This PDF document contains all information on accountability ("Management & facts") from Deutsche Telekom’s 2023 CR Report.

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Dear Readers,

Between war, inflation, and natural disasters, 2023 was another crisis-filled year. Exactly one year ago, this was where I wrote: “the future is becoming more difficult rather than easier. So let’s make the most of the opportunities we have to take action, and let’s stay optimistic.”

It is becoming harder and harder to stay optimistic in the face of everything that is happening in the world. However, we cannot allow the weight of this to overwhelm us into inaction – not as individuals, not as a company, and not as a society.

We as Telekom also have a very clear position. We speak up whenever individuals use the digital space to spread hate speech. At the start of the year, we published the new “Lights on!” campaign video as part of our “No hate speech” initiative. The video calls for democratic solidarity in society.

Yes, the challenges we face are complex and intertwined. And simple answers are therefore attractive to many. But I firmly believe we can find effective solutions together that are better. For this to happen, however, we need to learn to be more honest with each other and allow the big picture to emerge. We mustn’t only talk about our successes. We have to be honest about our challenges and – where necessary – also about our failures, embracing an attitude of “radical transparency.”

This is key when it comes to artificial intelligence (AI), for example. We must seize the opportunities offered by AI, but without ignoring the risks. For me, providing full information is an integral part of using AI responsibly. I am convinced that the best strategy when it comes to dealing with new technologies is to promote media literacy. In 2023, we used our “A message from Ella” video to draw attention to the damage deepfakes can cause if we are not careful to use our personal information and images of our children responsibly. However, we mustn’t let this put us off grasping the endless potential offered by AI. AI and digitalization will play a huge part in solving social and ecological problems around the world, and will ultimately be a major factor in our future economic growth.

We also prioritize transparency when it comes to climate protection. At Deutsche Telekom, we have set ourselves a vital target of achieving net zero emissions along our entire value chain by 2040. We have drawn up a transition plan for our journey to that goal that is designed to create transparency both within the company and externally, setting out what we have achieved in terms of climate protection and which activities have still to be launched.

To this end, we started incorporating Scope 1 and Scope 2 greenhouse gas emissions into our financial planning process in 2022. From 2024, we also intend to take account of Scope 3 emissions in this – that is to say, the greenhouse gas emissions that are generated in the supply chain and during use by our customers.

Any organization that lobbies for transparency must also be willing to have its own targets and activities audited by independent experts on a regular basis. The gold standard for climate protection is the Science Based Targets initiative (SBTi). This organization checks whether companies’ climate goals are in line with the latest climate research and contribute to compliance with the Paris Agreement. Our ambitious climate targets have been confirmed by SBTi experts. I am delighted that this makes us the first DAX heavyweight to receive such a validation of its long-term and net zero climate targets.

At Deutsche Telekom, responsibility for sustainability – and therefore also climate protection – lies with the Group Board of Management. All Board of Management departments are involved in equal measure when it comes to launching the necessary activities and investments and providing the required impetus to our decisions. This enables us to continue driving forward greener innovations and products. However, sustainability must become an even more integral part of our core business – for me, that also belongs to the concept of “radical transparency.”
Worldwide, Deutsche Telekom employees ensure that our networks operate smoothly and that our customers receive the best service – and they implement our sustainability strategy in all departments with determination. I would like to offer my sincere gratitude to all our staff for this. Thanks to their commitment and our operational performance, we made it into the top 10 most valuable brands in the world in 2023 – in fact, we are number one among the telecommunication companies. We also remain the most valuable corporate brand in Europe. This makes me proud, and it shows that we are heading in the right direction together.

And we will continue down the same road. We have set ourselves the goal of becoming the world’s leading digital and sustainable telecommunications company. This sustainability report contains comprehensive information about where we stand as at 2023 and what we are planning for the future.

One last thought – being transparent and calling out challenges is only ever the first step. The real work comes after. Finding solutions means finding the courage for open dialog, even beyond the boundaries of a company. Let’s all dare to be more transparent!

Best regards,
Tim Höttges
CR strategy
Sustainability and social responsibility have been firm components of our corporate activities for more than two decades. We see ourselves as a responsible company and have enshrined this in our Group strategy. As such, we are committed to implementing sustainability along our value chain – and to playing an important role in meeting today’s environmental, economic, and social challenges.

You can find additional information on our Group strategy in the 2023 Annual Report.

Our CR (Corporate Responsibility) strategy is derived from the Group strategy. It focuses on four key areas as well as good corporate governance in which we want to act as a role model:

1. Our strict commitment to climate-neutral business practices: We want to play a pioneering role on the way to a climate-neutral future and enable our customers and society as a whole to complete this journey together with us by 2040. We want to cut emissions by at least 90 percent, with only up to 10 percent being offset.

2. Our determined efforts to ensure our products and services are compatible with the circular economy: We want to make almost all of our technologies and devices compatible with a circular economy across the entire value chain by 2030.

3. Our pursuit of diversity, equity, and inclusion, as well as our investment in training for our employees: We want to provide a safe, supportive environment where we promote equity among people – across all dimensions of diversity.

4. Our determination to help shape a digital society that is based on fundamental democratic values and in which all people can participate safely, competently, and with autonomy: We want to make the digital world a tolerant, safe space for everyone and enable society to bridge the digital divide.

All strategic pillars must be based on sound governance, which for us encompasses a whole range of very different but equally important issues:

- Data protection, cybersecurity, and information security
- A dependable corporate compliance and risk management system
- Application of the basic principles of digital responsibility
- Respect for human rights and the sustainable development of supply chains
- Investment based on environmental and social criteria and transparent communication about our activities in terms of ecological and social sustainability
- An effective management structure for sustainability issues in the Group

Reporting against standards
Global Reporting Initiative (GRI)
- GRI 2–17 (General Disclosures)
Sustainability targets in remuneration

Our investments in the network build-out make us one of the biggest investors in the industry. In 2023, we invested more than EUR 16 billion Group-wide, primarily in building and operating networks to meet the growing demand for faster, full-coverage data services. However, the network build-out is not to lead to an increase in CO₂ emissions and thus accelerate climate change. For this reason, we use energy from renewable sources to decouple CO₂ emissions from energy consumption. In Europe, we have set ourselves the goal of doubling the energy efficiency of our networks by the end of 2024. Above and beyond this, we want to further increase energy efficiency – for instance at our data centers – and thus reduce energy consumption in the medium term despite the expected rise in data consumption (2024 against 2020, goal excludes T-Mobile US). The two non-financial performance indicators “energy consumption” and “CO₂ emissions” (Scope 1 and 2) were incorporated into the variable component of our Board of Management’s remuneration in 2021, and in 2022 were also made relevant for our international executives (excluding T-Mobile US), as well as all employees in Germany not covered by collective agreements.

In the United States, we are forging ahead with the highly intensive build-out of our 5G network, in particular in rural areas. This initially drives up power consumption. T-Mobile US, like the Group as a whole, has covered 100 percent of its electricity requirements from renewable energy sources since 2021. There are fluctuations in T-Mobile US’ Scope 1 carbon footprint owing to unforeseeable natural disasters and the associated temporary use of equipment such as diesel generators to restore and back up damaged network infrastructure. Consideration must be given to the special national situation in this key market, which is why the decision was taken not to include T-Mobile US in these two non-financial performance indicators in respect of short-term variable remuneration. This step ensures that the right incentives are set for the Board of Management, executives, and all employees in Germany not covered by collective agreements.

The annual ambition for the performance indicators “energy consumption” and “CO₂ emissions” (Scope 1 and 2) will continue to be set, managed, and reported for the entire Group as before, including a target value for T-Mobile US. Energy consumption for the Group as a whole in the reporting year was down slightly year-on-year at 12 241 GWh (prior year: 13 253 GWh). Due in particular to the Group-wide use of electricity from renewable energy sources, CO₂ emissions (Scope 1 and 2) are at a low level and dropped further as a result of our measures to 217 kt CO₂e (prior year: 233 kt CO₂e). The values given for total energy consumption and Scope 1 and Scope 2 emissions are based in part on estimates, assumptions, and extrapolations, and, in part, on data provided by our external energy service providers.

Corporate Digital Responsibility

Day in and day out, we see our world changing, at ever-faster rates. Computers, smartphones, and artificial intelligence (AI) now play indispensable roles in our daily lives. Most of the time, they help us without our even noticing their operation. All of this is the beginning of a development that we can no longer stop – and that we don’t want to stop. All enthusiasm notwithstanding, however, we shouldn’t head into the digital future blindly. As we move forward, we should seek to define a clear direction and a binding framework for that future. We at Deutsche Telekom are working to bring about digitalization oriented toward people and values. “Corporate digital responsibility” (CDR) refers to efforts to manage the opportunities and risks of the digital transformation responsibly. The goals of our CDR activities are twofold: to prevent negative impacts, and to help shape the digitalization process in a positive way.

Throughout our CDR work, we take great care to ensure that all processing of our customers’ personal data is carried out transparently and responsibly, in ways that also safeguard individual customers’ privacy and security. Further information about this area is available in our publications on data privacy, in our status report on data privacy, and in our transparency report. Also, in our Digital Ethics Guidelines on AI, we describe our responsible use of AI in connection with our products and services.

Digital participation is a core aspect of our commitment. We are working to ensure that all people have equal opportunity to be a part of the digital society. Our focuses in this regard include the technical aspects of broadband access, rates and devices that are affordable for all budgets, and users’ ability and desire to use digital media competently. For example, we carry out a variety of projects and implement measures to promote media literacy and democracy skills among the population.

Upholding of human rights is a key element of responsible digitalization. We strive always to protect and respect human rights in regard to the responsibilities that emerge as a result of technological change and the digital transformation. Our objective is for our technology to be implemented on the basis of humanitarian values. We have also anchored the principle of digital responsibility and participation in our Code of Human Rights, which we updated in 2023. This code applies not only to our company, but also to our business partners – and to our approximately 20,000 suppliers in over 150 countries. We expressly require our suppliers to join us in our responsibility, with a view to ensuring that human rights are also respected within the sphere of influence that we have outside of our Group.

Digital responsibility is also highly important with regard to environmental and climate-protection issues. By developing products that are innovative and sustainable, we help our customers reduce their own carbon footprints – and thereby contribute to climate protection. In addition, to help our customers find sustainable solutions, we highlight products and services that are environmentally and climate friendly. We do this with our TÜV-verified #GreenMagenta Label (for products and services) and our Eco Rating scheme (for mobile devices). Our “Smart Innovations” also
contribute to society’s efforts to improve its ecological balance. Digitalization is opening up new ways and possibilities for working. We are helping to shape the digital transformation in the workplace, in a responsible manner, and we are continuing to support our employees in addressing the challenges the transformation has brought. We are reinforcing our employees’ digital skills with a range of measures, including the WeLearn training initiative and the Percipio and “Learning from experts” (LEX) training packages. In addition, in close consultation with our Group Works Council, we have adopted a “Manifesto on Agile Working,” a set of guidelines for the digital workplace.

Our definition of digital responsibility

Technological development must be based on values. We see ourselves as having a responsibility to implement ethics within technologies and to make technologies accessible to everyone. In 2022, we published our Corporate Digital Responsibility (CDR) framework, which summarizes our views of digital responsibility. We make people the priority. The centerpiece of the framework is our House of Digital Responsibility, which is all about people-centric technology.

![The House of Digital Responsibility](image)

Our CDR framework and our House of Digital Responsibility are both based on our guiding principles. The foundation of this basis is the commitment to act in accordance with laws and regulations, with human rights, and with basic values such as cultural values. Conceptually, we place a number of key areas on this foundation – digital ethics, digital participation, the future of work, and climate protection and resources conservation. These key areas serve as orientational aids for our activities. The foundation and all of these areas, in turn, are housed under the umbrella of principles that constantly guide our efforts, namely data privacy and security, and transparency and dialog.

Outside of our own corporate sphere, our efforts and commitments in this area include active involvement in various alliances and partnerships, such as the BVDW (German Association for the Digital Economy), econsense, a network of internationally operating companies, and the Charta für digitale Vernetzung (Digital networking charter; only available in German). In addition, we are a member of the Corporate Digital Responsibility initiative of the German Federal Ministry of Justice. In 2021, we signed the Initiative’s CDR Codex, thereby committing ourselves to observe a set of concrete principles and to regularly publish a relevant progress report. We published this report for the reporting year in July 2023.

CR controlling: measuring and managing sustainability

Our CR controlling ensures that we can collect ESG data and KPIs transparently, and in a timely manner, and report them in the “Management & Facts” section and the interactive KPI tool of this CR report.

We record ESG data as part of our CR controlling and reporting activities. We use this data to calculate our ESG KPIs, which we use to measure and manage our CR performance. The non-financial performance indicators “energy consumption” and “CO₂ emissions” (Scope 1 and 2) that are relevant for remuneration are essential elements of the Group’s higher-level controlling processes. This also applies to other ESG KPIs, such as the Energy Intensity ESG KPI and the Sustainable Packaging and Return of Devices circular economy KPIs. Alongside the ESG KPIs, we also report other metrics and data with the aim of meeting internal and external transparency requirements.

In addition, we have developed an impact assessment method that allows us to measure and evaluate the environmental and social impact of selected products, solutions, and measures along the value chain. This helps us to keep our key sustainability activities results-oriented, to provide transparent reporting on them, and to demonstrate how our business activities are contributing to the achievement of the SDGs, for example.

We have been integrating our ESG data process incrementally in our ICS (internal control system) since 2021. This was initially comprised of specific ICS principles aimed at achieving a high level of data quality, timeliness, and transparency. These principles cover decentralized, system-based ESG data processes that are aggregated at the Group level. In as early as 2022, we supplemented the ICS principles with more demanding transaction-level controls for the remuneration-relevant KPIs. These transaction-level controls are reviewed internally and, in some cases, externally.

We are continuously improving our performance indicator system on the basis of internal and external requirements. We have added additional KPIs for the areas of resource conservation and circular economy since 2021, so we can coordinate and communicate our progress in this strategic area even more precisely. Trends in the ESG KPIs over the past four years can be seen here. In the reporting year, KPIs in the interactive benchmarking tool were, for the first time, broken down into the following segments: Germany, United States, Europe, Systems Solutions, Group Headquarters & Group Services, Group Development, and Technology and Innovation.
Our management tools: the ESG key performance indicators

ESG KPIs (key performance indicators) are used as management tools for our CR activities. Since they are highly relevant, we also publish them in the combined non-financial statement of our annual report.

The segments assist in the collection of Group-wide ESG KPIs by recording CR data themselves. They and their national companies represent 99 percent of the Group’s revenue.

For the purpose of integrated financial and sustainability reporting, the KPIs map all six types of capital (see diagram).

**Reporting against standards**

Global Reporting Initiative (GRI)
- GRI 2-23 (General Disclosures)
Business activities and organization

Our website presents a description of our business activities, and our 2023 Annual Report includes detailed information about the development of our business.

Our Group is structured into five operating segments and the Group Headquarters & Group Services segment. Our Technology and Innovation Board of Management department also unites the cross-segment technology, innovation, IT, and security functions of our Germany, Europe, and Systems Solutions segments. All segments are broken down individually in the interactive benchmarking tool. The following four operating segments make the biggest contribution to the development of sustainability in the Group and are therefore also addressed in separate sections of the report.

- **Our Germany operating segment** comprises all fixed-network and mobile business activities for consumers and business customers, including separate sales entities in Germany to allow a customer-centric sales approach. As a pioneer of digitalization, the segment offers a tailored service and product portfolio that is designed to be innovative while at the same time secure and simple. The bundling of our sales and service business within Sales & Service places a further focus on customer experience and on customer satisfaction. The Wholesale business delivers wholesale telecommunication services for third-party telecommunications companies. The build-out of the mobile and fixed networks in Germany is managed by the Technology business unit.

- **Our United States operating segment** combines all mobile activities in the U.S. market. T Mobile US provides service, devices, and accessories across its flagship brands. In addition, it sells devices to dealers and other third-party distributors for resale. It provides wireless communications services through a variety of service plan options to U.S. domestic customers, including plans marketed to businesses. T Mobile US also offers a wide selection of wireless devices, including smartphones, wearables, tablets, home broadband routers, and other mobile communication devices that are manufactured by various suppliers. In addition to its wireless communications services, it offers High Speed Internet utilizing its nationwide 5G network. It also provides products that are complementary to its wireless communications services, including device protection and wireline communication services. On May 1, 2023, T Mobile US closed the sale of its Wireline Business.

- **Our Europe operating segment** comprises all fixed-network and mobile operations of the national companies in Greece, Hungary, Poland, the Czech Republic, Croatia, Slovakia, Austria, North Macedonia, and Montenegro. In these countries, we are an integrated provider of telecommunications services. In Romania, our focus is on mobile communications. Besides traditional B2C fixed-network and mobile business, most of our national companies also offer ICT solutions for business customers.

- **Our Systems Solutions operating segment** offers B2B IT services in the core market of Western Europe under the T Systems brand. T Systems primarily addresses the IT growth areas of advisory, cloud services, and digitalization with a corresponding portfolio of products and solutions. We consider data sovereignty and security solutions to be the most attractive growth areas in the IT market, which is why we include them as integral components of our portfolio, enhanced by strategic partnerships. The services penetrate deep into the value chains of selected industries (automotive, healthcare, public sector, and transportation). As part of our transformation program, we have been working since 2018 to realign both our organization and our workflows, and make adjustments to our capacities. We now comprise four portfolio areas: Cloud, Digital, Security (in close collaboration with Deutsche Telekom Security), and Advisory (together with Detecon as an advisory partner). In addition, our Road User Services business unit offers road toll systems.

We are convinced that commercial, social, and ecological aspects can complement each other. We aim to make a positive contribution to sustainable development throughout our entire value chain.
Current organizational structure

Supervisory Board of Deutsche Telekom AG
Is regularly informed regarding the ESG strategy, its implementation and its key performance indicators

Group Board of Management
Approves Group-wide ESG regulations and strategies, and is regularly informed, by the business areas, regarding the status of such regulations and strategies, regarding progress in implementation of the overall ESG strategy, and regarding the status of individual goals and pertinent measures

Group Corporate Responsibility (GCR)
Central competence center for strategy, strategic policies and projects, specialist and procedural advising, external reporting, and stakeholder management

Segment leads / managers
Responsible for implementation of strategy, specifications, and goals within the relevant segments; report on such implementation to the Group Board of Management; and flesh out the CR strategy in keeping with business requirements

CR segment lead
The central contact person, with regard to CR issues, within the relevant segment. The CR segment lead adapts the company’s CR strategy to the segment’s requirements and coordinates CR-related activities within the segment.

CR-Controlling, segment
The area, within a segment, that is responsible for the timely provision of all of the segment’s CR-related data. This includes provision of CR data of subsidiaries. To that end, this CR Controlling area communicates regularly with the CR data controllers at the subsidiaries.

Managing boards of legal entities
Responsible for implementation of strategy, instructions, and targets within their own legal entities. In this connection, they report to their own segments and carry out CR governance in keeping with business requirements.

CR manager
The central contact person, with regard to CR issues, within the relevant legal entity. The CR manager adapts the company’s CR strategy to the legal entity’s requirements and coordinates CR-related activities within the legal entity.

CR Controlling, legal entity
Collects and consolidates the data required for the legal entity’s quantitative KPIs, and reports the data to the legal entity’s segment.

CR Controlling, shared services (DTSE) and departments
CR Controlling is responsible for the operational controlling of quantitative targets and KPIs across the various levels of the Group and for integrating this into established processes. CR Controlling is supported by shared services with Deutsche Telekom Services Europe (DTSE), to collect and consolidate ESG KPIs across the Group and ensure that the data collected is complete and of high quality.

The departments are responsible for embedding sustainability in their own topics and tasks and for reporting on this in accordance with the requirements for reporting, ratings and rankings. Depending on the scope of the tasks, roles similar to a CR manager/CR controller can be defined.

CR Board
Group-wide body that advises on CR-strategy development, consults with regard to Group-wide positions, and coordinates implementation of the CR strategy in the Group units

CR Data Board
A body that manages data acquisition and reporting processes involving GCR, Controlling and contracted service providers – especially service providers contracted by DTSE

CR Manager Network
Group-wide platform for all staff responsible for CR in segments, legal entities, and functions, for the purposes of sharing know-how and experience and ensuring information is passed on quickly and directly

Overall responsibility for Corporate Responsibility (CR) lies with our Board of Management, which deliberates and decides on the key strategic guidance and objectives. The Supervisory Board
advises and oversees the Board of Management in this task. The Group Corporate Responsibility (GCR) department develops Group-wide policies and guidelines with the goal of steadily advancing the corporate culture with regard to sustainable innovation, environmentally friendly business practices, and social responsibility. Since 2022, the Chair of the Board of Management has been responsible for GCR. By allocating responsibility in this way and incorporating ESG targets into Board of Management remuneration in 2021, the Supervisory Board and Board of Management highlighted the great importance that Corporate Responsibility has for our Group. CR controlling provides support through shared services with Deutsche Telekom Services Europe (DTSE) in consolidating ESG data and key figures comprehensively and integrating them centrally into the financial and management systems. The Board of Management is informed every quarter about the status of the most important sustainability KPIs in the Group Performance Report. The Supervisory Board is also regularly updated by GCR about the sustainability strategy and the progress that has been made in implementing it. Furthermore, a training workshop on the role of the Supervisory Board as part of new sustainability requirements was held in 2023. In the year under review, the members of the Board of Management discussed sustainability indicators and decided on the future development of individual topics in a variety of dialog formats. Additionally, the Global CR Board was realigned in the reporting year as a Group-wide committee and preparatory body for the Board of Management.

The different Group business units and segments are responsible for implementing the CR strategy. In 2023, the same kind of company management structure as is used in the headquarters was established in the segments. Overarching responsibility for a segment now lies with the segment management team. This management team delegates the tasks of adapting content and managing implementation in relation to the Group sustainability strategy to CR segment leads. The CR segment controller helps to develop the processes for recording, consolidating, and analyzing the ESG KPIs and helps to shape the management measures based on these KPIs. These functions supplement and reinforce the existing network of CR managers in the Group’s legal entities. To coordinate their tasks and learn from each other, CR managers and employees from CR-relevant functions across the Group collaborate in an international network under the leadership of GCR. During the year under review, this network included employees from around 52 companies in 29 different countries. Participants can exchange ideas and experience in relation to best practices and undertake training in the form of themed deep dives. The first in-person network meeting since the COVID-19 pandemic was held in 2023 and addressed focal points of the strategic roadmap for the current year. The roadmap includes switching the fleets over to electromobility, tackling challenges associated with Scope 3 emissions, enhancing the coordination of social commitment on an international level, implementing the Design for All project, and preparing for CSRD-compliant reporting from reporting year 2024.

Our CR Policy provides the formal, mandatory framework for the sustainability management activities at all Group units at a global level. In 2022, in a move designed to further shore up the implementation of our CR ambitions throughout the organization, we extensively developed the CR Policy that has been in place since 2017. Following its approval by the Board of Management in February 2023, we launched a process to enforce the updated version throughout the Group. At the end of 2023, the CR Policy had been enforced at 75 of 135 Group companies; the rollout will be continued in 2024. The CR managers in the individual segments and legal units are involved in the ratification of the CR Policy in the Group’s subsidiaries. As soon as the CR Policy has been adopted in a legal entity, that entity appoints its own official CR manager and CR controller. If specific obstacles to implementation become apparent – due to local legal requirements, for example – we work with the relevant individuals at the units affected who are responsible for making decisions and who are involved in the process to develop a solution that satisfies the strategic key statements of the Policy. We agree a timeframe for implementation with them. If a solution is not implemented within the agreed timeframe, dialog is sought with the Board of Management of Deutsche Telekom as the final escalation and decision-making level at which the functions concerned can set out their arguments and the state of affairs accordingly.

**Reporting against standards**

Global Reporting Initiative (GRI)
- GRI 2–9 (General Disclosures)
- GRI 2–12 (General Disclosures)
- GRI 2–13 (General Disclosures)
- GRI 2–15 (General Disclosures)

**United states segment: responsible business**

T-Mobile’s network technology positively impacts the way society lives, works, learns, and engages with the world. That’s why, when it comes to corporate responsibility, the segment’s environmental, social, and governance (ESG) approach is guided by the aspiration to create a connected world where everyone can thrive.

The ongoing commitment of T-Mobile US is fundamental to responsible business practices that promote integrity, responsibility, and transparency – while never losing sight of the opportunity to leverage its technology, scale and resources to be a force for good.

Continuously investing in responsible business practices underpins our ESG approach at T-Mobile US. That means being uncompromising in its ethical code and upholding strong corporate governance policies and practices that help everyone at T-Mobile US build and retain the trust of customers, employees, and the communities served. The segment’s Code of Business Conduct provides clear expectations on workplace conduct standards and legal guidelines. Training is carried out throughout the year and all employees and officers must participate. This annual training includes topics, such as Data Security and Privacy, Anti-Corruption, Harassment and Discrimination, and Non-Retaliation, among others.
2023 CR program: targets, activities, and deadlines
The CR program is where we define targets and report on progress regarding their implementation. In the reporting year, we once again aligned the CR program in accordance with the four pillars of our Management & Facts section – Strategy, Economy, Environment, and Social.

### Strategy

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Target achievement</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase relevance of sustainability within</td>
<td>Since 2022, responsibility for CR topics has rested with the Group Board of Management. We have also integrated the segment-based approach more consistently into the CR strategy and reporting, and given more responsibility to the segments.</td>
<td>Current organizational structure</td>
</tr>
<tr>
<td>the company</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enable employees to contribute to sustainability</td>
<td>A training workshop on the role of the Supervisory Board as part of new sustainability requirements was held in 2023. Training is also being offered for employees on specific issues such as human rights and compliance.</td>
<td>Current organizational structure Measures to strengthen our corporate culture Our approach to training and development</td>
</tr>
<tr>
<td>Further development of the CR Policy</td>
<td>Revision in 2022. By the end of 2023, the CR Policy had been enforced at 75 of 135 Group companies.</td>
<td>Current organizational structure</td>
</tr>
<tr>
<td>Publication of the company’s “Corporate Digital Responsibility” report</td>
<td>Publication of the Communication on Progress, in July 2023</td>
<td>Corporate Digital Responsibility</td>
</tr>
<tr>
<td>Contribute to the Sustainable Development Goals (SDGs)</td>
<td>Focus on 2, 3, 4, 5, 7, 8, 9, 11, 12, 13, 15, 16</td>
<td>Our contribution to the Sustainable Development Goals Measures and KPIs relevant to SDGs</td>
</tr>
<tr>
<td>Reporting in accordance with the 2021 GRI Standards</td>
<td>In the year under review, the CR Report was prepared in accordance with the 2021 GRI Standards.</td>
<td>GRI Index</td>
</tr>
<tr>
<td>Reporting in accordance with the standards of the Sustainability Accounting Standards Board (SASB)</td>
<td>Preparation of an SASB index with links to relevant report content</td>
<td>Sustainability Accounting Standards Board (SASB)</td>
</tr>
<tr>
<td>Further development of the materiality analysis</td>
<td>Extension of the CSRD-related materiality review of the value chain to cover the geographical and social perspectives by incorporating four national companies</td>
<td>Our process for identifying material CR topics</td>
</tr>
<tr>
<td>Improvement of processes for protecting human rights</td>
<td>Implementation of the risk analysis in accordance with the requirements of the Supply Chain Due Diligence Act, revision of the human rights policy statement and its publication</td>
<td>Our approach to protecting human rights</td>
</tr>
<tr>
<td>Exemplary CR reporting</td>
<td>ESG TRANSPARENCY AWARD for transparent publication of all sustainability measures</td>
<td>Awards for our commitment to sustainability and our reporting</td>
</tr>
</tbody>
</table>
## 2023 CR program

### Economy

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Target achievement</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>We aim to have 60 percent of our procurement volume be verified as “uncritical” by 2025</td>
<td>66.17 percent in 2023 (external procurement volume for Deutsche Telekom, excluding the United States and network capacity)</td>
<td>ESG KPI “Procurement Volume Verified as Non-Critical”</td>
</tr>
<tr>
<td>95 percent of our procurement volume should be without an identified CR risk by 2025</td>
<td>99.98 percent of procurement volume in 2023 (external procurement volume for Deutsche Telekom, excluding the United States and network capacity)</td>
<td>ESG KPI “Procurement Volume without CR Risk”</td>
</tr>
</tbody>
</table>
| Extension of 5G coverage | - Germany segment: availability of 5G for 95.9 percent of the population (prior year: 94.8 percent)  
- United States segment: availability of 5G for approximately 98 percent of the population (prior year: 98 percent)  
- Europe segment: availability of 5G for 67.2 percent of the population (prior year: 47.4 percent) | - Germany segment: progress with network build-out  
- United States segment: progress with network build-out  
- Europe segment: progress with network build-out |
| Increase Group-wide customer retention (measured using TRI*M index) | As of the end of 2023, the Group score (not including T-Mobile US) was 76.2 points (prior year: 76.0 points). | Measuring customer retention and endorsement |
| Obtain relevant service awards | This was achieved. The awards included the TÜV quality seal; the “Service King” distinction awarded by the trade magazine “Focus Money”; “best mobile-network hotline” in “connect” magazine’s 2023 hotline test; and “best mobile communications shop” according to “connect” and “CHIP” magazines. | Sales & service awards |
| Integration of requirements from EU Taxonomy | Fulfillment of the EU Taxonomy Regulation’s requirements applicable since the 2021 reporting year, via listing of taxonomy-eligible and taxonomy-aligned revenue, capital expenditure, and operating expenditure | EU taxonomy |
| Ensure inclusion in relevant sustainability indices | Listing in key sustainability indices | T-Shares in sustainability ratings and indices |
## 2023 CR program

### Environment

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Target achievement</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decrease Group-wide Scope 1 and 2 emissions by up to 95 percent, with respect to their 2017 levels, by the end of 2025. The remaining emissions are to be offset via suitable measures, to enable the company to reach climate neutrality.</td>
<td>A reduction of 95 percent since 2017, and of 7 percent in comparison to the prior year, to a level of about 217 t CO₂e</td>
<td>Our climate targets</td>
</tr>
<tr>
<td></td>
<td>The key elements of the strategy for offsetting measures were defined in the reporting year.</td>
<td>Climate target achievement</td>
</tr>
<tr>
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<td></td>
<td>4-year trend: total CO₂e emissions (Scopes 1 to 2) in the DT Group</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CO₂ compensation</td>
</tr>
<tr>
<td>Reduce CO₂ emissions (Scopes 1 to 3) by 55 percent with respect to their level in 2020</td>
<td>Total emissions in 2023: 10,693 kt CO₂eReduction of 23 percent since 2020.</td>
<td>Our climate targets</td>
</tr>
<tr>
<td></td>
<td>The target was validated in the reporting year by the Science Based Targets initiative (SBTi).</td>
<td>Climate target achievement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4-year trend: total CO₂e emissions (Scope 3) in the DT Group</td>
</tr>
<tr>
<td>Achieve climate neutrality by no later than 2040 (Scopes 1, 2 and 3)</td>
<td>Total emissions in 2023: 10,693 kt CO₂eReduction of 23 percent since 2020.</td>
<td>Our climate targets</td>
</tr>
<tr>
<td></td>
<td>The target was validated in the reporting year by the Science Based Targets initiative (SBTi).</td>
<td>Climate target achievement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4-year trend: total CO₂e emissions (Scope 3) in the DT Group</td>
</tr>
<tr>
<td>Ensure steps on the journey to climate neutrality are more concrete throughout the entire value chain</td>
<td>Creation of a climate transition plan with concrete measures for reducing Scope 1, 2, and 3 CO₂ emissions.</td>
<td>Climate Target Transition Plan: our journey towards net zero</td>
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<tr>
<td>We are working hard to increase the share of electricity procured through power purchase agreements (PPAs) in Germany and Europe to 50 percent by 2025.</td>
<td>As of the end of 2023, 30 percent of the power we used in Germany and Europe was procured via PPAs.</td>
<td>Our approach to more renewable energy</td>
</tr>
<tr>
<td>Improvement of the efficiency of our data centers; use of climate-neutral company data centers and externally operated data centers (pursuant to the Climate Neutral Data Centre Pact) by 2030</td>
<td>Global power usage effectiveness (PUE) value for 2023: 1.53 (2022: 1.59)</td>
<td>ESG KPI “PUE”: lower CO₂ consumption in data centers</td>
</tr>
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<td>PUE value for Germany in 2023: 1.52 (2022: 1.50)</td>
<td>System Solutions segment: energy efficiency throughout the entire value chain</td>
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<td></td>
<td>Our most-efficient high-availability data center has a PUE of 1.24.</td>
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<tr>
<td>Raise the profile and boost the impact of the Green Pioneers community</td>
<td>Training on environmental issues for colleagues, with more than 2,100 participants</td>
<td>Green Pioneers in GermanyGreen employee networks in the Systems Solutions segment</td>
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<td>Five-year anniversary of the initiative: Green Pioneers Day is held to develop new ideas and objectives for the coming years</td>
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<tr>
<td>Reduction of CO₂ emissions tied to customers’ use of our products and solutions; in particular, reduction of those emissions’ share of our own total emissions</td>
<td>Increase of our enablement factor in Germany to 4.78 (2022: 3.76); throughout Europe to 3.6 (2022: 2.6).</td>
<td>ESG KPI “Enablement Factor” in the DT Group in GermanyESG KPI “Enablement Factor” in the DT Group in Europe</td>
</tr>
<tr>
<td>Stabilization of our energy consumption by 2024, via doubling of our energy efficiency in Europe (the ratio of network data traffic to the electricity required to move it), in spite of continued strong data-traffic growth and our ongoing network expansion</td>
<td>Energy consumption in 2023: 12.2 million MWh (2022: 13.3 million MWh)</td>
<td>Total energy consumption</td>
</tr>
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</table>
## 2023 CR program

### Environment

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Target achievement</th>
<th>Implementation</th>
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</thead>
<tbody>
<tr>
<td>Linking of Board of Management remuneration to reductions of the company’s CO₂ emissions and energy consumption</td>
<td>In the reporting year, energy consumption dropped slightly and CO₂ emissions were reduced. In addition, the two ESG KPIs were integrated within the remuneration system for executives in Germany and Europe as well as for employees not covered by collective agreements in Germany.</td>
<td>Sustainability targets in remuneration, Remuneration Report 2022, Our climate targets</td>
</tr>
<tr>
<td>Through 2024, our Europe segment plan to collect one million used mobile devices and keep them in the circular economy by refurbishing or recycling them.</td>
<td>2023: Approx. 273,000 devices</td>
<td>Our approach to circular economy, Europe segment: resource efficiency for mobile and fixed-network devices</td>
</tr>
<tr>
<td>We are aiming to ensure that, by 2024, none of the electronic waste produced and no used devices that are collected in the Europe operating segment, such as smartphones, routers or laptops, end up in landfills without undergoing recycling processes, but will be disposed of properly or recycled, as is already the case in Germany.</td>
<td>We achieved this goal by the end of 2022 and are planning to roll out implementation to T-Mobile US and T-Systems in future.</td>
<td>Waste avoidance, recycling and resource conservation</td>
</tr>
<tr>
<td>By 2030, we intend to ensure that almost all of the products we bring into circulation can be returned to the circular ecosystem.</td>
<td>Returns quota for mobile and fixed-network devices: 28 percent</td>
<td>Our approach to circular economy</td>
</tr>
<tr>
<td>We aim to ensure that, by the end of 2024, sustainable product packaging has been adopted for over 90 percent of all of the smartphones Deutsche Telekom sells in Europe.</td>
<td>As of the end of 2023, 100 percent of all smartphones sold by Deutsche Telekom in the EU were sold in sustainable packaging.</td>
<td>Sustainable product packaging</td>
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</table>
## 2023 CR program

### Social

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<tr>
<th>Objectives</th>
<th>Target achievement</th>
<th>Implementation</th>
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<tbody>
<tr>
<td>Increase the proportion of women on the Supervisory Board and in top positions in middle and upper management to 30 percent by 2025</td>
<td>Total workforce: 35.7 percent women</td>
<td>Our approach to diversity, equity, and inclusion</td>
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<td>Middle / upper management: 27.9 percent</td>
<td>Proportion of women on the Board of Management</td>
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<td>Board of Management of DTAG: 37.5 percent</td>
<td>Proportion of women in middle and upper management</td>
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<td>Supervisory Board (in Germany): 47.3 percent</td>
<td>Proportion of women on the Supervisory Board</td>
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<td>Supervisory Board, international (European fully consolidated international companies): 38.9 percent</td>
<td>Commitment to increasing the proportion of women</td>
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<td>Maintain the Group-wide (national) high health rate of 95 percent</td>
<td>2023:</td>
<td>Health rate</td>
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<td>Including long-term illnesses: 94.3 percent (2022: 93.8 percent)</td>
<td>Effectiveness of our health and safety measures</td>
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<tr>
<td></td>
<td>Excluding long-term illnesses: 95.8 percent (2022: 95.2 percent)</td>
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<tr>
<td>Reduce the accident rate in Germany</td>
<td>Accident rate for accidents leading to more than three missed days of work, in 2023:</td>
<td>Effectiveness of our health and safety measures</td>
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<td>5.2 accidents per thousand employees (2022: 5.5)</td>
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<tr>
<td>Boost digital skills development</td>
<td>Digital learning rate (share of learning hours completed as online learning, Group-wide without TMUS) 2023: 73 percent (2022: 79 percent)</td>
<td>Our approach to training and development</td>
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<td>88 percent of the training courses available on a Group-wide basis were available online (without T-Mobile US) (2022: 85 percent)</td>
<td>Skills development at Telekom Training</td>
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<td>Increase in the proportion of digital experts</td>
<td>2023: 22.0 percent digital experts (Group-wide without TMUS) (2022: 19.7 percent)</td>
<td>Proportion of digital experts</td>
</tr>
<tr>
<td>Improve employee satisfaction</td>
<td>Engagement score in November 2023 [pulse survey, Group-wide without TMUS]: 76 points (2022: 78 points)</td>
<td>Our employee survey</td>
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<td>We last conducted the employee survey every two years.</td>
<td>Regular pulse survey</td>
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<td>Satisfaction and engagement score</td>
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</table>
Values and Guiding Principles

Corporate responsibility (CR) is based on shared values. Our fundamental values are set out in binding Guiding Principles. We have made these Principles part of the everyday work of our employees through a variety of measures, such as reviews, updates, and our annual “Living Culture Day.” And the measures have been successful. According to our pulse survey to determine employee satisfaction in November 2023, 80 percent of our employees agree that the Guiding Principles are actually being applied to our everyday work (prior year: 80 percent). The corresponding agreement figure among our executive staff was even higher, at 85 percent.

We want to ensure that everyone in our Group and with our partner companies knows how to act responsibly and respect human rights. Our Code of Conduct, our Code of Human Rights, and our Supplier Code of Conduct all serve this purpose. The Codes also serve as the basis for our compliance management system, which guarantees that our business activities are in compliance with laws and regulations.

Certifications at the following national and international companies were added in 2023:

- T-Systems Road User Services GmbH in Munich and Bonn (certified to ISO 14001 and ISO 45001)
- T-Systems ITC Iberia, S.A. (the headquarters in Barcelona and the Madrid site are certified to ISO 45001, while the Granada site is certified to ISO 14001)

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 2-23 (General Disclosures)

Certified health, safety, and environmental management: almost all workstations covered

Our integrated management system for Health, Safety, and Environment (HSE) contributes at Group level to making sustainability a component of all our business processes and of our employees’ everyday lives.

It helps us to systematically plan, implement, and improve our HSE processes. This promotes the health of our employees and also has a positive effect on their performance. It also helps us to bid on new projects in which potential commercial customers require their suppliers to provide HSE certificates.

Our Group-level HSE management system is covered by an umbrella certificate based on the international standards ISO 45001 (formerly OHSAS 18001) for occupational health and safety and ISO 14001 for environmental management. For some units, it also covers international standard ISO 9001 for quality management.

Some of the national companies are not covered by an umbrella certificate because they have their own certifications, some of which are even more comprehensive. This is the case in Greece, for example, where the OTE Group has its own integrated management system. In addition to the standards named above, it also covers the international standards ISO 50001 for energy management and ISO 27001 for data security.

All of our employees in Germany have ISO 14001- and ISO 45001-certified workstations. Certificate coverage remains at the same level as in the previous year, however, with international coverage of 98 percent of employees.
Risk and opportunity management
For us, comprehensive risk and opportunity management also means considering the opportunities and risks arising from ecological or social aspects, or from the management of our company (environment, social and governance – ESG). We actively and systematically involve relevant stakeholders in order to identify which current and potential ESG risks and opportunities are important for Deutsche Telekom. We also participate in a number of working groups and committees. We continuously track ESG issues and systematically ascertain our stakeholders’ positions on these matters.

Important tools we use for this purpose are:

- Our risk management system, which systematically identifies, evaluates, and addresses relevant risks
- Our (annual) evaluation of emerging risks, which provides an overview of new and long-term trends in external risks
- Our extensive analysis of physical and transitory risks (risks resulting from sudden adjustments to economic sectors due to climate change), which we align with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD)
- Our involvement in working groups and committees, numerous national and international business associations, and social organizations (GeSI, Federation of German Industries, Bitkom, econsense, and the German National Association of Senior Citizens’ Organizations, for example)
- Stakeholder dialog formats organized by us
- Our various publications, such as the media review and newsletters
- Our internal compliance evaluation, which also examines the most important sustainability risks
- Our materiality process, which we are continually developing.

In our annual report, we also provide information about the following issues, which we have identified as key aspects of our risk-and-opportunity management process:

- Climate protection
- Due diligence obligations in the Group (German Act on Corporate Due Diligence in Supply Chains [Lieferkettensorgfältpflichtgesetz – LkSG])
- Healthcare

The risks determined by the annual risk assessment pursuant to the German LkSG and the annual LkSG report can be viewed here.

Reporting against standards
Global Reporting Initiative (GRI)
- GRI 2–23 (General Disclosures)

Emerging risks
Emerging risks are difficult to predict, because their future development is extremely uncertain. They involve events that are beyond our influence and control, such as geopolitical tension, new technologies, or macroeconomic factors. These risks are either new or become significantly more significant for our company over time. Even if they already impact our business today, their impact can grow in the long term (three to five years) and potentially impede most of our activities to a much greater extent in the future.

We need to act early and effectively to identify and assess risks like this and protect our company and our customers from them. This could even require adjustment of our strategy and/or our business models to mitigate their impact. To enable us to respond to such risks comprehensively, our risk management system must systematically identify and assess these emerging risks, to derive mitigating measures.

We describe the emerging risks that are becoming increasingly important to us here.
Emerging risks with relevance for Deutsche Telekom

Technological risk: cyber attacks

Cyber attacks are increasing rapidly. The speed of digital transformation, machine learning, and computing capacity is growing exponentially. At the same time, the attacks are becoming increasingly specific and efficient. They are overtaking security fixes, with the result that the number of vulnerabilities that could be exploited by this kind of attack at our company is increasing.

The potential impacts of this risk include:

- Failure to protect our infrastructure and our customer data against cyberattacks
- A lack of knowledge among employees or excessively complex infrastructure can make it more difficult to prevent cyberattacks, such as those triggered by artificial intelligence
- Compliance with increasingly strict legal requirements for data retention and data protection could affect our strategy or our business models
- Financial losses can arise from the new extortion techniques that are increasingly being used in attacks and demanding payments in cryptocurrencies, for example
- Loss of reputation, because customers could lose trust in the quality of our communications services

Our corrective measures include:

- Switching to more robust IT control environments
- Improving protection against widespread types of attacks
- Deploying machine learning technology (artificial intelligence) to identify attacks
- Improving reactivity when defending against identified attacks
- Raising awareness of cyberattacks among our customers
- Better recognition of malware and improvement of user authentication techniques

We explain further measures in the “Data protection & data security” chapter.

Environmental risk: weather extremes

Advancing climate change will increase the intensity and frequency of extreme weather events. The related physical effects include warming oceans, higher heat and humidity, increased average temperatures, heavy storms (wind, lightning, hail, tornadoes, and hurricanes), and heat waves – which in turn can result in natural disasters like flooding and drought.

The potential impacts of this risk include:

- Flooding of river basins and coastal areas due to heavy rainfall, which can destroy or seriously damage our base stations, network nodes, and other infrastructure
- Tornadoes and hurricanes that can cause significant damage to data centers, cell towers, office buildings, and our retail outlets
- Heavy storms can also damage or destroy cell towers, particularly at higher-elevation sites
- Forest fires and heat waves can damage or destroy nearby cell towers or our equipment sites
- Infrastructure that is not robust enough to withstand these tougher conditions in the long term
- Reduction in the stability of our power supply

These impacts could result in longer and more frequent network outages, which in turn have the potential to lower our revenue, increase our churn rate, and damage our reputation. In addition, additional investments will be necessary to adapt our processes and make our infrastructure more robust. The costs of insurance cover for such events will likely increase steadily over time.

Our risk mitigation measures include:

- Better methods for predicting when and where potential disasters might occur in future
- Identifying weak points in our cell towers and other infrastructure
- Eliminating identified weak points in our infrastructure to withstand higher wind speeds and temperatures; designing more robust network infrastructure in areas that are particularly susceptible to such disasters
- Installing emergency power supplies for all critical network elements, to avoid network outages and reduce downtimes
- Improving our plans for maintaining operations and for disaster recovery for scenarios in which such outages might occur

Business risk: infectious diseases/pandemics

Outbreaks of disease and pandemics cannot be predicted. Nonetheless, historical data shows that regional and global pandemics have become increasingly frequent over the past decades. A new sickness or virus can spread quickly, become a pandemic, and drastically impede global economic growth. This can affect multiple industry sectors and supply chains and have significant impacts on the way we live and work.
The potential impacts of this risk include:

- Increasingly delayed deliveries and payments, as well as payment defaults among business customers and consumers could increase our bad debts
- Restrictions in the public sphere could force our stores to close and affect sales and services for our customers
- Travel restrictions could affect our roaming traffic volumes and our revenue
- Customer growth could be curbed, because it is difficult to acquire new customers
- Companies may need to reduce their orders of IT services and devices
- Restrictions to social contacts (distance learning and working from home) could overload our networks and reduce their efficiency
- In the case of a severe pandemic, coupled with restrictions, our workforce could be reduced temporarily or permanently

Our corrective measures include:

- Monitoring of relevant developments by our Group Situation Center
- Organization of crisis management and task forces
- Issuance of pandemic guidelines
- Provision of suitable hygienic and personal protective equipment for sales outlets, offices, and network infrastructure sites
- Ramping up and hardening our networks to handle additional peak loads in voice and data traffic
- Protecting our customers and employees through mobile working, online sales, and online customer service

Geopolitical risk: geopolitical instability

Geopolitical tensions endanger stability with respect to the global economy and the financial markets. Economic, political, and/or technological rivalries between geopolitical powers could lead to further trading barriers and thus drive deglobalization even further.

The main potential impacts of this risk include:

- Sanctions could lead to significant restrictions within our supply chain, potentially resulting in disruptions to business
- Increased regulatory uncertainty could result in the alteration or removal of network infrastructure
- Rising prices for the purchase of raw materials and supplies or even a scarcity of resources
- Increased volatility on the financial markets could have a negative impact on the development of interest rates, exchange rates, and even our share price

Our risk mitigation measures include:

- Diversification of our supply chain to cover numerous countries and various suppliers to reduce our dependence on individual countries
- Increasing our supplies of critical components
- Creating transparency regarding service relationships that could be critical across the entire value chain
- Monitoring political developments to be able to take suitable action right away

Social risk: availability of talented job candidates

Our long-term success depends on our ability to acquire top talents, to hold on to them, and to develop them further. The worldwide skills shortage could get worse since young people are joining the workforce later on, older staff are leaving earlier, and there is a general increase in the need for experts in digitalization across all industries.

The main potential impacts of this risk include:

- Reduced productivity could impact our innovativeness and threaten our competitive advantage
- Trying to reach our most important business and financial targets with unfilled positions could lead to project delays and impact our efficiency
- Increased pressure for existing staff could in turn lead to higher stress levels or greater dissatisfaction among employees and have a negative impact on our corporate culture
- The loss of experienced employees could lead to knowledge gaps in key areas

Our risk mitigation measures include:

- Succession planning, in which top talents are identified and developed to take on leadership positions
- Employee development programs including reskilling and upskilling
- New requirements such as health, diversity, and sustainability in order to gain new employees and retain those already at the company
• Investments in automation, artificial intelligence, and other technologies to optimize our processes and lend extra support.

• Setting up and strengthening our brand value as an attractive employer brand.

• Developing long-term incentive and remuneration programs.

• An HR planning strategy which anticipates the skills needed in future and monitors potential staff turnover.
Our process for identifying material CR topics

For some two decades now, we have used a materiality-assessment process to identify the topics that are relevant for our sustainability strategy and for our reporting. Our materiality-assessment process takes account of provisions of the German Commercial Code (HGB) and of the 2021 Global Reporting Initiative. We are continuously refining our materiality analysis. In 2023, the key factors influencing refinement of this process included the provisions of the EU Corporate Sustainability Reporting Directive (CSRD), which will be relevant for our reporting as of the 2024 reporting year. However, since the CSRD will have the effect of changing the materiality criteria, we have selected the topics for the present non-financial statement (NFS) on the basis of our 2022 materiality analysis, which we reviewed in the reporting year to ensure it was fully up to date.

In connection with a document analysis covering the value chain, we explored existing and forthcoming legislation, various competitors, and the expectations of our stakeholders, e.g., the capital markets. An underlying process dating from 2022, considering the entire value chain, had identified the negative and positive impacts of our business activities on the environment, society, and human rights, along with pertinent financial sustainability opportunities and risks. We then assessed the positive and negative impacts based on the probability of their occurrence and the scope of their impacts on the environment, society, and human rights. In the process, we examined the following value creation stages: extraction of resources, production by our suppliers, Deutsche Telekom’s business operations – divided into “administrative processes” and “network build-out and data centers,” usage of our products and services by our customers, and disposal and recycling. In the year under review, we also considered the results of existing materiality analyses from four national companies (T-Mobile US, T-Mobile Polska, Hrvatski Telekom, and OTE Group), in order to incorporate a geographically and socially broad-based international perspective.

In addition, to determine financial materiality, the identified sustainability opportunities and risks were assessed, in internal interviews, with regard to the probability of their occurrence and their potential financial impact on our business. The results of the updated materiality analysis were then validated in an internal workshop with participants from various functional units. As a result of their own activities, the participants were familiar with the concerns of a range of external stakeholders, and they highlighted these concerns in the process.

This review process identified energy consumption in the supply chain, and in transportation, as an additional key issue for the non-financial statement. Last year’s CR report covered the same issue in connection with the topic “Greenhouse-gas emissions – Scope 1, 2, 3.” All in all, the analysis results and related internal discussions have identified issues relating to climate action, circular economies, and health and safety as being of particular importance for Deutsche Telekom.

Reporting against standards
Global Reporting Initiative (GRI)
- GRI 2–12 (General Disclosures)
- GRI 2–14 (General Disclosures)
- GRI 3–1 (Material Topics)

Complete overview of the issues covered by the materiality analysis
Our materiality analysis, now already oriented to the CSRD, considered a total of 34 issues with regard to materiality. Within these, a total of ten sub-issues were identified as material (highlighted in boldface in the list). More information about the materiality-analysis process is available here.

Reporting against standards
Global Reporting Initiative (GRI)
- GRI 3–1 (Material Topics)
- GRI 3–2 (Material Topics)
The following issues were covered by the materiality analysis:

<table>
<thead>
<tr>
<th>ESG area</th>
<th>Issue</th>
<th>Sub-issue</th>
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<tbody>
<tr>
<td>Environment</td>
<td>Climate action</td>
<td>Energy consumption and energy mix (including energy efficiency)</td>
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<td></td>
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<td>Greenhouse-gas emissions – Scope 1, 2, 3</td>
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<td>Environmental pollution</td>
<td>Air pollution (including various pollutants)</td>
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<td>Water pollution (including marine resources and pollutants)</td>
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<td>Soil pollution (including various pollutants)</td>
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<td>Water and marine resources</td>
<td>Water balance (including water management on the part of suppliers)</td>
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<td>Biodiversity and ecosystems</td>
<td>Production-related/production-site-related stresses on biodiversity, ecosystem performance and ecosystems</td>
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<td>Circular economies</td>
<td>Resources/materials used, and circular economies</td>
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<td>Waste, waste management, and recycling processes</td>
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<td>Social</td>
<td>Working conditions</td>
<td>Training and development</td>
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<td>Health and safety</td>
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<td>Working hours</td>
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<td>Work-life balance</td>
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<td>Fair remuneration</td>
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<td>Social security</td>
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<td>Water and sanitary facilities</td>
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<td>Equity and diversity</td>
<td>Inequality (with regard to working conditions, salaries, and remuneration ratios)</td>
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<td>Non-discrimination and equity for all</td>
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<td>Precarious employment conditions</td>
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<td>Other employment-related rights</td>
<td>Collective bargaining, freedom of association, and social dialog</td>
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<td>Forced labor, human trafficking, and child labor</td>
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<td>Privacy protection/data privacy</td>
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<tr>
<td></td>
<td></td>
<td>Decent housing</td>
</tr>
<tr>
<td></td>
<td>Only end consumers / users</td>
<td>Access to information/freedom of speech</td>
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<tr>
<td></td>
<td></td>
<td>Access to products/accessibility</td>
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<tr>
<td></td>
<td>Only for affected communities</td>
<td>Access to decent, adequate food</td>
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<tr>
<td></td>
<td></td>
<td>Protection of land rights, and free, prior, and informed consent</td>
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<td>Safety</td>
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<td></td>
<td>Freedom of speech, freedom of association, and self-determination</td>
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<tr>
<td></td>
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<td>Protection of human rights organizations/protection of human rights</td>
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<tr>
<td></td>
<td>Indigenous peoples</td>
<td>Cultural rights</td>
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<tr>
<td>Governance</td>
<td>Business conduct</td>
<td>Anti-corruption and anti-bribery</td>
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<td></td>
<td></td>
<td>Anti-competitive conduct</td>
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<tr>
<td></td>
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<td>Lobbying (sponsorships and transparency)</td>
</tr>
</tbody>
</table>
Results of the materiality analysis

The results of this year’s materiality analysis will help us prepare for the upcoming reporting requirements from the CSRD. For reporting in our non-financial statement (NFS) pursuant to §§ 315c in conjunction with 289c 289e of the German Commercial Code (HGB), we used the results of this year’s materiality analysis to review the key topics described there. In the present CR report, we are already applying the topic adjustments that we studied in connection with CSRD preparations and that comply with the 2021 GRI Standards.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Materiality by impact</th>
<th>Financial materiality</th>
<th>GRI aspects</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy consumption and mix</td>
<td>✓</td>
<td>✓</td>
<td>Energy (GRI302)</td>
<td>Our approach to energy-efficient networks</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>Sustainability targets in remuneration</td>
</tr>
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<td>Greenhouse gas emissions, scopes 1, 2, 3</td>
<td>✓</td>
<td>✓</td>
<td>Emissions (GRI305)</td>
<td>Our approach to measuring our climate-protection progress</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>Our climate targets</td>
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<td></td>
<td></td>
<td>Sustainability targets in remuneration</td>
</tr>
<tr>
<td>Resources used &amp; circular economy</td>
<td>✓</td>
<td>×</td>
<td>Materials (GRI301)</td>
<td>Our approach to circular economy</td>
</tr>
<tr>
<td>Waste, disposal, and recycling methods</td>
<td>✓</td>
<td>×</td>
<td>Waste (GRI306)</td>
<td>Waste management and recycling</td>
</tr>
<tr>
<td>Health and safety</td>
<td>✓</td>
<td>×</td>
<td>Occupational health and</td>
<td>Our approach to health and occupational safety</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>safety (GRI403)</td>
<td></td>
</tr>
<tr>
<td>Non-discrimination and diversity</td>
<td>✓</td>
<td>×</td>
<td>Diversity and equal</td>
<td>Our approach to diversity, equity, and inclusion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>opportunity (GRI405)</td>
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<td></td>
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<td></td>
<td>Non-discrimination</td>
<td>Our approach to protecting human rights</td>
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<td></td>
<td></td>
<td></td>
<td>(GRI406)</td>
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</tr>
<tr>
<td>Collective bargaining, freedom of association,</td>
<td>✓</td>
<td>×</td>
<td>Freedom of association and</td>
<td>Our approach to shaping employee relations</td>
</tr>
<tr>
<td>and social dialog</td>
<td></td>
<td></td>
<td>collective bargaining</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>(GRI407)</td>
<td></td>
</tr>
<tr>
<td>Anti-corruption and anti-bribery</td>
<td>✓</td>
<td>×</td>
<td>Anti-corruption (GRI205)</td>
<td>A compliance management system aligned with the company’s risk situation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Our approach to sustainable procurement</td>
</tr>
<tr>
<td>Protecting privacy/data protection</td>
<td>×</td>
<td>✓</td>
<td>Not material by GRI</td>
<td>Our approach to data protection</td>
</tr>
<tr>
<td>Access to the information society</td>
<td>×</td>
<td>✓</td>
<td>Not material by GRI</td>
<td>Our approach to digital participation (access, affordability, ability) and digital values</td>
</tr>
</tbody>
</table>
As part of the materiality analysis, we analyzed potential scenarios for financial materiality. Sustainable products can help mitigate existing social, economic, or ecological problems, for example. On the other hand, adverse environmental impacts, such as larger quantities of produced waste, can increase costs (in this case, costs for waste management). The results show that currently, climate-related topics, data protection, access to the information society, and individual aspects in the supply chain pose a financial risk to society, the environment, and human rights, as well as to us as a company. Harmful substances along the supply chain can impair human health, for example, and increasing legal requirements that we have to meet can increase costs. On the other hand, our products and services can help solve ecological and social challenges. For example, we offer solutions that help reduce energy consumption. Such challenges, therefore, pose opportunities for sustainable development, as well as market opportunities for us. For years now, these issues have been taken into account in Deutsche Telekom’s overarching risk-and-opportunity management process, and they are described in detail each year in our annual report.

To determine the key topics, we defined “materiality thresholds” for each of the impacts (financial as well as impacts on the environment, society, and human rights). A topic is considered material as soon as one of these thresholds is exceeded.

Reporting against standards
Global Reporting Initiative (GRI)
• GRI 3-1 (Material Topics)
• GRI 3-2 (Material Topics)

Materiality as a basis for evaluation of ESG risks and opportunities
In the year under review, we once again used our materiality analysis as a starting point for identifying and evaluating financial risks and opportunities that arise in connection with our sustainability issues. In the Group, risks and opportunities are generally assessed using a standardized risk process. As a result, many topics are covered that are also highly relevant from a sustainability perspective. The complementary consideration of financial impacts in the framework of the materiality analysis also helps us take impacts on the environment, society, and human rights into account. If new findings arise in this process, they are incorporated within the standardized risk process.
Impact measurement and management

What impacts do our business operations have on society, the economy and the environment? To what extent are we contributing, with our products, solutions and measures, to the achievement of the UN’s Sustainable Development Goals (SDGs)? These questions guide us in our impact measurement.

We know that to achieve our overarching aim – to constantly increase our business operations’ positive impacts and minimize their negative impacts – we must precisely measure the impacts of our activities.

With the support of experts from within and outside of the company, we have developed a multi-stage impact measurement approach. It enables us to identify the impacts of projects, products, and measures in key ecological and social areas, and to identify their contributions to the SDGs. This process was validated by an examination performed by TÜV Rheinland in the year under review.

We use the results of impact measurement to continually improve our sustainability performance. In addition, they give us valuable information that helps us in transparently communicating the sustainability benefits of our products to consumers and business customers, investors, and other stakeholders.

At the beginning of the process, the responsible experts explain the sustainability aspects of the products and measures concerned. If significant ecological or social/societal impacts are identifiable, we determine how to proceed:

- For products and projects relating to the environment, we define the target situation we want to achieve – i.e., the product to be assessed – and the initial situation – i.e., a product being used for comparison. We also define the relevant challenges to be solved. The initial situation and the target situation are analyzed, throughout the entire applicable life cycle, in terms of their environmental impacts. The resources used in each of the two situations (initial and target) are compared. The results of the comparison are then used as a basis for calculating the pertinent CO₂ savings and any other environmental impacts and benefits, such as reduced water consumption.

- To identify the positive impacts of our products and projects of social and/or societal relevance, we identify relevant current and future societal challenges, and show how our products or services could help tackle them. In the process, we certify measures that make positive contributions to social and societal challenges in the digital world, such as measures that improve digital participation, improve working conditions or help reduce online hate speech and risks.

To obtain transparent and comparable results, we describe the various impact contributions using established metrics for use of resources, and with the help of external frameworks, such as the SDGs. That allows us to also evaluate our contributions to sustainable development from a global perspective. In doing so, we always ensure that our methods are based on robust data and assumptions, and are effective for several years. We also describe the relevant starting point, or baseline, as accurately as possible so that we can reliably evaluate and account for the concrete external impact.

Each completed impact assessment adds to our understanding of the interactions involved – and does so also with respect to all subsequent analyses. We are continually refining our impact measurement process, which has been in place since 2020. In doing so, we take account of both internal requirements and external requirements, such as those arising from regulatory provisions and market developments. At the same time, we are working to bring about commonly accepted standards for measurement of the societal impacts of our products and services – for example, in the framework of the European Green Digital Coalition (EGDC).

In the year under review, we determined the impacts of a total of 13 projects, products, and measures. Overall, 50 of our products and solutions have earned one of the two labels #GreenMagenta or #GoodMagenta described. We have included descriptions of concrete, selected examples applying to the Germany and System Solutions segments and to all segments. Our Europe segment and DTSE also offer labeled products. A current overview of all labeled products is available on our website.
Impact assessment for the Germany segment
Since 2020, various products of the Germany segment have undergone our impact measurement process. As part of such assessment, the products were reviewed for any contributions to the Sustainable Development Goals (SDGs). The analyzed products – digital solutions – help companies reduce their emissions, save energy and create circular economies.

The Deutsche Telekom Sustainability Manager
The Deutsche Telekom Sustainability Manager (Telekom Nachhaltigkeitsmanager) is a central platform for successful management of Environment/Social/Governance (ESG) aspects and issues. New provisions such as the Act on Corporate Due Diligence in Supply Chains (Lieferkettensorgfaltspflichtengesetz – LkSG) and the Corporate Sustainability Reporting Directive (CSR&D) now require companies to achieve greater transparency in their sustainability activities. Via the Deutsche Telekom Sustainability Manager platform, we provide digital tools that support companies in complying with legal requirements in the area of ESG and in achieving their ESG goals.

For example, the tools support CSR&D-compliant preparation of ESG reports and precise calculation of carbon footprints, and they help enhance transparency in supply chains.

The Deutsche Telekom Sustainability Manager also helps companies structure their reporting process, by facilitating targeted entry of performance indicators and precise allocation of responsibilities. Each performance indicator can be linked to specific tasks, measures and goals. Online guides facilitate data entry. By supporting companies in measuring their impacts, the Manager helps companies reach their goals. In addition, it streamlines and accelerates the entire reporting process. Also, it supports user-friendly online publishing of downloadable sustainability reports – which has the added benefit of saving paper.

By helping companies record and manage their sustainability indicators, the Deutsche Telekom Sustainability Manager contributes to SDG 13 (Climate Action).

This solution has been awarded the #GreenMagenta label.

One device for all network functions: Deutsche Telekom’s uCPE device
As the market for electronic devices keeps growing, so do its negative environmental impacts, such as unsustainable resources consumption in production, and continual accumulation of electronic waste. With a view to reducing the numbers of devices our customers require, the Germany segment is now offering devices that combine a range of different features that used to call for separate devices. The devices, known as “universal Customer Premise Equipment (uCPE)” devices, have been available from the Germany segment since 2023, for companies in Germany that have international locations. The devices bring together and virtualize a full complement of network services, including services that used to necessitate separate devices, such as SD-WAN, firewall and route-optimization services. Use of uCPE devices in connection with other services is planned for a later date.

Often, customers use different devices to manage different network and security functions. But each device comes with its own space, power and cooling requirements. Because it combines a range of different network functions in one unit, therefore, the Germany segment’s new uCPE device is helping the segment’s business customers reach their sustainability goals. As a single unit that replaces multiple devices, the new device enables customer locations to significantly reduce their power consumption. In addition, it reduces transport costs, thereby helping to streamline logistics processes. Furthermore, the new uCPE device comes with “extra CPU” chips that customers can activate as necessary, as their requirements grow, without having to order larger devices. This also helps keep the new product’s carbon footprint small.

In the framework of a 24-month contract period, replacement of three separate devices with a single uCPE device can save about 1,900 kg of CO₂e emissions.

This solution contributes to the following SDGs:

- SDG 8 (Decent Work and Economic Growth): By requiring fewer devices in all, systems with uCPE devices improve logistics processes.
- SDG 12 (Responsible Consumption and Production): The packaging for uCPE devices is made of recycled materials and is fully recyclable. Also, the soy-based ink used in printing on the packaging outperforms conventional ink in terms of sustainability.

The uCPE device has been awarded the #GreenMagenta label.

More-sustainable management of companies’ devices
Smartphones and tablets play an indispensable role in our everyday working lives. At the same time, companies are finding that the task of managing all of their employees’ company-owned devices is becoming more and more complex. In many cases, when devices reach the end of their useful lives within the company, they are simply put away and are no longer used. In addition, in many cases devices are replaced before they have reached the end of their useful lives, and then are neither used nor properly recycled.

In cooperation with the “everphone” mobile device service, the Germany segment offers its business customers “Device as a Service” plans. Under such plans, the Germany segment manages devices for its customers. This responsibility includes active collection of devices from employees, exchange and expert repair of defective devices, and certified disposal and recycling of devices taken out of service. This increases the service lives of devices within companies.

Our impact measurement in 2021 found that Device as a Service can reduce emissions by about 50 kilograms of CO₂ equivalents per company smartphone and tablet. The refurbishment rate increases to over 97 percent. Also, employees become more aware of the need to use devices sustainably, throughout the entire value chain. In addition, the high refurbishment rates and longer usage
The service also contributes to the following SDGs:

- **SDG 13 (Climate Action):** The service encourages and promotes cycling as a sustainable mode of transportation for employees, thereby reducing traffic emissions and the associated negative impacts on the environment.

- **SDG 9 (Industry, Innovation and Infrastructure):** Deutsche Telekom and everphone plan to work together to implement a comprehensive sustainability strategy, including the roll-out of Device as a Service (DaaS) in additional countries. The platform is expected to inspire and motivate employees to shift from private vehicles to sustainable mobility options, thereby reducing CO₂ emissions by about 12 metric tons annually per 100 employees.

We have awarded this service our #GreenMagenta sustainability label.

**Impact measurement for the Systems Solutions segment**

Since 2020, various products of our systems business segment have undergone impact measurement as part of the Transparency Suite. In addition, the products have been reviewed for any contributions to the Sustainable Development Goals (SDGs). With them, T-Systems is seeking to enable customers to operate more sustainably.

**Supply Chain Transparency Suite**

Today’s complex global supply chains, unfortunately enough, often entail human rights abuses, such as child labor, as well as heightened risks for workers’ health, such as risks from accidents and toxic chemicals. Now the Systems Solutions segment has developed the Transparency Suite, a software-based solution for protection of human rights. As an added benefit, the Suite supports compliance with the German Act on Corporate Due Diligence in Supply Chains (Lieferkettensorgfaltspflichtengesetz – LkSG), including its socially and ecologically oriented provisions.

The Transparency Suite comprises a risk management system that is automatically updated on a daily basis. Depending on the package selected, the Suite combines internal and external data in ways that support ongoing assessment of supply chains and the suppliers directly or indirectly involved in them. Using the requisite data it continually collects, the Suite divides supply chains into risk clusters, identifies human-rights violations and highlights available corrective measures. In the process, the Suite also makes use of external resilience data, augmented reality and artificial intelligence (AI), which will make further automation increases possible in the future. Also, the Transparency Suite can be used to compile data for reports to the Federal Office for Economic Affairs and Export Control (BAFA).

The strategic approach applied by our Transparency Suite provides the basis for comprehensive CSR reporting. As a result, it contributes to the following SDGs:

- **SDG 6 (Clean Water and Sanitation):** The German Act on Corporate Due Diligence in Supply Chains (Lieferkettensorgfaltspflichtengesetz – LkSG) requires companies to review their production processes for any use of hazardous substances that can contaminate groundwater.

- **SDG 8 (Decent Work and Economic Growth):** Monitoring and analysis of human rights risks provide ways to mitigate such risks.
This solution has been awarded the #GoodMagenta label.

SDG 12 (Responsible Consumption and Production): SDG 12 applies especially to handling of chemicals and waste throughout products’ life cycles. The German Act on Corporate Due Diligence in Supply Chains – compliance with which is reviewed in this context – promotes compliance with the Stockholm Convention and the Basel Convention, both of which are relevant to the issues detailed above.

Smart Groundwater Monitoring

Climate change is bringing increasingly frequent and severe droughts, and the water shortages they cause threaten the need to conserve and protect groundwater resources. In the medium and long terms, changes in annual rainfall distribution will affect groundwater formation and lead to local drops in groundwater tables. Pumping of groundwater can exacerbate this problem. Consequently, the agriculture sector, which uses water especially intensively, needs to find ways to reduce its water consumption.

Now, the Systems Solutions segment’s “Smart Groundwater Monitoring,” an IoT solution, is facilitating sustainable water management strategies. It includes a digital water meter that collects and analyzes groundwater-use data. Precise water-flow monitoring can help make water use in field irrigation more sustainable. The system’s detailed-analysis capabilities support more-efficient, variable distribution of water rights, and they facilitate faster detection – and elimination – of weaknesses in water-management strategies. The system also provides hourly notification of pumped water quantities, and this simplifies compliance with obligations for notification of competent authorities. Our impact measurement, taking account of 600 pumping sites over a 10-hour period, found that fine-tuning of irrigation in keeping with weather conditions can save up to 30 percent of the groundwater (540 000 m³) that would normally be used. Throughout the course of a year with five months of irrigation, the system can reduce CO₂e emissions by more than 130 000 kg, by enabling farmers to monitor groundwater use remotely.

The digital water-meter system contributes to the following SDGs:
- SDG 2 (Zero Hunger): Optimization of agricultural irrigation helps prevent crop failures – and thereby helps prevent food shortages and meet basic food needs.
- SDG 6 (Clean Water and Sanitation): Monitoring and regulation of groundwater use can help improve water availability.
- SDG 15 (Life on Land): Careful, conservation-oriented water use helps protect freshwater ecosystems, aquifer fauna and overall biodiversity.

This solution has been awarded the #GoodMagenta label.

Digital bill of lading helps conserve resources and make processes more efficient

A digital bill of lading developed in close cooperation with various commerce/industry partners is now providing a modern alternative to conventional paper documents in supply chains. Doing away with printed documents saves valuable resources: Every million sheets of paper saved represents savings of 7.7 metric tons of CO₂ equivalents and nearly 6 000 cubic meters of water.

Also, the system helps optimize processes – and thereby reduce resources consumption – by using real-time communication and reducing document losses.

The digital bill of lading is an innovative, sustainable way to make business workflows more efficient. This solution, therefore, contributes to the following SDGs:
- SDG 6 (Clean Water and Sanitation): By saving paper, the production of which is water-intensive, use of the digital bill of lading saves water.
- SDG 9 (Industry, Innovation and Infrastructure): The digitalization the system brings helps make industrial processes more efficient.
- SDG 12 (Responsible Consumption and Production): Elimination of unnecessary paper consumption is a sustainable-consumption solution.

The digital bill of lading has been awarded the #GoodMagenta label.

Cross-segment measures for impact measurement

Sensor-equipped containers for used textiles, for optimized recycling processes

Demand for clothing and textiles keeps growing – along with incineration-based disposal of textiles that reach the end of their life cycles, which has negative climate impacts and wastes resources. Current practices for managing discarded used clothing and textiles are using growing quantities of new raw materials. To promote circular economies, and thereby help conserve resources, we collect discarded textile items for upcycling, using collection containers connected to the Internet of Things (IoT). The containers have integrated fill-level sensors that help to analyze and optimize the collection process, and make it as efficient as possible.

The system makes it possible to optimize personnel assignments and pick-up routes, because the sensors automatically monitor the containers’ fill levels and send out just-in-time notification, via the IoT cloud, whenever a container fills up. Collected textile items are made available for reuse, wherever possible, or are properly recycled by our partners. The optimized container emptying that the automatic fill-level monitoring and notification makes possible has reduced the average annual pick-up route distances by 30 percent, or by about 9 400 km. That corresponds to CO₂e savings of about 23 metric tons of CO₂e per year, for ten containers for collecting discarded textiles. Also, Deutsche Telekom has collected...
about 21 metric tons of textiles for reuse. That corresponds to a CO2-emissions reduction of 315 metric tons (cumulative) and 138 million liters of water saved (also cumulative).

This solution also contributes to the following SDGs:

- SDG 11 (Sustainable Cities and Communities): By helping to cut CO2e emissions and save time, the connected waste-textile containers help cities and communities become more sustainable.

- SDG 12 (Responsible Consumption and Production): The solution’s improved recycling process supports sustainable consumption and production. It helps save and conserve natural resources.

This Deutsche Telekom sustainability solution is strongly focused on promoting a sense of responsibility, and it has been awarded the #GreenMagenta label.

A new app provides an easy way to apply for maternity and parental leave

Applications for maternity and parental leave present challenges for both employees and our human-resources department, because they tend to involve a lot of red tape, including the obtaining of all required documents. Now, a new parental leave app offers our employees an innovative way of managing all the paperwork. And it supports expectant parents throughout their entire parental leave.

By providing a comprehensive, detailed overview of the application process for parental leave, and monitoring the status of submitted applications, the app plays a useful role – for all involved persons – from the time an employee first notifies the company of a pregnancy until the time they are able to return to work. With just a few clicks, users can download needed forms – and, in most cases – complete them within the app, which offers the added benefit of saving paper.

With estimated savings of 340 kg paper and 880 kg CO2e per year, the parental leave app is making a positive environmental contribution.

In addition, the app provides access to the “Stay in ContacT” network, via which employees on parental leave can stay in touch with employees in the workplace – and cultivate contacts that can facilitate their return to their regular jobs.

With the parental leave app, we are contributing to the following SDGs:

- SDG 8 (Decent Work and Economic Growth): By facilitating the tasks of applying for and organizing parental leave, the app reduces the relevant stress for expectant mothers and fathers.

- SDG 10 (Reduced Inequalities): The app is available for all expectant parents – regardless of gender.

- SDG 12 (Responsible Consumption and Production): The paper savings achieved by the app promote sustainable consumption.

This solution has been awarded the #GoodMagenta label.

A fun and games way to learn about online security: “AwareNessi – the fantastic security activity book“


“Awarenessi” supports parents in talking with their children about internet safety, and in teaching them to use the internet with care (SDG 4).

This service also contributes to the following SDGs:

- SDGs 5 (Gender Equality) and 10 (Reduced Inequalities): “Awarenessi” is a gender-neutral avatar. The magazine uses gender-neutral language that is appropriate for children.


- SDG 12 (Responsible Consumption and Production): Issues of “Awarenessi” are available in digital form, for printout only as necessary. This helps reduce paper waste.

- SDG 16 (Peace, Justice and Strong Institutions): For each issue of “Awarenessi,” our employees volunteer 60 hours of their time (for development, design, and communication). In addition to helping make children aware about data and information security, “Awarenessi” promotes respectful conduct and interaction online.

- SDG 17 (Partnerships for the Goals): The issues are available in 16 different languages. Consequently, “Awarenessi” provides reliable information about the internet internationally.

We have awarded this solution our #GoodMagenta label.
Our Contribution to the Sustainable Development Goals

“As the leading European telco, we also want to be a leader when it comes to sustainability.” A comparison with the 17 United Nations SDGs shows that many of our activities, services, and products are already helping to meet ecological and societal challenges today.

We support the 17 Sustainable Development Goals (SDGs) of the United Nations (UN). Various studies have come to the conclusion that 103 (of a total of 169) subgoals associated with the SDGs can benefit from the use of ICT. Examples include the study entitled “ICT-centric economic growth, innovation, and job creation,” published in 2017 by the International Telecommunication Union, and the “SMARTer2030” study launched by the GeSI (Global e-Sustainability Initiative) initiative in 2019.

Our network infrastructure forms the technological foundation; it enables solutions to social and ecological challenges, hence contributing to achieving many SDGs. That is why we believe we can make the biggest impact on SDG 9: “Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.”

The following overview details how we contribute to implementing the SDGs. It also shows how we measure our contribution, and refers to specific examples from the current CR report.

Melanie Kubin-Hardewig
Vice President Group Corporate Responsibility Deutsche Telekom AG
Management & facts
Strategy
Sustainable Development Goals

**SUSTAINABILITY GOAL 1**
Decent Work and Economic Growth
We provide excellent working conditions for our employees and work continuously to make the supply chain more sustainable. Our contribution.

**SUSTAINABILITY GOAL 11**
Sustainable Cities and Communities
Our innovative solutions and the network infrastructure built out help shape the transformation of cities into smart urban spaces. Our contribution.

**SUSTAINABILITY GOAL 9**
Industry, Innovation and Infrastructure
We invest in new technologies, secure network infrastructure and, in doing so, create the basis for economic performance and participation in the knowledge and information society. Our contribution.

**SUSTAINABILITY GOAL 12**
Responsible Consumption and Production
We increase the share of innovative, sustainable products in our portfolio, ensuring transparency about this by identifying these products with our #GoodMatters and #GreenMatters labels. Moreover, we reduce the waste volume generated by our Group and are committed to proper recycling. Our contribution.

**SUSTAINABILITY GOAL 3**
Good Health and Well-being
We support the health care sector by providing various ICT solutions, from hospital management systems to our contact tracing app, the Corona-Warn-App. We also promote the health and well-being of our employees across the Group. Our contribution.

**SUSTAINABILITY GOAL 13**
Climate Action
We contribute to climate protection — within the Group by taking measures to increase energy efficiency and use renewable energy and outside the Group by providing sustainable products and services. Our contribution.

**SUSTAINABILITY GOAL 4**
Quality Education
We support the population’s media literacy and democratic skills with various projects and initiatives. We offer our employees a wide range of individual, vocational training and development programs. Our contribution.

**SUSTAINABILITY GOAL 16**
Life on Land
ICT solutions help increase yields in agriculture and conserve resources. We are committed to conserve biodiversity and call on our suppliers to protect the environment. Our contribution.

**SUSTAINABILITY GOAL 5**
Gender Equality
We promote equal opportunities and use targeted measures to increase the share of women in management, in supervisory boards, and in STEM professions. We also call on our suppliers to ban gender discrimination. Our contribution.

**SUSTAINABILITY GOAL 1**
No Poverty
Our networks provide the conditions for economic and social participation and thus also access to education, the lack of which is one of the main causes of poverty. Our contribution.

**SUSTAINABILITY GOAL 7**
Affordable and Clean Energy
We increase the share of green energy in our total energy consumption and use energy-efficient technology. Our contribution.

**SUSTAINABILITY GOAL 2**
Zero Hunger
ICT solutions help boost crop yields while remaining resources such as seeds and water. Our contribution.
Our contributions to achieving the SDGs have also had a positive effect on our Company. In order to highlight these contributions, we have divided them into five areas: “Employees”, “Finance”, “Structure”, “Relationships” and “Environment”. Each area has been assigned its own symbol.

To clearly highlight the contribution our products, services, and activities make toward the individual sustainability development goals and our value chain, we have marked the relevant passages in our annual report and the “Management and Facts” section of the CR report with the respective SDG and value contribution symbols.
**Stakeholder management**

**Our stakeholders**

Our interaction with stakeholder groups helps us find support for our concerns. In addition, it provides input that helps us recognize key trends early on. Also, it facilitates our innovation processes. The “Design for All” sounding board is a current example of our efforts to actively include our stakeholders. The sounding board, staffed with external experts, advises us on ways of making our products and processes more accessible and easier to use.

The following overview sets out who our stakeholders are and what matters to them most:

### Analysts, investors and their representatives

**TOP-SUBJECTS:**
- Energy consumption and mix
- Greenhouse gas emissions, scopes 1, 2, 3
- Anti-corruption and anti-bribery
- Protecting privacy/data protection

**Stakeholder groups:**
- Private investors
- Funds, asset managers and analysts
- (SRI) rating agencies
- Analyst organizations and associations
- Institutional investors

### Customers, potential customers and their representatives

**TOP-SUBJECTS:**
- Greenhouse gas emissions, scopes 1, 2, 3
- Protecting privacy/data protection
- Access to the information society

### Stakeholder groups:

- Youngsters and young adults
- Families
- Middle-aged people
- Senior citizens
- Small and medium-sized enterprises
- Large corporations
- Public authorities
- Consumer organizations and segment-specific interest groups

### Business sector and its representatives

**TOP-SUBJECTS:**
- Energy consumption and mix
- Greenhouse gas emissions, scopes 1, 2, 3
- Resources used & circular economy
- Waste, disposal, and recycling methods
- Health and safety
- Non-discrimination and diversity
- Collective bargaining, freedom of association, and social dialog
- Anti-corruption and anti-bribery
- Protecting privacy/data protection
- Access to the information society

**Stakeholder groups:**
- DAX-listed companies
- Other large corporations
- Small and medium-sized enterprises
- Trade and industry associations
- Cooperation partners
- Competitors

### Science, research and education

**TOP-SUBJECTS:**
- Energy consumption and mix
- Greenhouse gas emissions, scopes 1, 2, 3
- Resources used & circular economy
- Waste, disposal, and recycling methods
- Health and safety
- Protecting privacy/data protection
- Access to the information society

**Stakeholder groups:**
- CR and sustainability research institutions
- Political and business research institutions
- Universities
- Schools
- Day care centers
- Student organizations and university associations
- ICT, sociology and design research institutions
NGOs and special interest groups

TOP-SUBJECTS:
- Energy consumption and mix
- Greenhouse gas emissions, scopes 1, 2, 3
- Resources used & circular economy
- Waste, disposal, and recycling methods
- Health and safety
- Non-discrimination and diversity
- Collective bargaining, freedom of association, and social dialog
- Anti-corruption and anti-bribery
- Protecting privacy/data protection
- Access to the information society

Stakeholder groups:
- Humanitarian organizations and charities
- Business ethics groups
- Multi-thematic organizations
- Churches and their relief organizations as well as other religious and social groups
- Foundations
- Environmental and climate protection organizations

Media

TOP-SUBJECTS:
- Energy consumption and mix
- Greenhouse gas emissions, scopes 1, 2, 3
- Resources used & circular economy
- Waste, disposal, and recycling methods
- Health and safety
- Non-discrimination and diversity
- Collective bargaining, freedom of association, and social dialog
- Anti-corruption and anti-bribery
- Protecting privacy/data protection
- Access to the information society

Stakeholder groups:
- Radio broadcasters, daily press, press agencies
- Online media and social networks
- Publishers
- Journalist associations/media groups
- ICT and communications

Politics

TOP-SUBJECTS:
- Greenhouse gas emissions, scopes 1, 2, 3
- Health and safety
- Collective bargaining, freedom of association, and social dialog
- Anti-corruption and anti-bribery
- Protecting privacy/data protection

Stakeholder groups:
- Players at national level
- Embassies and consulates
- Supervisory and regulatory authorities
- Communities and their representatives
- International organizations
- Players at EU level and in the USA

Employees, potential employees and their representatives

TOP-SUBJECTS:
- Greenhouse gas emissions, scopes 1, 2, 3
- Resources used & circular economy
- Health and safety
- Non-discrimination and diversity
- Collective bargaining, freedom of association, and social dialog
- Anti-corruption and anti-bribery

Stakeholder groups:
- Employees
- Managers
- Board of Management
- Applicants and prospective employees
- Trade unions and works councils
- Apprentices/trainees and students
- Endowed chairs

 Suppliers

TOP-SUBJECTS:
- Energy consumption and mix
- Greenhouse gas emissions, scopes 1, 2, 3
- Resources used & circular economy
- Health and safety
- Anti-corruption and anti-bribery

Stakeholder groups:
- Auditors and certification bodies
- Suppliers
- Consultants

Reporting against standards

Global Reporting Initiative (GRI)
- GRI 2–29 (General Disclosures)
We encourage stakeholder engagement in our corporate activities. With this in mind, we developed an appropriate strategy in 2011. It is based on the three AA1000 principles developed by AccountAbility, a non-governmental organization: materiality, inclusivity, and responsiveness. Our compliance with these principles was reviewed and confirmed by an auditing company in connection with the introduction of our 2013 Strategy. In the 2023 reporting year, we intensified our dialog with our employees – for example, via our Green Pioneers Day – with a view to making our internal processes even more sustainable.

We used a case-based relevance analysis to identify the type and intensity of our stakeholder engagement. The more relevant a stakeholder group is to the topic or project concerned, the more intensive the engagement of that stakeholder group can be. Depending on the intensity, we make a distinction between three types of engagement: participation, dialog, and information.

The feedback that we receive from our stakeholders is incorporated into our CR activities and also affects the CR program.

### Reporting against standards

**Global Reporting Initiative (GRI)**
- GRI 2-29 (General Disclosures)

### Overview of memberships and collaborations

Overview of memberships and collaborations as part of our sustainability commitment:

#### Business and industry associations
- Bitkom
- Bundesverband der Deutschen Industrie e. V. (BDI) (The Voice of German Industry)
- European Telecommunications Network Operators’ Association (ETNO)
- Forum Nachhaltige Entwicklung der Deutschen Wirtschaft e. V. (econsense) (Forum for Sustainable Development of German Business)
- GSM Association (GSMA)
- Next Generation Mobile Network (NGMN)
- International Telecommunication Union (ITU)
- TM Forum

#### Organizations for protecting the climate and the environment
- B.A.U.M. e. V.
- Climate Neutral Data Center Pact
- Eco-Rating Consortium
- European School of Management and Technology (ESTM)
- Global e-Sustainability Initiative (GeSI)
- Joint Alliance for CSR (JAC)
- Lenovo 360 Circle
- RE100
- Solar Impulse Foundation
- Stiftung KlimaWirtschaft (German CEO Alliance for Climate and Economy)
- UN Climate Change Global Innovation Hub
- UN Global Compact
- The Climate Choice

#### Organizations for societal topics
- Aktion Deutschland Hilft e. V.
- Amadeu Antonio Stiftung
- Bundesarbeitsgemeinschaft der Senioren-Organisation (BAGSO) (German Association of Senior Citizens’ Organizations)
- Business Council for Democracy (BC4D)
- Diversity Charter
- Charter of Digital Networking
- CORRECTIV
- Das NETZZ
- Deutschland sicher im Netz (DsIN) (Making Germany safe on the net)
- Digitale Helden (Digital Heroes)
- Diskutier mit mir e. V. (Discuss with Me)
- DKMS
EDAD Design für alle e.V.¹
Europäische Akademie für Frauen in Politik und Wirtschaft Berlin e. V. (EAF Berlin) (European Academy for Women in Politics and Science Berlin)
esports player foundation
feee
FemTec
Freunde fürs Leben e. V.¹ (Friends for Life)
Gesicht Zeigen! Für ein weltoffenes Deutschland e. V. (Show your face)
Global Digital Women
HateAid
ichbinhier e. V.¹
IST Germany
JUUUPORT e. V.¹
Kompetenzzentrum Technik - Diversity - Chancengleichheit e. V. (kompetenzz) (Competence Center Technology - Diversity – Equal Opportunity)
Managerfragen.org¹ (Manager Questions)
100% MENSCH¹ (100% Human)
Nummer gegen Kummer¹ (youth counseling line)
Sozialhelden e. V.
TelefonSeelsorge¹ (crisis hotline)
UN Women Deutschland e. V.¹

Research institutions
Ben-Gurion University
Deutsches Zentrum für Luft- und Raumfahrt (German Aerospace Center)
Forschungs institut für Kraftfahrwesen und Fahrzeugmotoren (Research Institute for Automotive Engineering and Powertrain Systems Stuttgart)
Fraunhofer Institut
Handelshochschule Leipzig (Leipzig Graduate School of Management)
Helmholtz-Zentrum für Umweltforschung (Helmholtz-Centre for Environmental Research)
Umwelt Campus Birkenfeld (Environmental Campus Birkenfeld)
Cooperation with universities: Martin-Luther-Universität Halle-Wittenberg, University of Freiburg, Paderborn University, University of Stuttgart, TU Darmstadt (Technical University of Darmstadt)

¹ Website only available in German

Reporting against standards
Global Reporting Initiative (GRI)
GRI 2–28 (General Disclosures)
GRI 2–29 (General Disclosures)
A compliance management system aligned with the company’s risk situation

Our compliance culture is a key component for corporate governance based on integrity and respect. We have expressed our Group-wide commitment to complying with ethical principles and both legal and statutory requirements. This commitment has been incorporated in our Guiding Principles and Code of Conduct.

Integrity – which necessarily encompasses compliance – forms the basis of all our business decisions and activities. It defines the behavior of all our employees in dealings with customers, employees, investors, managers, and Deutsche Telekom’s overall sphere of operations.

We have implemented a compliance management system (CMS) with the objective of minimizing risks from systematic breaches of legal or ethical standards. In this approach, we address risks that could result in regulatory or criminal liability of the company, its executive bodies, or its employees – or in significant harm to the company’s reputation. The Board of Management considers its overall responsibility for compliance as a key leadership task. Our Chief Compliance Officer is responsible for the design and management of the CMS. Compliance officers implement the CMS and our compliance goals locally at the level of our operating segments and national companies.

Our compliance work pursues the following objectives in particular:

- Fostering a compliance culture and ethical conduct
- Identifying, analyzing, and assessing compliance risks at an early stage
- Integrating preventive measures in business processes early and permanently, to prevent breaches of compliance
- Responding consistently to any breaches of compliance
- Minimizing liability risks for the company
- Being viewed as a dependable partner by customers and business partners

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 2–23 (General Disclosures)
- GRI 2–25 (General Disclosures)
- GRI 2–26 (General Disclosures)
- GRI 205 3–3 (Management of material topics)

Ongoing audit of compliance management continued

We have our compliance management system audited and certified regularly by independent auditors, with particular attention paid to anti-corruption measures. In the 2020 and 2021 financial years, 22 companies were audited successfully: nine German companies in 2020 and 13 international companies in 2021. The audits focused in particular on processes in the companies that are exposed to an increased risk of corruption in general, for example, in procurement, sales, events, donations, sponsorships, mergers and acquisitions, and human resources. The next audit of selected Group companies for certification purposes (IDW PS 980 audit standard) is planned for the 2024 and 2025 financial years.

Further development of the compliance management system through regular risk assessment

Compliance risk assessments (CRAs) are a foundation of our compliance management system. We use CRAs to identify and assess compliance risks and implement appropriate preventive measures based on their results. To this end, we have introduced a process to be carried out at regular intervals. The companies that are inspected through CRAs are selected according to risk, using a model based on the maturity of the companies in question.

The Board of Management and the Audit Committee of the Supervisory Board of Deutsche Telekom are notified of the results of a compliance risk assessment.

The CRA methodology was adjusted in the reporting year and a focus CRA carried out. The focus CRA is a further evolution of the existing CRA approach. Under the new approach, the goal is to assess the effectiveness of the control environment in selected compliance risk areas. We piloted this approach in 2023, with a primary focus on our procurement processes. Ten international companies (the Europe and Systems Solutions operating segments) and one national company (Germany operating segment) participated in this focus CRA pilot project. The companies were selected according to risk, with a focus on international companies with their own procurement organization. The respective Group companies are responsible for carrying out both the focus CRA and the standard CRA. The central compliance organization manages the overall process, providing support and advice at all stages.
As a company listed on a United States stock exchange, T-Mobile US uses its own methodology to carry out a risk assessment; it reports regularly on this risk assessment to the relevant bodies, which include representatives of Deutsche Telekom AG.

Reporting against standards
Global Reporting Initiative (GRI)
GRI 2–16 (General Disclosures)
GRI 2–25 (General Disclosures)
GRI 205–1 (Anti-corruption)

A clear reference framework: Deutsche Telekom’s compliance policies
Our compliance culture is a key component for corporate governance based on integrity and respect. We have expressed our Group-wide commitment to complying with ethical principles and both legal and statutory requirements. This commitment has been incorporated in our Guiding Principles and Code of Conduct.

The Code of Conduct is further detailed by additional internal policies aimed, for example, at preventing corruption and breaches of antitrust laws.

Our compliance policies include strict requirements for providing gratuities to public officials, including facilitation payments in particular.

The Group Policy on Avoiding Corruption and Other Conflicts of Interest includes a basic rule that requires all employees to keep their personal interests separate from those of the company. In individual cases where conflicts of interest are unavoidable, employees are required to disclose and document such conflicts.

With our digital ethics guidelines for artificial intelligence (AI), we are committed to ensuring that our AI-based products and services are used responsibly, including future developments. AI must be designed to be human-centered, to protect the sovereignty, freedom from discrimination, and freedom of speech of the persons involved.

An overview of our most important policies is available on our website.

Reporting against standards
Global Reporting Initiative (GRI)
- GRI 2–28 (General Disclosures)

Raising awareness of compliance risks among staff
We support our employees Group-wide with a variety of measures to ensure that their everyday work remains ethical and legally compliant. This includes:

- A policies database that helps staff find and implement applicable regulations

- Regular compliance and anti-corruption training, which is also part of our onboarding processes for new employees. In the year under review, we rolled out an e-learning module on the fundamentals of compliance to all domestic and international Group employees (not including TMUS) that addresses anti-corruption and other topics. This module is available in 14 languages. It also contains an in-depth section on dealing with (potential) conflicts of interest (see GRI 205–2)

- It features short, to-the-point videos on compliance topics of relevance to everyday work procedures. They are available to employees at all times, via the YAM UNITED intranet portal and LinkedIn

- Since 2013, to mark the worldwide UN Anti-Corruption Day each December 9: annual implementation of Group-wide communication campaigns and a variety of anti-corruption awareness activities at the companies

- AskMe – the advisory portal for questions regarding compliance and integrity. This portal gives employees answers to compliance issues that often come up at work (FAQs). Employees also have the opportunity to contact the AskMe consulting team with any questions they may have about compliance. The number of inquiries and the topics covered can be viewed here

Regular commitment by the members of the DTAG Board of Management to strict compliance with applicable laws (particularly the ban on corruption)

Reporting against standards
Global Reporting Initiative (GRI)
- GRI 2–26 (General Disclosures)
- GRI 205–2 (Anti-corruption)

Systematic handling of breaches of compliance through the TellMe whistleblower portal
For Deutsche Telekom, compliance with valid laws, internal policies, and principles of conduct is essential, because we know that corporate success is built on a foundation of integrity, ethics, and personal responsibility. That’s why we want to avoid all risks that could question our integrity and harm others.

If we are to live up to this responsibility, it is important that we are made aware of any misconduct that could have an impact on compliance.

Deutsche Telekom therefore provides all employees and external parties with a means of reporting violations of laws and internal regulations – even anonymously – through the TellMe whistleblower portal, which has been in place since 2006. This also includes tip-offs regarding human rights-related and environmental risks, as well as legal violations in our global supply chain. It can involve the actions of our employees in internal business units of Group companies, as well as those of our suppliers or business partners. We follow up on all tip-offs related to a violation of legal or internal regulations, provided the description of the facts is adequate.
If requested, all information provided by whistleblowers will be treated in confidence to the extent permitted by law. Provided that whistleblowers have acted to the best of their knowledge and in good faith and have not broken any applicable law themselves, they will not suffer any disadvantage or harm as a result of raising their concern. Reprisals against whistleblowers are prohibited, including threats of and attempts at reprisals. Every report will be thoroughly examined, suspected cases will be investigated, and any breaches rigorously followed up. Any violations we uncover will be rigorously sanctioned, without exception, according to legal provisions, regardless of the rank and position of the persons involved. This also includes possible termination of the employment relationship and an assertion of claims for damages. Any weaknesses identified in the internal control system during the investigation are systematically analyzed and remedied.

We have introduced a Group-wide reporting process to control and monitor these activities.

- Most of the tip-offs received in 2023 focused on “financial interests” (possible cases of fraud, embezzlement, manipulation of targets, and unfair sales methods).
- In confirmed cases, we impose systematic sanctions that are proportionate to the act and the guilt of the perpetrator and are in line with applicable legal provisions. We publish other details, such as information about implemented measures, on our website.

**Receipt and handling of tip-offs on the TellMe portal***

<table>
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<td>Compliance-relevant tip-offs</td>
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<td>Non-compliance-relevant tip-offs</td>
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<td>758</td>
<td>962</td>
</tr>
</tbody>
</table>

*Tip-offs received directly by the international companies are only included here if they are relevant to the Group.

In addition to Deutsche Telekom’s internal points of contact and reporting channels like the TellMe portal, whistleblowers can also use external reporting channels (only available in German).

**Measures to strengthen our corporate culture**

Compliance and integrity are key components of our corporate culture.

The world is getting increasingly complex and we are confronted with new challenges and regulations every day. This makes it more important than ever to offer reliable guidance to all employees, to enable them to act confidently and ethically in different situations.

Our e-learning offerings for compliance have been established Group-wide, including those covering value-based, cultural, and integrity-related aspects. In 2023, we rolled out an e-learning module on the fundamentals of compliance to all domestic and international Group employees (not including T-Mobile US) that addresses anti-corruption and other topics. This module is available in 14 languages. We also held in-person training with Board of Management members and top management in 2023, in which we processed and discussed proper conduct in typical compliance dilemmas based on practical examples.

Our ICARE check, a self-test with five simple questions, supports our employees in making the right, responsible decisions in difficult situations.

**Crossing borders: Worldwide cooperation for compliance**

Different framework conditions in the countries where Deutsche Telekom is active represent a significant compliance challenge for us. The increasingly dynamic development of global markets, new digital business models, and intensified international competition also influence our compliance strategy.

To meet the Group’s demands as an international corporation, we regularly discuss strategic compliance topics with compliance officers at our international Group companies. At our International Compliance Days in 2023, compliance officers and compliance managers from our international and local units met in person with experts from Group Compliance to discuss current topics. In addition, new compliance managers were invited to an onboarding session at Deutsche Telekom’s headquarters in the year under review. In addition to the opportunity to meet their colleagues on the central Compliance team in person, the employees also learned about compliance processes, topics, and culture, along with challenges in the Group. Two classroom courses were held for new compliance managers in the year under review, culminating in the designation “Certified Compliance Manager.”

Each local department has a key account manager from the Group Compliance team, who exchanges information with them on a regular basis. More international exchange takes place in regular, virtual compliance community calls, where compliance managers from local units take part in activities such as presenting their departments and local challenges to the community. Other topics in the virtual meetings included the compliance strategy, results from the compliance risk assessment, the compliance e-learning, the German Act on Corporate Due Diligence in Supply Chains (Lieferkettensorgfaltspflichtengesetz – LkSG), and generative AI.
We also discuss compliance issues with other companies and with expert groups. In addition, we regularly promote the further development of compliance standards and management systems through specialist presentations, publications, and other contributions.

**Commitment to anti-corruption initiatives**

We participate regularly in the work of national and international organizations that focus primarily on compliance issues. As a member of associations and organizations such as the German Institute for Compliance (DICO e. V.), the Compliance & Integrity forum of ZfW (Center for Business Ethics) and Bitkom, Germany’s digital association, we make use of opportunities to exchange ideas and experiences related to compliance.

For years now we have been using the United Nations International Anti-Corruption Day on December 9 as an opportunity to raise awareness in the Group about the issue of bribery and corruption. For more details, see the “Raising awareness of compliance risks among staff” section.

**Responsible use of artificial intelligence (AI)**

Digital responsibility is a task for society as a whole. Deutsche Telekom develops artificial intelligence (AI) and uses it in a variety of products and services for our customers and for internal use. AI systems have long become an integral component of how we work. For example, they are used to answer customer inquiries in the best possible way.

Like our commitments to high service quality and digital sovereignty, we are committed to the ethical use of AI that focuses on people and their needs (human-centered AI).

We are taking the following measures to ensure that human-centered AI is embedded at the company:

- An interdisciplinary working group on digital ethics was formed with employees from Group Compliance, T-Labs, DT Service, Legal, Group Privacy, Group Public and Regulatory Affairs, Patent & Brand, T-Systems, and Deutsche Telekom Services Europe and organizationally incorporated into the Law and Integrity area of the Compliance department. It deals with the ongoing development, support, and implementation of digital ethics throughout the Deutsche Telekom Group. It focuses on the implementation of foreseeable requirements from future AI regulation by the European Union.

- Our Board of Management members Claudia Nemat (Technology and Innovation) and Birgit Bohle (HR and Legal Affairs, Labor Director) are actively involved in coordinating activities in this area. The interdisciplinary working group on digital ethics, for example, was coordinated in a co-creation approach by the two Board of Management members, along with the Chief Compliance Officer and the Head of Group Public & Regulatory Affairs.

- Deutsche Telekom is taking a pioneering role in the use of AI in IT systems related to employment. To this end, an “AI Manifesto” (only available in German) was developed together with employee representatives to acknowledge the specific challenges posed by AI and incorporate technical and regulatory developments in internal processes. A body of experts consisting of representatives from both groups was formed to support further implementation.

- A body of experts on ChatGPT was founded at the beginning of the year to address the challenges of generative AI and enable exchange on and assessment of these new technologies across the relevant corporate disciplines. In February 2023, the body developed an action framework called “ChatGPT,” aimed at promoting understanding of the risks and opportunities that large language models present to our employees and establish a culture of enablement. The “ChatGPT” action framework regulates voluntary use of the test version of ChatGPT offered by OpenAI, to ensure that our employees who use this technology do so effectively and with awareness of their responsibilities.

- To further promote a culture of enablement, the first “Deutsche Telekom Generative AI Prompt-A-Thon” was organized in September, where participants were encouraged to develop prompts to solve a variety of tasks and explore potential future uses of generative AI.

- In addition, communities focused on topics such as “Human-centered Technology” and operational implementation efforts such as the AI Competence Center (AICC), the Telekom Deutschland Data Tribe, and the T-Systems AI Factory receive central support within this framework to synchronize efforts at the corporate level with existing processes focused on digital ethics.

Against backdrop of human-centered AI, in 2018 we were one of the first companies in the world to develop guidelines for the ethical use of our AI. These guidelines illustrate how we use AI responsibly. Our AI guidelines outline an approach in which AI is developed with people and their needs in mind. They are oriented to the pertinent legal foundations – and to our Code of Human Rights, in which we commit ourselves to upholding and promoting human rights and taking responsibility.

To further detail our AI guidelines and put them into practice, we have initiated measures such as the following:

- The “Professional ethics” guide was developed together with technology experts and project managers. The guide presents best practices, methods, and tips for applying the AI Guidelines to development processes. With this guide, we seek to ensure that all developers who work with AI conform to the AI guidelines and implement them in the systems and products they develop.

- We use our “Digital Ethics Assessment” to ensure that our ethical AI requirements can still easily be followed and implemented in our development processes, as part of our “ethics by design” approach.
In addition, we have added the AI Guidelines to the curricula for various training and development courses for our employees. For example, we developed advanced training courses for data scientists and for our “Re-Skilling Academy,” in which we offer a variety of attractive formats – such as virtual guided tours and online training – and provide support for learning journeys on AI with extensive coverage of digital ethics.

To ensure that our high ethical standards for AI development are also reflected in our supply chain, we supplemented our Supplier Code of Conduct in 2020 with content related to our AI guidelines and updated it in 2022 – making us a pioneer in this area as well.

As part of our work as a member of various bodies, we proactively share our experiences and insights with other companies. This occurs, for example, in our work in the Federation of German Industries (BDI); the German Association for Information Technology, Telecommunications and New Media (Bitkom); the German Association for the Digital Economy (BVDW); and the D21 digitalization initiative.

**Further development of the Compliance organization**

Dynamic challenges in our market environment, increasing regulatory requirements, and changes in the working world require continual adjustments to our compliance management system. We also keep our Compliance staff’s knowledge up to date with requirement-based, situation-related training courses and cross-company interchange formats, among other measures. In addition to professional development, these courses cover topics such as agility, modern working, and tools and processes.

To adapt our Compliance organization to the increasing demands of our internal and external customers and to agile working methods, the Group Compliance organization has been structured according to an agile organizational model with a focus on customers, the Group Compliance organization has been structured according to an agile organizational model with a focus on customers and digitalization and has been working with agile methods since 2021.

This ongoing development of our Compliance organization is intended to contribute to our customer-centric, lawful, sustained success as a company. Our compliance strategy focuses on our target vision of a leading digital compliance management system (leading digital CMS).

We envision a compliance management system (CMS) that does the following:

- Integrating compliance requirements in business processes as seamlessly as possible
- Showing the Group-wide status of the CMS and existing compliance risks at all times, transparently and up to date
- Actively takes up and addresses new developments in the business and regulatory domains and uses the insights gained for continuous improvement

The key components of leading digital CMS are culture, trust, and simplicity.

- **Culture** is the foundation of how we work together. Compliance cannot succeed without a good, open corporate culture in which every individual is willing to take responsibility, admit mistakes, and point out risks.
- **Trust** goes in two directions: The Compliance function serves as a trusted advisor, which develops solutions for dealing with compliance risks together with the business units. Conversely, the Compliance unit also returns this trust by only defining binding guidelines, where deemed necessary under risk aspects.
- **Simplicity** means that we want to make it as simple as possible for everyone at the company to follow the rules and implement compliance requirements. This means formulating the rules clearly and simply, for instance, and limiting them to what is essential.

To achieve the objective of having a leading digital CMS, we have defined specific measures that we are implementing step by step.

- We created the Compliance Digital Transformation cluster to consolidate digitalization expertise and drive forward the ongoing development and digitalization of compliance processes. Our efforts in 2023 included the implementation of our new Compliance Reporting Tool (CRT).
- To address the modules of trust, culture, and simplicity overall, we developed the ICARE check, a simple self-test with five questions for critical situations. The test is intended to help all employees master difficult situations and judge whether they should obtain advice before deciding on how to proceed further.
- We also supplemented our classroom training courses with dilemmas from everyday business. Joint, interactive discussion of situations from everyday business that often make it difficult to find the right answer has resulted in a trusting, open dialog in the training courses, contributing to both the “culture” and “trust” elements.
- In 2023, we rolled out an e-learning module on the fundamentals of compliance to all domestic and international Group employees (not including T-Mobile US) that addresses anti-corruption and other topics. This module is available in 14 languages. Based on a new learning concept, it incorporates a “tone from the top” approach – compliance as practiced by Board of Management members – combined with many interactive elements. The aim is to teach employees about compliance in a simple, playful manner.
In addition, adjustments to compliance risk assessments and the handling of our TellMe whistleblower portal that were needed to implement the German Act on Corporate Due Diligence in Supply Chains (Lieferkettensorgfaltspflichtgesetz – LkSG) took effect on January 1, 2023.

Our measures for the organization's evolution with regard to artificial intelligence (AI) are listed here.

**United States segment: compliance risk assessment**

As a US-listed company, T-Mobile US conducts a risk assessment based on its own methodology. The outcome is regularly reported to the relevant bodies, including representatives of Deutsche Telekom AG. Before T-Mobile US selects suppliers, a centralized Third-Party Risk Management (TPRM) process screens for anti-corruption, global sanctions, and human rights violations, as well as financial, security, reputational, and environmental risks. Supplier risk assessments are performed on an ongoing basis depending on the risk profile of the supplier. Automated, real-time workflows in TPRM look for any adverse news or changes in supplier risk profiles and continually monitor current suppliers for policy violations and risks. Events or issues detected by TPRM monitoring are escalated to the enterprise legal, compliance, and business teams for review and recommended handling.

T-Mobile US expects its affiliates, business partners, suppliers, and their stakeholders to comply with its Human Rights Statement. This covers areas such as discrimination, working conditions, and freedom of expression. Furthermore, T-Mobile US uses its Responsible Sourcing Policy to encourage suppliers to set their own science-based emissions reduction targets, and the policy tracks supplier performance through regular assessments managed by EcoVadis.
Human rights

Our approach to protecting human rights
“Acting responsibly” is an integral part of our corporate strategy and therefore a requirement for all employees in our Group. Protecting human rights and environmental concerns have been a key part of our business activities and corporate governance for more than two decades.

Our commitment: We undertake to respect and promote human rights and environmental regulations everywhere that we are active; this includes our supply chains and business partners.

In order to make this commitment a reality, ever since 2016 we have worked to develop and implement a comprehensive program for human rights and environmental due diligence. This includes measures such as regular analysis of potential risks and the impacts of our business activities with respect to human rights and environmental concerns. We use the results of these analyses to avoid, minimize, or halt any negative impacts. They also enable us to make targeted improvements.

In our Code of Human Rights, we spell out in detail our commitment to respecting and promoting human rights and environmental concerns everywhere we operate – including our suppliers and business partners. The code (formerly the “Code of Human Rights & Social Principles”) is part of our human rights policy statement and was expanded over the course of the reporting year. Content such as the existing Employee Relations Policy as well as our regulations on shaping employee relations and employee concerns were integrated more fully. The code was adopted by the Group Board of Management in 2023 and subsequently published internally and externally. The code’s adoption by the management bodies of the Group companies included began at the same time. This process is to be continued in 2024. The Code of Human Rights outlines our values and standards, which are set forth in greater detail in our internal Group Policies, instructions, and processes, creating our framework for action. We are guided by internationally recognized human and environmental reference frameworks, such as the United Nations Universal Declaration of Human Rights, the core labour standards of the International Labour Organization (ILO), or the OECD Guidelines for Multinational Enterprises.

At the beginning of 2023, the German Act on Corporate Due Diligence in Supply Chains (Lieferkettensorgfaltspflichtengesetz – LkSG) came into force. It sets additional requirements for us regarding the exercise of human rights and environment-related due diligence obligations – both for the entrepreneurial activities of our Group companies and for our global supply chain. In order to fulfill these requirements, we have fully adapted our due diligence processes and incorporated them step-by-step into the applicable business workflows. The new structure of the revised Code of Human Rights is also based on the requirements of the LkSG.

The Board of Management of Deutsche Telekom AG and the management of the individual Group companies are responsible for implementation of and compliance with our due diligence processes. Periodic and/or event-driven (ad hoc) internal reporting on human rights and environment-related results in decision-making bodies (e.g., management bodies) ensures that it is always possible to make informed decisions. To train employees in human rights, we updated our existing human rights training over the course of the reporting year and made it available in more languages.

Deutsche Telekom created the roles of human rights officer and LkSG officer in order to monitor the effectiveness of LkSG risk management system. In accordance with a decision by the Board of Management, these roles will be taken on by the Vice President of Group Corporate Responsibility. As human rights officer, this person reports directly to the Chair of the Board of Management of Deutsche Telekom AG and has further supporting functions. Where required to under national regulations, Group companies have appointed monitoring roles in the same form for their business areas. The overall coordination of the human rights risk assessment processes and responsibility for the overarching human rights strategy are taken care of by Group Corporate Responsibility.

Other new obligations arising from the LkSG are covered by existing functions. For example, Group Compliance Management is responsible for carrying out the compliance risk assessment. This risk assessment has been supplemented with additional human rights and environmental dimensions, making it an internal source for identifying risks within our own business. Employees from HR are responsible for the topic of “Suitable working conditions, occupational health and safety.” The environmental topics are managed by Group Corporate Responsibility.

Reporting against standards
Global Reporting Initiative (GRI)
- GRI 406 3–3 (Management of material topics)
- GRI 407 3–3 (Management of material topics)

Risk assessment processes
We revised our risk management system in 2023 and incorporated it to a greater extent into all relevant business workflows. The aim of risk management is to recognize, prevent, or minimize human rights or environmental risks. It is based on individual due diligence obligations, which comprise the following core elements:
Risk assessments for the entire supply chain
We want to use risk assessments to help gain transparency regarding human rights and environmental risks within the supply chain. They should enable us to derive targeted follow-up measures and therefore effectively eradicate or minimize any actual or potential risks. As part of the LkSG risk management system, we carry out annual risk assessments for our own business units in the Group companies included as well as their direct suppliers. This came to 248 Group companies and approx. 20,000 direct suppliers in 2023. The T-Mobile US subgroup is excluded from this and has its own system for carrying out risk assessments.

When carrying out these assessments, we inspected external and internal information, reviewing it for plausibility and prioritizing it accordingly. We have included information from publicly accessible reports on country and industry risks, as well as information from our existing management processes. We received internal information from sources such as complaints processes, the results of the compliance risk assessment, employee surveys, audits, and certifications. We also take into account internal and external knowledge on human rights and the environment from the relevant experts who are appointed and reviewed each year as LkSG specialists. As of the year under review, we are following this process to create an annual risk matrix for our own business as well as a risk scale for suppliers which differentiates between high, medium, and low human rights and environmental risks in the supply chain. The results of the risk matrix are adopted by the Group Board of Management. They form the basis for deriving further measures and are furthermore incorporated into decision-making processes for the company. They also influence our approach to internal and external communication. The results for 2023 were published in our “Annual Policy Statement on the human rights strategy (Annual report LkSG)”.

In addition to the annual assessments, ad hoc risk assessments are carried out for the entire supply chain, including business partners. This also includes considering the risks before entering into a new business relationship such as part of company acquisitions, for example. In 2023, ad hoc risk assessments were triggered by situations such as extreme weather in Greece and the war in the Middle East. Such an assessment was also required within our own business due to the foundation of the new company, Deutsche Telekom Tiefbau GmbH. Other triggers included tip-offs regarding potential risks or violations which were submitted via our TellMe complaints channel.

Deriving and implementing preventive and remedial action
As soon as a high-level risk and/or violation of a due diligence obligation is identified as part of an annual or ad hoc risk assessment, we step in immediately with suitable, risk-based preventive and/or remedial action. This includes, for example, revising and implementing policies or instructions. We also carry out training as needed and perform local, risk-based controls, such as in the form of Human Rights Impact Assessments or internal and external audits.

For example, the following measures were carried out in 2023:
- Amending our Code of Human Rights, incl. our policy statement and adjusting our expectations of employees and suppliers
- Revising and implementing Group-wide human rights training for all Group employees (without T-Mobile US)
- Carrying out in-depth training for employees with a focus on discrimination as part of a newly devised e-learning course
- Implementation of specialist training, such as for procurement roles
- Engagement in networks and associations such as the Joint Alliance for CSR (JAC, formerly known as Joint Audit Cooperation) for the purposes of carrying out joint audits for suppliers on industry-wide and/or overarching topics, the United Nations Global Compact, or econsens.

Based on the risk position as determined, we saw no need for a risk-based audit in 2023 in the form of an on-site Human Rights Impact Assessment for any of the Group companies in scope.

Complaints process
Our whistleblower portal TellMe provides people from all stakeholder groups with the option to report information regarding misconduct. This also provides an opportunity to give tip-offs regarding misconduct affecting human rights or environmental concerns which relate to Deutsche Telekom or our supply chain.

The public can access the procedure through our homepage and via the websites of the Group companies. To ensure that everyone is able to access the complaints process, we accept tip-offs both by phone via a free, international service number as well as via email, post, or online submission through the aforementioned website – all this can be done anonymously too, if needed.

All tip-offs are taken on and processed by trained staff from our Compliance unit. Our experts make sure to adhere to the statutory requirements in doing so and do their best to protect the whistleblower. Insights from complaints and tip-offs are incorporated into the annual risk assessments.

Via the TellMe whistleblower and complaints portal, employees and external third parties can submit information and report complaints – anonymously, if needed. A total of five tip-offs and complaints relating to human rights or environmental law were received via TellMe in the reporting year. In particular, risks relating to civil engineering work for the rollout of optical fiber were derived from the complaints and tip-offs received and factored into the annual risk analysis.
Reporting

We published the following reports and documents focusing on the subject of human rights in the reporting year:

- **Code of Human Rights**: Part of the policy statement on the human rights strategy in accordance with § 6 II Supply Chain Act (LkSG).

- **Annual LkSG report**: Results of the annual risk assessment for 2023 as a supplementary policy statement on the human rights strategy of Deutsche Telekom AG as well as the other German Group companies that are subject to reporting duties in accordance with LkSG.

We plan to disclose the official reporting to the supervisory authorities in accordance with LkSG four months after the end of the respective reporting year at the latest via our website in accordance with § 10 LkSG.
Commitment to consumers
We are Europe’s leading telecommunications company in terms of market capitalization, revenue, and earnings. Against this backdrop, consumer policy issues are a high priority for us.

Our key topics:

- Ongoing measures to protect consumer data privacy (in online advertising, for example)
- Improving extensive protection of minors, irrespective of the technology used, at the national and EU level
- Improving customer service standards
- Efforts to ensure consistent, understandable messaging in communications with our customers
- Improving consumer protection in telecommunications (for example, when switching providers for fixed-line and mobile connections)

In all these areas, we stand for a constructive and solution-oriented approach that is geared to both consumer interests and the interests of our company.

Political advocacy tools
Our partners in parliaments, governments, and non-profit organizations need to uphold their independence and integrity. This principle is codified in Deutsche Telekom’s Code of Conduct. According to this, donations to political institutions, parties, and political representatives are not allowed, for example. We place importance on factual communication, competence, credibility, and integrity. As a result, politicians and stakeholders feel that the information we provide is authentic and credible and can refer to this information when forming their own opinions. Deutsche Telekom is registered in the official transparency register for lobbyists in Brussels. Deutsche Telekom has also been listed in the Lobby Register (only available in German) since February 28, 2022 for the representation of special interests vis-à-vis the German Bundestag and German Government; this register was introduced in 2022 in accordance with the Lobby Register Act. Within the context of our collaboration efforts in associations and other bodies, we feel that we are under the obligation to comply with all ethical codes and legal provisions.

In 2023, our political advocacy work focused on the following key issues:

- Fiber-optic roll-out
- 5G expansion
- Partnerships in the area of expansion
- Regulatory procedure
- Public safety/cell broadcast
- Net neutrality
- Resilience and cybersecurity
- European cloud ecosystem
- Platform regulation
- Data economy
- Consumer protection
- Green ICT
- Fair Share

On the Deutsche Telekom website, under the special topic heading “Public and Regulatory Affairs”, we regularly provide information about current issues and perspectives relative to representation of interests.

Association fees: the main political advocacy outlay
Active involvement in associations is the cornerstone of our political advocacy work. Accordingly, all the various membership fees (for umbrella/trade/industry associations) account for the majority of our outlay in this area. To make our involvement transparent, an overview of the main fees paid in the past three years is provided below.
Our guiding principle is to respect the independence and integrity of our political interlocutors – which is why we welcome the introduction of a lobby and transparency register at the European level and in Germany, and registered as one of the first companies (EU) and on time (in Germany on February 28, 2022).

You can view the current table outlining lobbying expenses in accordance with the applicable transparency regulations here.

**Our position on broadband: investment incentives are needed**

Having a high-performance, reliable and secure broadband infrastructure is the basis of success for all business sectors and is a key factor in making a business location attractive. For many years now, Deutsche Telekom has been making significant contributions in this area by investing heavily in the infrastructure for mobile internet and the fixed-line network, and especially in our fiber-to-the-home (FTTH) networks. We show more commitment than any other company to providing full-area coverage, including in rural areas.

In order to drive network expansion, network operators in Germany need investment incentives, legal and regulatory planning security, and technological freedom of action. That enables them to respond flexibly to the circumstances of enterprises and households and meet political, economic, and social requirements. Only under these preconditions can we fully harness the potential for cost-effective private network expansion using all available technologies. When it comes to areas where cost-effective broadband expansion is not possible, it is up to the public sector to ensure that white spots are eliminated by providing supplier-neutral funding programs and exercising sound judgment. Legal frameworks and regulatory practice need to actively support private-sector investment in new fiber-optic networks and prevent unnecessary financial burdens and red tape for the network operators investing in networks.

In view of the fact that the internet and telecommunications markets are converging rapidly, and in light of the growing market and financial power of the dominant global players providing cloud services online, the sector-specific regulation of telecommunications that has been pursued to date is creating more and more of an imbalance. The same laws and regulations that apply to telecommunications companies also need to apply to internet companies providing the same services. The objective here must be to create equal competitive conditions and enable fair distribution of the financial burden involved in broadband expansion.

**Our position on network neutrality: the internet should stay open**

As part of the EU Telecoms Package, regulations on the open internet were adopted and came into effect on April 30, 2016. The regulations particularly address permitted traffic management and transparency requirements and limit commercial product and service differentiation on the internet.

Deutsche Telekom remains committed to preserving an open internet. We are continuing to expand our infrastructure so that we can cope with rapidly increasing amounts of data traffic and facilitate innovation in our network. As a result, we are satisfying our

<table>
<thead>
<tr>
<th>Category</th>
<th>Institution</th>
<th>2021 (EUR)</th>
<th>2022 (EUR)</th>
<th>2023 (EUR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual total monetary contributions / donations (in EUR)</td>
<td>Trade associations</td>
<td>&lt; 5 000 000*</td>
<td>&lt; 5 000 000*</td>
<td>&lt; 5 000 000*</td>
</tr>
<tr>
<td></td>
<td>Political parties</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Largest single annual contribution (in EUR)</td>
<td>(Deutsche) Industrie und Handelskammer (IHK/DHK)</td>
<td>2 278 611</td>
<td>2 608 477</td>
<td>2 908 695</td>
</tr>
<tr>
<td></td>
<td>Bundesverband der deutschen Industrie (BDI e.V.)</td>
<td>520 929</td>
<td>476 928</td>
<td>474 995</td>
</tr>
<tr>
<td></td>
<td>Bundesvereinigung der Deutschen Arbeitgeberverbände (BDA)</td>
<td>400 407</td>
<td>400 407</td>
<td>443 000</td>
</tr>
<tr>
<td></td>
<td>Bitkom e.V.</td>
<td>343 085</td>
<td>368 284</td>
<td>376 833</td>
</tr>
</tbody>
</table>

* The above figures for contributions to trade associations mean “less than 5 million euros per year” (the actual values may vary from year to year; the value given is a rounded maximum value). Deutsche Telekom does not make contributions, grant advantages or give benefits of any kind, directly or indirectly, to political parties, political movements, or trade unions or their representatives or candidates, except as required by applicable laws and regulations.

**Reporting against standards**

**Global Reporting Initiative (GRI)**
- GRI 415–1 (Public Policy)

**Transparency information on lobbying expenditures**

No general definition of lobbying expenditures is available to date. For this reason, we publish our lobbying expenditures in Germany in accordance with the applicable transparency requirements at the federal level (pursuant to the Act Introducing a Lobby Register for the Representation of Special Interests vis-à-vis the German Bundestag and the Federal Government [Lobbyregistergesetz – LobbyRG]) and in the states of Baden-Württemberg and Bavaria (pursuant to the Transparency Register Act [Transparenzregistergesetz – Treg; only available in German] in Baden-Württemberg and the Bavarian Lobby Registration Act [Bayerisches Lobbyregistergesetz – BayLobbyRG; only available in German]), in Brussels (pursuant to the Interinstitutional Agreement of 20 May 2021 between the European Parliament, the Council of the European Union and the European Commission on a mandatory transparency register), and in Washington for T-Mobile US (pursuant to the Lobbying Disclosure Act [LDA]).

Our guiding principle is to respect the independence and integrity of our political interlocutors – which is why we welcome the introduction of a lobby and transparency register at the European level and in Germany, and registered as one of the first companies (EU) and on time (in Germany on February 28, 2022).
customers’ growing demands and meeting the expectations of online content and application providers, who want to be able to provide services meeting high technical-quality standards both now and in the future.

We are developing an innovative network architecture – 5G networks – which can better and more flexibly meet the various transmission quality requirements of specific services. We thereby fulfill business and regulatory requirements and enable innovation in the services we offer on our networks. Content will not be controlled, however. When competing with other network operators, we will also continue to market services with guaranteed quality features exclusively on a non-discriminatory basis.

Lobbying expenditures 2022 in accordance with applicable transparency rules

<table>
<thead>
<tr>
<th>Area covered by reporting requirements</th>
<th>Lobbying expenditure (2022)</th>
<th>Relevant transparency rule detailing legal requirements and respective definition of lobbying expenditures.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deutsche Telekom AG / Bavarian Parliament and Bavarian State Government</td>
<td>110 000 EUR* [3]</td>
<td>Bayerische Lobby Register Act (Bayerische Lobbyregistergesetz – BayLobbyRG) [8]</td>
</tr>
<tr>
<td>T-Mobile USA / Federal Government of the US</td>
<td>9 049 000 USD* [5]</td>
<td>Lobbying Disclosure Act (LDA) [10]</td>
</tr>
</tbody>
</table>

* The different information is not directly comparable due to the applicable legal regulations in each country. To the extent that lobbying expenditures must be specified as a range according to the requirements of the respective register, the upper value of the range is specified.
GRI Index
Deutsche Telekom's 2023 CR Report was created in line with the Global Reporting Initiative (GRI) guidelines and in agreement with the option “in accordance” with GRI. So our high demands on transparency are maintained. The reported information relates to the period from January 1 to December 31, 2023.

In the GRI content index, we refer to content pertaining to general and specific standard disclosures and explain the content when necessary. The standard disclosures are based on the very relevant aspects identified in our materiality process. Selected content from various action areas has been reviewed in this regard; such content is marked in the index with [Data reviewed by Deloitte]. The index also contains links and explanations relative to other GRI aspects that are covered in the report.

Sustainability Accounting Standards Board (SASB)
There are various standards for CR reporting for companies. Our CR report has been based on reporting in accordance with the Global Reporting Initiative (GRI), in particular, for nearly 20 years. Our annual report has met the European requirements for CR reporting since 2017. We have been making our contribution toward reaching the SDGs transparent in our reporting since 2017 as well. To satisfy the growing interest of our stakeholders in comparable sustainability information, we have published an additional index on the sustainability standards of the Sustainability Accounting Standards Board (SASB) in our CR report since 2021 – with an industry-specific focus on the information and communications technology sector.

In the SASB index, we explain how we satisfy the industry-specific SASB criteria or link to passages in our sustainability communication where we explain how we satisfy them. In addition, we list the SASB criteria at relevant locations within the present report.

We welcome the growing attention being given to sustainability issues, and of course are happy to readily meet growing transparency requirements. At the same time, we are aware of announced efforts to consolidate various relevant standards and frameworks.

Principle Adverse Impacts (PAIs)
The Sustainable Finance Disclosure Regulation (SFDR) is intended to create more transparency regarding the extent to which financial products are sustainable. We therefore would like to use a table to illustrate for our investors and financial services providers the most important indicators according to the SFDR (Principal Adverse Impacts, PAIs) of their investment decisions or policies on sustainability aspects. This includes environmental, social and employee concerns as well as protecting human rights and fighting corruption and bribery. For the reporting year, we focused on the mandatory indicators for financial institutions in the disclosure of PAIs. In future, we will evaluate the extent to which we can also report other PAIs.

Indicators for telecommunications providers from the GSM Association (GSMA)
The indicators outlined by the GSM Association (GSMA; worldwide association of mobile communications providers) are intended to create a uniform sustainability standard for the telecommunications industry and make comparisons within the industry easier. Ten of the most important KPIs for the industry have been selected within the four categories of environment, digital participation, digital integrity, and supply chain. The KPIs are based on standards such as GRI and SASB, which have long been applied by Deutsche Telekom, too. We welcome GSMA using these sector-specific, established standards and reveal in the following table the extent to which our reporting is already in keeping with these indicators.

UN Global Compact – Communication on Progress
Deutsche Telekom was one of the founding members of UN Global Compact over 20 years ago. Since then, we have communicated our efforts for implementing its ten principles in our annual Communication on Progress (CoP). Our current Communication on Progress and communications from years gone by can be found here.

Reporting against standards
Principle Adverse Impacts (PAIs)
- Social and employee matters
German Sustainability Code

The German Sustainability Code has been approved by the Federal Government’s Council for Sustainable Development. Deutsche Telekom was one of the first companies to accede to the Sustainability Code. The German Sustainability Code aims to make companies’ commitments to sustainability transparent and comparable under a binding framework. For the 2023 reporting year, we will not be publishing a declaration of conformity with the German Sustainability Code for the first time, as we are focusing on preparing for future reporting in accordance with the CSRD. You can find the statements from previous years on the German Sustainability Code website under “Deutsche Telekom AG.”
<table>
<thead>
<tr>
<th>Sustainability Indicator</th>
<th>Metric</th>
<th>2023</th>
<th>Omission/Additional information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mandatory climate and other environment-related indicators</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greenhouse Gas Emissions</td>
<td>Scope 1 GHG Emissions</td>
<td>4-year trend: Total CO2e emissions (Scopes 1 to 2) in the DT Group</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Scope 2 GHG Emissions (market-based)</td>
<td>4-year trend: Total CO2e emissions (Scopes 1 to 2) in the DT Group</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Scope 3 GHG Emissions</td>
<td>4-year trend: Total CO2e emissions (Scope 3) in the DT Group</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total GHG Emissions</td>
<td>Total CO2e emissions (Scopes 1 to 3) in the DT Group</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Carbon footprint</td>
<td>CO2e emissions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GHG Intensity (scope 1+2+3) (per revenues)</td>
<td>ESG KPI &quot;Carbon Intensity&quot; DT Group</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Investment in companies active in the fossil fuel sector</td>
<td>N/A</td>
<td>We are not active in the fossil fuel industry.</td>
</tr>
<tr>
<td></td>
<td>Share of non-renewable energy consumption and non-renewable energy production of investee companies from non-renewable energy sources compared to renewable energy sources, expressed as a percentage of total energy sources</td>
<td>Share non-renewable energy consumption: 7.5%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Share renewable energy consumption: 92.5%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Share renewable electricity: 100%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Energy consumption in MWh per million EUR of revenue</td>
<td>ESG KPI &quot;Energy Intensity&quot; DT Group</td>
<td></td>
</tr>
<tr>
<td><strong>Biodiversity</strong></td>
<td>Share of investments in investee companies with sites/operations located in or near to biodiversity-sensitive areas where activities of those investee companies negatively affect those areas</td>
<td>N/A</td>
<td>Due to limited data availability, we are currently unable to publish detailed information about headquarters or operations sites in proximity to such areas, however, biodiversity considerations are always taken into account when investigating new sites.</td>
</tr>
<tr>
<td><strong>Water</strong></td>
<td>Tons of emissions to water generated</td>
<td>We are not aware of any significant emissions to water in our operations.</td>
<td></td>
</tr>
<tr>
<td><strong>Waste</strong></td>
<td>Tons of hazardous and radioactive waste generated</td>
<td>Waste production (including e-waste)</td>
<td></td>
</tr>
<tr>
<td><strong>Mandatory social and employee and respect for human rights</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social and employee matters</td>
<td>Violations of the principles of the United Nations Global Compact and the OECD Guidelines for Multinational Enterprises</td>
<td>UN Global Compact – Communication on Progress</td>
<td>We are not aware of any violations of UN Global Compact principles in our operations.</td>
</tr>
<tr>
<td></td>
<td>Companies with the UNGC principles or OECD Guidelines for Multinational Enterprises or grievance/complaints handling mechanisms to address violations of the UNGC principles or OECD Guidelines for Multinational Enterprises</td>
<td>UN Global Compact – Communication on Progress</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Average unadjusted gender pay gap</td>
<td>N/A</td>
<td>We do have various programs in place to promote gender equality. This is also externally acknowledged, i.e. in the Bloomberg gender equality report.</td>
</tr>
<tr>
<td></td>
<td>Average ratio of female to male board members, expressed as a percentage of all board members</td>
<td>Percentage of women in middle and upper management</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percentage of women on the management board</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percentage of women on the Supervisory Boards</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Share of investments in investee companies involved in the manufacture or selling of controversial weapons</td>
<td>No involvement in controversial weapons.</td>
<td></td>
</tr>
</tbody>
</table>
## Indicators for telecommunications providers from the GSM Association (GSMA)

<table>
<thead>
<tr>
<th>Topic</th>
<th>KPI name</th>
<th>GSMA Code</th>
<th>GSMA Code Description</th>
<th>Reference and additional information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment</td>
<td>Science Based Target</td>
<td>GSMA-ENV-01</td>
<td>Disclose whether you have set, or committed to set, GHG emissions targets that are in line with the goals of the Paris Agreement to limit global warming to well below 2°C above pre industrial levels and pursue efforts to limit warming to 1.5°C and to achieve net zero emissions before 2050.</td>
<td>Our climate targets</td>
</tr>
<tr>
<td></td>
<td>Scope 1, 2 and 3 Emissions</td>
<td>GSMA-ENV-02</td>
<td>Absolute Scope 1 and 2 emissions (tonnes CO₂e)</td>
<td>4-year trend: total CO₂e emissions (Scopes 1 to 2) in the DT Group</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Absolute Scope 1 and 2 emissions (tonnes CO₂e) per 1PB data</td>
<td>ESG KPI “Carbon Intensity” DT Group1.24 tCO₂e/PB</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Percentage change in absolute Scope 1 and 2 emissions since last reporting period</td>
<td>4-year trend: total CO₂e emissions (Scopes 1 to 2) in the DT Group CO₂e emissions scope 182.7% compared to 2022</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Absolute Scope 3 emissions (tonnes CO₂e)</td>
<td>4-year trend: total CO₂e emissions (Scope 3) in the DT Group</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Absolute Scope 3 emissions (tonnes CO₂e) per 1PB data</td>
<td>4-year trend: total CO₂e emissions (Scope 3) in the DT Group60.02 tCO₂e/PB</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Percentage change in absolute Scope 3 emissions since last reporting period</td>
<td>4-year trend: total CO₂e emissions (Scope 3) in the DT Group CO₂e emissions scope 3-11% compared to 2022</td>
</tr>
<tr>
<td>Energy</td>
<td>Energy Consumption</td>
<td>GSMA-ENV-03</td>
<td>Total energy consumed (MWh)</td>
<td>Total energy consumption</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total energy consumed (MWh) per 1PB of data.</td>
<td>ESG KPI “Energy Intensity” DT Group70.14 MWh/PB</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total Network energy consumed (MWh)</td>
<td>12 136 189,93 MWh</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total Network energy consumed (MWh) per 1PB of data</td>
<td>69.53 MWh/PB</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Percentage grid renewable</td>
<td>ESG KPI “Renewable Energy”</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Percentage grid non renewable</td>
<td>ESG KPI “Renewable Energy”</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Percentage off grid renewable</td>
<td>Not relevant for our reporting</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Percentage off grid non renewable</td>
<td>Not relevant for our reporting</td>
</tr>
<tr>
<td>Waste</td>
<td>Materials Recycled or Reused</td>
<td>GSMA-ENV-04</td>
<td>Percentage of Network equipment repaired or reused, by units.</td>
<td>We currently do not report that KPI</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Percentage of Network equipment repaired or reused, by purchase price</td>
<td>We currently do not report that KPI</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Percentage of Handset and CPE repaired or reused, by units</td>
<td>Take Back Mobile Devices ESG KPI (including cell phones)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Take Back CPEs ESG KPI (including fixed-line)</td>
<td>We refurbish and repair up to 75% of all returned devices. Compared to the number of sold devices this accounts for about 22% of all devices sold and rented to our customers.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Percentage of Handset and CPE repaired or reused, by purchase price</td>
<td>We do not report that KPI and do not currently believe this to be relevant for our reporting.</td>
</tr>
<tr>
<td>Waste</td>
<td>Generated</td>
<td>GSMA-ENV-05</td>
<td>Total waste generated (tonnes) per 1PB of data</td>
<td>Waste production (including e-waste)0,5 t/PB</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Network waste (tonnes) per 1PB of data</td>
<td>We currently do not report that KPI</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Handsets and other Customer premises equipment (CPE) waste (tonnes) per 1PB of data</td>
<td>We currently do not report that KPI</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>All other waste (tonnes) per 1PB of data</td>
<td>We currently do not report that KPI</td>
</tr>
<tr>
<td>Materials Recycled</td>
<td></td>
<td>GSMA-ENV-06</td>
<td>Percentage of Network waste (from 1.5b) recycled (units)</td>
<td>We currently do not report that KPI</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Percentage of purchase price of recycled Network waste</td>
<td>We currently do not report that KPI</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Percentage of Handsets and CPE waste (from 1.5c) recycled (units)</td>
<td>We currently do not report that KPI</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Percentage of purchase price of recycled Handsets and CPE waste</td>
<td>We currently do not report that KPI</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Percentage of all other waste (from 1.5d) recycled (units)</td>
<td>We currently do not report that KPI</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Percentage of purchase price of all other recycled waste</td>
<td>We currently do not report that KPI</td>
</tr>
<tr>
<td>Topic</td>
<td>KPI name</td>
<td>GSMA Code</td>
<td>GSMA Code Description</td>
<td></td>
</tr>
<tr>
<td>----------------------------</td>
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<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Digital Inclusion</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Network Coverage           | Population Covered by Mobile Network | GSMA-INC-01 | Percentage of population covered by operator’s mobile network. Breakdown by: 3G, 4G, 5G  
Germany segment: progress with network build-out  
United States segment: progress with network build-out  
Europe segment: progress with network build-out  
Rollout of the new 5G mobile generation |
| Affordability              | Device and Subscription Affordability | GSMA-INC-02 | Cost of the most affordable data-enabled phone, as percentage of monthly GDP per capita  
Due to our involvement in a wide variety of markets, we do not report that KPI and do not currently believe this to be relevant for our reporting. However, with our T phones we allow consumers to access the latest technologies at an affordable price.  
Average cost of 1GB of data, as percentage of monthly GDP per capita  
Due to our involvement in a wide variety of markets, we do not report that KPI and do not currently believe this to be relevant for our reporting. |
| Digital Skills             | Digital Skills Programmes          | GSMA-INC-03 | Number of people (excluding employees) that have completed a digital skills training programme, divided by total subscribers  
We currently do not report that KPI. However, with our Beneficiaries KPIs we do report on information related to trained individuals.  
ESG KPIs: Community Contribution, Reach - Focus Topics, and Beneficiaries – Focus topics |
| **Digital Integrity**      |                                   |            |                                                                                                                                                                                                                                                                                                                                                       |
| Data protection            | Customer Data Incidents            | GSMA-INT-01 | Number of data breaches, per million subscribers  
We currently do not report that KPI  
Percentage of data breaches involving personally identifiable information (PII)  
We currently do not report that KPI  
Number of customers affected, per million subscribers  
We currently do not report that KPI  
Number of regulatory actions for data protection violations (e.g. marketing related complaints, data breaches, etc), per million subscribers  
We currently do not report that KPI |
| Digital Rights             | Digital Rights Policy              | GSMA-INT-02 | Is there a policy specifically covering Digital rights protection and transparency, Privacy, Freedom of expression, Government mandates to shut down or restrict access, and/or Government requests for data?  
Yes, Code of Human Rights |
| Online Safety              | Online Safety Measures             | GSMA-INT-03 | Do you have controls or programmes in place to improve online safety for children and other vulnerable groups?  
Our approach to protection of minors in the media  
Digital participation through media literacy  
Digital values |
| **Supply Chain**           |                                   |            |                                                                                                                                                                                                                                                                                                                                                       |
| Sustainable Supply Chain   | Sustainable Procurement Policy     | GSMA-SUP-01 | Do you have a Sustainable Procurement Policy in place?  
No, we don’t have a separate policy but sustainability is an integral part of our procurement policy and integrated into our supplier contracts via our Supplier Code of Conduct. Additionally, CO₂ emissions play a significant role in our selection of suppliers.  
If yes, how many of the following elements does it cover?  
Organizational governance: decision making processes and structures  
Yes  
Human rights  
Yes  
Labour practices  
Yes  
Environment  
Yes  
Fair operating practices  
Yes  
Consumer issues  
No  
Community involvement and development  
No |
| Supplier Assessments       |                                   | GSMA-SUP-02 | Percentage of suppliers screened against the Sustainable Procurement Policy using company defined and documented assessment procedure, within the previous two years  
We do not report on the percentage of our suppliers but the percentage of our purchase order volume as this more accurately reflects the relevant parts of our supply chain. ESG KPI “Procurement Volume Without CR Risk”  
Percentage of suppliers assessed against the Policy through site visits, within the previous two years  
We do not report on the percentage of our suppliers but focus on our strategically most important suppliers that reflect about 80% of our purchase order volume. For our site visits, we do cooperate with other companies in the JAC initiative.  
ESG KPI “Procurement Volume Without CR Risk” |
Awards for our commitment to sustainability and our reporting

German Sustainability Award for our commitment to sustainability
In the year under review, we were once again honored for our commitment to sustainability and received the 16th German Sustainability Award for the telecommunications sector. This makes us one of the 100 pioneers of transformation in the German economy and the most sustainable telecommunications company. This award honors business engagement in key areas of transformation in which there is a particular need for action. These areas reflect the Sustainable Development Goals (SDGs) of the United Nations and the targets of the German government’s sustainability strategy: climate, nature, resources, value chain, and society.

ESG TRANSPARENCY AWARD: award for transparent reporting
In the year under review, we won the ESG TRANSPARENCY AWARD for our transparent reporting on our progress, initiatives, and projects in the environmental, social, and governance areas. This award honors the transparent presentation of all sustainability measures in the framework of verifiable ESG reporting, as well as the integration of forward-looking sustainability concepts in enterprise strategies.

CSRD readiness: award for the best climate reporting among DAX 40 companies
In 2023, we were honored with the “Building Public Trust Award” for the third time (after 2017 and 2020) for outstanding, consistent sustainability reporting among DAX 40 companies. The topics of EU taxonomy, climate goals, and CSRD readiness received special mention.

Second place in the CSR benchmark for best digital sustainability communication
We once again took second place in the NetFederation Corporate Social Responsibility (CSR) benchmark in 2023. At 815 points, we were just three points behind the first-place winner and 97 points ahead of third place. The criteria analyzed are assigned to the three categories “Attitude and credibility,” “Reporting and publications,” and “Facts and KPIs.” The NetFed benchmark is an annual study on the current status of digital sustainability communication.

Award for climate protection from CDP
On behalf of investors, the non-governmental organization CDP regularly evaluates the climate protection activities of listed companies worldwide and compiles an index of the leading companies, the Climate “A-List”. In this list, Deutsche Telekom is represented for the eighth time in a row for the year 2023.

Gold and Honors ARC Awards for our CR Report
At the ARC Awards 2023, our Corporate Responsibility Report won gold in the category “Interactive Annual Report: CSR – Corporate Social Responsibility Award” and Honors in the category “Cover/Home Page: Corporate Social Responsibility Award.” Creativity, innovation, and the clarity and effectiveness of communication were key criteria mentioned in the decision.

Awards for sustainable products and services
Speedport Smart 4 and Speedhome WLAN awarded TÜV eco-label
Deutsche Telekom’s Speedport Smart 4 and Speedhome WLAN routers were awarded the certification “Green Product” by TÜV Rheinland. The sustainability properties of the devices have thus been certified by a neutral body. They meet the strict criteria of TÜV and prevailed in all categories. In addition to responsible handling of chemical substances, both products scored points with their resource efficiency with regard to energy, recycling, and durability. TÜV Rheinland also gave favorable ratings to the carbon footprint and compliance with social standards, particularly in production.

The Representative Office in Berlin is certified as a Sustainable Partner
Deutsche Telekom’s Representative Office in Berlin makes event facilities available to internal and external groups/organizations. In the year under review, it was recognized by the VisitBerlin Convention Office as a Sustainable Partner in its top category, “Leader,” for the fifth time running. The Office’s sustainability performance was audited in four categories: governance, risk & compliance; environmental aspects; social aspects; and economic aspects.

Awards for sustainable finance
Best European telco in the S&P assessment
In 2023, we qualified for the renowned sustainability indexes “Dow Jones Sustainability Index World” (DJSI World) and “Dow Jones Sustainability Index Europe” (DJSI Europe) for the ninth time in a row. DJSI World represents the top 10 percent of the largest 2500 companies in the S&P Global BMI based on long-term economic, environmental and social criteria. In 2023, we took first place in the European index.

Bloomberg Gender-Equality Index
In the year under review, we were again one of 484 companies selected for the Bloomberg Gender Equality Index (GEI). The GEI measures and evaluates gender-equality performance in a total of five areas: female leadership and talent pipeline; equal pay and gender pay parity; inclusive culture; anti-sexual harassment policies; and pro-women brand.
A complete overview of the indexes in which the Deutsche Telekom T-Share is listed, in the year under review, is available here.

**Awards for our commitment to digital inclusion and digital values**

**Digital Inclusion Benchmark**

Our ambitions and actions for digital participation and inclusion in society were recognized with the award of third place in the Digital Inclusion Benchmark 2023 – improving our ranking by four spots compared to the previous year. In this ranking, the World Benchmark Alliance rates the 200 most influential digital tech companies in the world.

**Awards for Teachtoday**

In 2023, the Teachtoday initiative once again won two prizes at the Comenius EduMedia Awards, which recognize digital educational media. An international panel of scientists, specialists, and education practitioners examined over 200 different educational media. The Teachtoday portal and the online SCROLLER magazine for kids won the panel over with their outstanding educational and media quality and won prizes in the categories “IT, communication, and media education” and “General multimedia products.”

**Awards for our No Hate Speech initiative**

With our No Hate Speech initiative, we are working to ensure that people have nothing to worry about as they navigate cyberspace. Via channels such as video and radio spots, workshops and podcasts, we are calling attention to hate speech, social media outrages and cyberbullying, and encouraging people to show “civil courage online” and stand up against such negative trends. We received several awards for this campaign:

- **Awards for “The choir against hate” ad**
  - Spotlight Festival 2023: Two bronze awards in the category “Social Impact” – both the award from the expert panel and the audience prize
  - In 2023, we won several awards for our ad entitled “The choir against hate.” We wanted to use this ad to show that, together, we can be louder than online hate speech.
  - ADC 2023: Third place in the “Brand Building” category

- **2023 German Award for Sustainability Projects**
  - We took first place in the “Campaign” category in the 2023 German Award for Sustainability Projects (Deutscher Award für Nachhaltigkeitsprojekte 2023) with our No Hate Speech initiative. The panel assessed four focus areas: effectiveness/benefits of the project, innovation, relevance to the core business of the company and industry, and timeliness.

- **Brands Award 2023**
  - Our No Hate speech initiative also won the 2023 Brands Award (Marken-Award 2023) in the category “Social commitment.” The magazine “absatzwirtschaft” (“marketing”) and the German Federal Association of Marketing Clubs (Bundesverband Marketing Clubs – BVMC) award this prize for excellence in brand management.

**Awards for our commitment in the area of diversity**

**Among the European top 10 in the FT-Statista Diversity Ranking**

In 2023, we took tenth place among 850 European companies in the FT-Statista Diversity Ranking and second place among the 146 German companies surveyed. This ranking, compiled by the Financial Times and Statista, is determined based on a survey of employees and three additional indicators: the share of women in management positions, communications made in favor of diversity, and an externally calculated diversity value from a leading provider of data on diversity, equity, and inclusion.

**Award of the golden PRIDE Champion seal**

In the year under review, we were rated in the framework of the PRIDE Champion Audit and scored 87.56 percent of the total possible points, winning the golden seal. This independent audit procedure focuses on company activities related to the diversity dimension “sexual orientation and gender identity.”

**Accolades from BeyondGenderAgenda for our commitment to diversity**

In 2023, we took second place in BeyondGenderAgenda’s German Diversity Index and were also awarded the network’s Loyalty Seal. In addition, Birgit Bohle won the award “CHRO (Chief Human Resources Officer) of the Year” at the German Diversity Awards in recognition of her commitment to diversity at Deutsche Telekom, among other factors.

**Sales & service awards**

**TÜV quality seal for “tested customer satisfaction” in 2023**

TÜV Rheinland once again tested customer satisfaction with Deutsche Telekom in the year under review. The organization surveyed customers on the competency, reliability, and friendliness of Deutsche Telekom’s hotline employees, technical customer service, and shop staff. We even topped the individual results from the previous year in every area and – like in previous years – won customers over with our consultation quality across all channels. For these reasons, TÜV Rheinland once again awarded us their seal of approval with the rating “good.”

**connect’s Hotline Test: first place for mobile and broadband in 2023**

In 2023, our mobile communications hotline was recognized as the best among German network operators for the fifth time running – in the test conducted by the trade magazine connect, we once again won the judging panel over in the five categories of accessibility, waiting time, voice response system, friendliness, and quality of statements. We were ranked “outstanding” for our excellent accessibility and short waiting times and “very good” in the other categories.

The magazine also tested the fixed-network hotlines for existing customers of telecommunications companies in Germany, Austria, and Switzerland. The testers rated the communication providers in categories such as accessibility, friendliness, expertise, and solution orientation. Our team could be reached the fastest, with an average time of just 23 seconds, taking first place.
connect’s 2023 mobile network shop test

For many customers, being able to visit a Telekom Shop and have a personal conversation with an advisor on site is essential. The modern facilities, provision of seating and beverages, excellent hardware placement, high average engagement of employees, and quality of advice together earned us the rating “Very good” in the overall assessment of our shops. Eight shops were even rated “Outstanding” this year. As a result, we were once again crowned the test winner in connect magazine’s shop test in 2023.

CHIP’s 2023 mobile network shop test

The trade magazine CHIP conducted its second annual survey of the customer experience in mobile network shops. We won the top spot, as in the previous year. In particular, CHIP praised our friendliness, willingness to help, and interest in our customers’ concerns.

connect: test winner among network operator service apps in 2023

The MeinMagenta app took first place in connect magazine’s test of service apps – including in the DACH region (Germany, Austria, Switzerland) for the first time. connect recognized the “outstanding” performance and security of the app. We also use the technical platform for our service app in our international subsidiaries in all European markets, in a total of ten countries.

Servicevalue: the best digital assistance systems 2023

Our chatbot “Frag Magenta” (“Ask Magenta”) took first place in the Servicevalue study. In addition to the overall ranking, “Frag Magenta” was awarded top marks in the categories “problem-solving competence” and “voice navigation.” The ranking also included three additional categories: digital customer service, customer experience and support, and data privacy and ethics.

First place in connect’s customer barometer for both mobile communications and internet provider in 2023

In the year under review, we took first place in connect’s customer barometer in both the mobile communications and internet provider categories. For the mobile communications test, connect magazine and the Fachinstitut für Technikthemen (Specialist Institute for Technology Issues) surveyed over 2 700 private customers of various providers. We were the overall winner, with a rating of 1.6, scoring points in particular in the subcategories answering speed, friendliness, and immediate solutions in first contact, all rated as best by our customers. The internet provider test involved surveying 2 600 customers and we also took first place here with a rating of 1.8.

CHIP’s overall winner in digital services for DSL and fixed-line network, hosting, mobile communications, and streaming services in 2023

In CHIP’s tests for digital services, we came out on top in four categories in the year under review: DSL & fixed-line network, hosting, mobile communications, and streaming services. For this test, CHIP magazine reviewed the digital services of 286 companies in 20 different industry sectors. We were given the rating “very good” in all four categories and were even the only provider to achieve this rating in the hosting category.

Wirtschaftswoche magazine: first place for the MeinMagenta app

At the start of the year under review, the market research institute Innofact surveyed 2 000 people about their usage behavior of apps and their features. Split into eight categories, users were asked about factors like relevance for everyday use, design, topicality, and continuous further development. Innofact assessed a variety of areas, including tourism, mobility, and banking. Our MeinMagenta app took place in the communications sector.

F.A.Z.: Germany’s best customer advisors

In their study “Germany’s best customer advisors 2023,” the F.A.Z. Institut analyzed around 20 000 companies in a variety of sectors. The rating was derived based on mentions on websites and in forums, blogs, consumer portals, and social media channels. The study examined the price/performance ratio, customer service, price, quality, recommendations, and service. With 100 points, we were the industry leader in the telecommunications sector, setting the benchmark for all other companies in this sector.

2023 “Service King” award from Focus Money

In 2023, we took first place in the telecommunications sector in the customer satisfaction survey of Focus Money magazine for the eighth time in a row. The financial magazine surveyed nearly 300 000 customers. Deutsche Telekom is the leading telecommunications provider throughout Germany.

Awards for our mobile network in Germany

Germany segment

In the last few years, Telekom Deutschland has invested extensively in its fixed and mobile networks. These ongoing investments continue to pay off for customers, as confirmed by our repeated victories in the mobile communication tests by CHIP (Issue 1, 2024), connect (Issue 1, 2024), and COMPUTER BILD (12/2023).

- CHIP’s mobile communications test

  We won the “Mobile Network Test” of CHIP trade magazine for the thirteenth time in a row in 2023 and were declared the “best network.” In addition, we received the “Best 5G network” (“Bestes 5G-Netz”) logo.

- connect’s mobile communications test

  We were also the overall winner of the “2023 Mobile Network Test” by connect magazine, with a rating of “outstanding.” This was awarded for the first time in Germany. Testing focused on the performance and reliability of the networks for voice (e.g., call setup time) and data (e.g., downloads and uploads).

- connect’s fixed-network test

  We also took first place in connect magazine’s fixed-network test in the year under review. Scoring 912 out of 1 000 possible points, we won the rating “very good,” coming out on top in the comparison of nationwide providers. connect introduced a new testing methodology in 2023, focusing on the performance and quality customers actually experience. To do so, the test teams scrutinized fixed-network and internet connections from January to July 2023, evaluating...
more than 330 million test samples. Four categories were rated: download, upload, latency, and stability. Our network delivered excellent values particular in the areas of actively measured upload data speeds and network latency (delay times).

**Europe segment**
Hrvatski Telekom in Croatia and Magenta Telekom in Austria won the 2023 Ookla Speedtest Award for their respective countries. Hrvatski Telekom won the awards for the best mobile communications network, fastest mobile communications network, and best mobile coverage in Croatia for the fifth year in a row. Magenta Telekom also won the award for the fastest fixed-network internet in Austria for the second time running.

**Awards for our work in training and development**
For employers competing to recruit IT and tech specialists, it is vitally important to have an excellent employer brand. Consequently, we continually aim to improve Deutsche Telekom’s attractiveness, on a lasting basis, as an employer for IT/tech talent. In 2023, we again received various awards for our achievements as an employer and training provider. This strengthens our conviction that we are on the right track with our recruiting and employer-brand strategy.

1st place in the NetFed HR Benchmark
We held on to our top spot in the HR Benchmark from NetFed in 2023, which analyzes the HR websites of the 50 largest companies in Germany. Examples of the assessed criteria include: How are insights into the company provided? How well is the subject of “job applications” covered by information and services? How does the company and employer open a dialog with potential candidates on its website?

**Germany’s best training organization in 2023**
Deutsche Telekom won the Germany seal “Germany’s best training organization in 2023” by Focus Money magazine for the second time in a row. For this rating, DEUTSCHLAND TEST analyzed the country’s 20,000 largest employers. The study is based on four pillars: structural data, apprentice pay, training success, and additional offerings by the companies.

LinkedIn Top Company
For seven years now, LinkedIn has analyzed employers with regard to opportunities for advancement, support for advanced training, and employee development. Commitment to greater diversity and inclusion has also become an increasingly important factor in rating the surveyed companies. In 2023, Deutsche Telekom was ranked in the top 10 LinkedIn Top Companies, showing that our initiatives for an inclusive, vibrant corporate culture and our many offerings for personal and professional development are on the right track.

Leading Employer 2023
In the meta-study “Leading Employers 2023” by the Institute of Research & Data Aggregation, Deutsche Telekom won in all six categories – including “Employee satisfaction” and “Understanding of values.”

**Top Employer 2023**
T-Systems in Germany received the Top Employer certification from the renowned Top Employer Institute for the first time in the year under review. Companies that are certified as “top employers” put their employees at the center of their business activities and offer them an excellent environment for work and development.

**Accolades as an attractive employer**
National companies from the Europe segment received a number of awards as attractive employers in the year under review. For example, T-Mobile Austria received the Kurier seal of quality “Favorite Employer 2023,” PwC named Magyar Telekom the most attractive employer in the telecommunications and media industries in Hungary, and T-Mobile Czech Republic also won the prize for top employer in the telecommunications sector.

**Employer Branding Award 2023 for Magenta Telekom**
In another win for the Europe segment, our Austrian national company Magenta Telekom won the special prize in gold in the category “Digital HR” at the Employer Branding Awards 2023. This prize is awarded for outstanding performance in the area of human resources. Magenta Telekom won the prize for its onboarding journey. The onboarding process helps employees find their way around during their first 100 days at the company.

**Awards for the US segment**
Disability:IN 2023 Disability Equality Index
Disability:IN Disability Equality Index evaluates disability inclusion in the workplace. For the seventh year in a row, T-Mobile US received a 100 percent score from the Disability Equality Index Survey.

JUST Companies Rankings 2023: ranked #31 among America’s MOST Just Companies
JUST Capital ranked T-Mobile US #31 on its 2024 Rankings of America’s Most JUST Companies in recognition of its ongoing progress and commitment to driving responsible business practices and positive environmental and social impact.

2023/2024 Human Rights Campaign Foundation Corporate Equality Index
In recognition as one of the best places to work for LGBTQ+ Equality, T-Mobile US received a score of 100 percent on the 2023/2024 Human Rights Campaign’s Corporate Equality Index.

America’s Climate Leaders 2023
T-Mobile landed number 1, out of 400 companies on USA Today’s first-ever America’s Climate Leaders list, a reflection of the commitment to reducing its environmental footprint.

CDP Climate Change Assessment
T-Mobile US continued to score at the Leadership Level by CDP, earning an A- in 2023 for climate change reporting.
Awards for the Systems Solutions segment

2023 European Code of Conduct Award

T-Systems won the Code of Conduct Award by the European Commission for its data center in Biere. An independent panel recognized 120 companies whose data centers demonstrated a significant reduction of energy consumption in 2023. T-Systems was among the six winners with the most energy-efficient data centers in Europe. Factors such as the PUE (power-use effectiveness) value of the data centers, best practices, and energy-efficient methods were taken into account in identifying the winners.

Platinum prize for T-Systems data centers

T-Systems won the platinum prize for its data centers at the “Readers’ Choice IT Awards” for the second year in a row. This award is presented by the trade portal BigData-Insider in a variety of categories, to companies that excel in the IT domain through innovation, progressive strategies, or extraordinary market understanding. More than 70,000 users voted for T-Systems as first place in the category “Green Co-Location.” You can find out more about energy efficiency at Systems Solutions segment here.

Leading provider of sustainable IT services in Europe

PAC, a European market analysis and consulting firm in the software and IT sector, rated T-Systems as “best-in-class” in eight different categories. In the framework of its study, PAC rated the sustainability performance of 26 different telecommunications providers. T-Systems succeeded – especially thanks to its consulting subsidiary Detecon – in positioning itself as a leading provider of sustainable IT services in Europe, scoring points in the category “Sustainability Consulting” with its high-level competence and market presence. PAC emphasized the company’s IT operations (infrastructure) and sustainability services that are well integrated in its overall portfolio as particular strengths of T-Systems.

T-Systems also earned top spots in the sustainability and ESG service benchmark of the market research and consulting firm Information Services Group (ISG): it was recognized as a “leader” in Europe in the categories “Technology Solutions and Implementation Services – IT” and “Technology Solutions and Implementation Services – Operational Technology.” Together with its subsidiary Detecon, T-Systems was also named as a market leader in IT services throughout Europe in the category “Strategy and Enablement.” T-Systems also received the rating “Product Challenger” in the category “Data Platforms and Managed Services.” This study marked the first time ISG published a benchmark for sustainable services.

Industry Award for fuel conservation app

The IST World Congress gave the Industry Award to the “Low Carbon Mobility Management” fuel conservation app, which had already been certified under the #GreenMagenta label. The app was certified in 2022 and satisfies the ISO-23795-1 standard for low-carbon fleet management, navigation, and smart, environmentally friendly traffic systems. The app can be used by vehicle operators worldwide and helps to protect the environment by reducing CO₂ emissions. More information about our commitments in the area of mobility is available here.
Socially responsible investment
SRI investment products consist of securities from companies that have passed an audit based on environmental, social, and governance (ESG) criteria. The development of demand from socially responsible investors for T-Shares serves as an indicator we can use to assess our sustainability performance.

With our Socially Responsible Investment (SRI) ESG KPI, we measure how the financial markets perceive our CR activities.

The concept behind the United Nations’ Sustainable Development Goals (SDGs) continues to attract attention on the part of investors. With a view, in part, to evaluating our operations in light of the SDGs, we have introduced a process for assessing the impacts of projects, products, and measures.

The SFDR (Sustainable Finance Disclosure Regulation) is also relevant for Deutsche Telekom. It applies primarily to financial institutions that should incorporate sustainability factors into their decision-making processes concerning investments and have to collect relevant data regarding the sustainability impacts of their investments. Enterprises outside the financial sector are also affected and for that reason we have set out in tabular format for our investors and financial service providers the Principal Adverse Impacts (PAIs) of their investment decisions or guidelines in terms of sustainability aspects.

T-Shares in sustainability ratings and indexes
As part of our CR strategy, we have taken part successfully for many years in ESG ratings, which we select based on reputation, relevance, and independence. When rating agencies give high marks to our social and ecological commitment, the T-Share is included in the financial market’s sustainability indexes.

In 2023, the T-Share was again listed on leading sustainability indexes, including S&P Global’s prominent, and CSA-based, DJSI World and DJSI Europe. Our shares were also listed yet again on the FTSE4Good Index Series (for the twelfth year running) and the STOXX Global ESG Leaders. We are also still listed on the Euronext Indexes.

The table below presents a selection of other T-Share listings.

<table>
<thead>
<tr>
<th>Rating agency</th>
<th>Indexes/ratings/ ranking</th>
<th>Successfully listed in index</th>
</tr>
</thead>
<tbody>
<tr>
<td>S&amp;P CSA</td>
<td>DJSI World</td>
<td>✔ ✔ ✔ ✔ ✔</td>
</tr>
<tr>
<td></td>
<td>DJSI Europe</td>
<td>✔ ✔ ✔ ✔ ✔</td>
</tr>
<tr>
<td></td>
<td>S&amp;P ESG Index Series</td>
<td>✔ ✔ ✔ ✔ ✔</td>
</tr>
<tr>
<td>CDP</td>
<td>STOXX Global Climate Change Leaders</td>
<td>✔ ✔ ✔ ✔ ✔</td>
</tr>
<tr>
<td></td>
<td>Supplier Engagement A-List</td>
<td>✔ ✔ ✔ ✔ ✔</td>
</tr>
<tr>
<td>MSCI</td>
<td>ESG Universal Indexes</td>
<td>✔ ✔ ✔ ✔ ✔</td>
</tr>
<tr>
<td>ISS-ESG</td>
<td>„Prime“-Status (Sector Leader)</td>
<td>✔ ✔ ✔ ✔ ✔</td>
</tr>
<tr>
<td>Bloomberg</td>
<td>Gender Equality Index</td>
<td>✔ ✔ ✔ ✔ ✔</td>
</tr>
<tr>
<td>Sustainalytics</td>
<td>STOXX Global ESG Leaders</td>
<td>✔ ✔ ✔ ✔ ✔</td>
</tr>
<tr>
<td></td>
<td>UN Global Compact 100²</td>
<td>✔ ✔ ✔ ✔ ✔ n.a.</td>
</tr>
<tr>
<td>FTSE Financial Times Stock Exchange</td>
<td>FTSE4Good</td>
<td>✔ ✔ ✔ ✔ ✔</td>
</tr>
<tr>
<td>Moody’s</td>
<td>Euronext indexes based on Moody’s ESG data</td>
<td>✔ ✔ ✔ ✔ ✔</td>
</tr>
</tbody>
</table>

 Listed  Not listed
² Listed in other indexes in the relevant universe.
²³ Index was discontinued in the reporting year.
Data checked by Deloitte.

Reporting against standards
Task Force on Climate-related Financial Disclosures (TCFD)
- The most important key figures for measuring and managing climate-related opportunities and risks
ESG KPI “Socially Responsible Investment (SRI)”
More and more investors take into account sustainability aspects of their investments (Socially Responsible Investments, SRI). SRI investment products consist of securities from companies that have passed an audit based on environmental, social, and governance (ESG) criteria. The development of demand from socially responsible investors for T-Shares serves as an indicator we can use to assess our sustainability performance. The ESG KPI “Socially Responsible Investment” indicates the proportion of shares in Deutsche Telekom held by these kinds of investors.

Our commitment to greater sustainability pays off: As of December 31, 2023, around 32 percent of all T-Shares were held by investors who take environmental, social, and corporate governance criteria into account for their investment strategy; the same figure was just 31.3 percent in the previous year. (Source: Nasdaq)

Our ambition in this connection: Increase the KPI

Reporting against standards
Task Force on Climate-related Financial Disclosures (TCFD)
- The most important key figures for measuring and managing climate-related opportunities and risks

Sustainable capital investments & bond issues
In the past years, sustainability criteria have become increasingly important, both politically and economically, with respect to capital investments. And we are among those seeking to make our capital investments increasingly sustainability-oriented. This applies both to money that we invest and to bonds that we issue for the purpose of raising borrowed capital for investments. To this end, we regularly evaluate financing models that are attractive and sustainable, working in close consultation with our Group units Corporate Responsibility and Treasury (financial management).

Sustainable capital investment
Since 2019, Deutsche Telekom’s capital investments (“DT Trust”) have been geared toward ecological and social standards. The DT Trust is based on the criteria for the Government Pension Fund Norway (“Norges”). Among other things, we exclude companies that violate human rights, manufacture certain weapons, or whose core business is considered harmful to the environment.

EU taxonomy: compliance
The EU Taxonomy Regulation is the outcome of a European regulatory initiative. The goal of the Regulation is to promote investment in companies that are managed responsibly and that are involved in sustainable economic activities. The EU Taxonomy aims to create a uniform understanding of which activities and investments are sustainable. For this, the European Commission has defined clear criteria with precise metrics. This is intended to help investors to assess whether a company in which they want to invest operates sustainably. Since 2021, the businesses affected have had an obligation to report on how much of their turnover comes from the economic activities covered by the EU Taxonomy. In addition, companies must disclose the extent to which they invest in these economic activities, and what level of operating expenditure is associated with these activities.

Six environmental objectives
The first criteria regarding which economic activities are to be classed as environmentally sustainable in accordance with the EU Taxonomy were adopted by the European Commission in 2022. They apply to the taxonomy environmental objectives “Climate change mitigation” (CCM) and “Climate change adaptation” (CCA). There are also additional taxonomy environmental objectives in the areas of “Water and marine resources” (WTR), “Circular economy” (CE), “Pollution prevention and control” (PPC), and “Biodiversity and ecosystems” (BIO). The European Commission adopted criteria for these objectives in June 2023, which were required to be applied for the first time for the 2023 reporting year.

The EU Taxonomy distinguishes between economic activities that are “taxonomy-eligible” and “taxonomy-aligned”:
- “Taxonomy-eligible” economic activities are those activities for which concrete sustainability criteria are listed in the EU Taxonomy [Annexes to EU Delegated Regulations (EU) 2021/2139, (EU) 2022/1214, (EU) 2023/2485, and (EU) 2023/2486].
- “Taxonomy-aligned” economic activities are those activities that are fully compliant with the sustainability criteria listed in the EU Taxonomy [Annexes to EU Delegated Regulations (EU) 2021/2139, (EU) 2022/1214, (EU) 2023/2485, and (EU) 2023/2486]. To be taxonomy-aligned, an economic activity must make a substantial contribution to one of the aforementioned six environmental objectives while at the same time doing no significant harm (DNSH) to any of the other objectives. In addition, the company must meet the minimum social standards defined in the Taxonomy Regulation. The diagram below provides a summary of the taxonomy requirements:
Requirements of the EU taxonomy = Taxonomy-eligible economic activities

<table>
<thead>
<tr>
<th>Taxonomy-aligned economic activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Substantial contribution</strong></td>
</tr>
<tr>
<td><strong>Do no significant harm</strong></td>
</tr>
<tr>
<td><strong>Compliance with minimum safeguards</strong></td>
</tr>
</tbody>
</table>

**Substantial contribution**
to at least one of the six environmental objectives of the EU Taxonomy:

1. Climate change mitigation (CCM)
2. Climate change adaptation (CCA)
3. The sustainable use and protection of water and marine resources (WTR)
4. The transition to a circular economy (CE)
5. Pollution prevention and control (PPC)
6. Biodiversity and ecosystems (BIO)

**Do no significant harm**
An activity can only be considered to contribute to one of the six objectives if it has no other significant negative environmental impact ("Do no significant harm" principle).

**Compliance with minimum safeguards**
The minimum safeguards are social requirements in accordance with

- the OECD Guidelines for Multinational Enterprises,
- the UN Guiding Principles on Business and Human Rights,
- the Core Labour Standards of the International Labour Organization (ILO),
- and the International Bill of Human Rights.

**Implementation at Deutsche Telekom**
The following economic activities of Deutsche Telekom are currently taxonomy-eligible [the activity numbers refer to Annexe I of Delegated Regulation (EU) 2021/2139, which describes the criteria for the "Climate change mitigation (CCM)" environmental objective, as well as to Annexe II of Delegated Regulation (EU) 2023/2486, which lists the criteria for the "Circular economy (CE)" environmental objective]:

- Data processing, hosting and related activities (CCM 8.1)
- Data-driven solutions for GHG emissions reductions (CCM 8.2)
- Product-as-a-service and other circular use and result-oriented service models (CE 5.5): Lease of terminal equipment to business customers and consumers
- Transport by motorbikes, passenger cars, and light commercial vehicles (CCM 6.5): Deutsche Telekom’s vehicle fleet (cross-cutting activity)

In the reporting year, we made minor changes to the application of materiality thresholds compared with the prior year. That is why we no longer report the activity "Infrastructure enabling low-carbon road transport and public transport" (CCM 6.15), which relates to the charging solutions of our Comfort Charge subsidiary for electric vehicles. A complete overview of the economic activities that are currently part of the EU Taxonomy is available using the EU Taxonomy Compass.

With the exception of the activity "Product-as-a-service and other circular use and result-oriented service models (CE 5.5)," a comprehensive review was conducted for all of Deutsche Telekom’s taxonomy-eligible activities to determine whether they can also be classified as taxonomy-aligned. We conducted an initial analysis of taxonomy eligibility for activity CE 5.5. We will continue to deepen this analysis and publish the results – as required by law – in 2025 for the 2024 reporting year.

A taxonomy criterion that applies to all activities is the climate risk analysis, which was performed at Group level. In connection with the taxonomy-eligible activities, we have identified individual local climate risks, although these are mitigated by existing adaptation measures. The criteria for doing no harm to environmental objective "Climate change adaptation" (CCA) are therefore met. The only exception to this is the United States operating segment, where management of climate risks is still in the process of being developed and therefore does not yet fully meet the requirements of the EU Taxonomy. In any case, there were no taxonomy-eligible activities carried out to any significant extent in the United States operating segment in the reporting year.

We ensure compliance with minimum social standards for all taxonomy-eligible activities through a Group-wide management system. The standards refer to the OECD Guidelines for Multinational Enterprises and the UN Guiding Principles on Business and Human Rights, including the ILO Core Conventions and the International Bill of Human Rights. We perform our human-rights-related due diligence obligations using a risk-based management system encompassing both the Group and our supply chain. We also maintain a process of trust-based dialog with employees’ representatives and trade unions.

You will find comprehensive information on checking for taxonomy alignment in the relevant sections of the CR Report and the non-financial statement in our Annual Report.

The following table provides an overview of our taxonomy-eligible and taxonomy-aligned economic activities for the reporting year. It breaks the figures down into both absolute values and the applicable percentage of Group turnover, capital expenditure, and operating expenditure.
### EU taxonomy KPIs – taxonomy-eligibility and -alignment of the economic activities of the Deutsche Telekom Group

Deutsche Telekom Group in 2023

<table>
<thead>
<tr>
<th>Of which: taxonomy-eligible</th>
<th>Turnover</th>
<th>% (2023)</th>
<th>% (2022)</th>
<th>Capital expenditure</th>
<th>% (2023)</th>
<th>% (2022)</th>
<th>Operating expenditure</th>
<th>% (2023)</th>
<th>% (2022)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevant total figures for the Group</td>
<td>111 970</td>
<td>100.0</td>
<td>100.0</td>
<td>24 290</td>
<td>100.0</td>
<td>100.0</td>
<td>413</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Of which: taxonomy-aligned activities</td>
<td>2 770</td>
<td>2.5</td>
<td>1.8</td>
<td>517</td>
<td>2.1</td>
<td>0.8</td>
<td>137</td>
<td>33.2</td>
<td>33.5</td>
</tr>
<tr>
<td>Of which: non-taxonomy-aligned activities</td>
<td>2 513</td>
<td>2.2</td>
<td>1.3</td>
<td>517</td>
<td>2.1</td>
<td>0.8</td>
<td>135</td>
<td>32.7</td>
<td>33.1</td>
</tr>
<tr>
<td>CCM 8.2 Data-driven solutions for GHG emissions reductions</td>
<td>257</td>
<td>0.2</td>
<td>0.5</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>2</td>
<td>0.5</td>
<td>0.4</td>
</tr>
<tr>
<td>CCM 8.1 Data processing and hosting</td>
<td>1 148</td>
<td>1.0</td>
<td>1.0</td>
<td>213</td>
<td>0.9</td>
<td>0.4</td>
<td>79</td>
<td>19.1</td>
<td>19.0</td>
</tr>
<tr>
<td>CCM 8.3 Data-driven solutions for GHG emissions reductions</td>
<td>719</td>
<td>0.6</td>
<td>0.3</td>
<td>2</td>
<td>0.0</td>
<td>0.0</td>
<td>56</td>
<td>13.6</td>
<td>14.1</td>
</tr>
<tr>
<td>CE 5.5 Product-as-a-service and other circular use- and result-oriented service models*</td>
<td>645</td>
<td>0.6</td>
<td>-</td>
<td>170</td>
<td>0.7</td>
<td>-</td>
<td>0</td>
<td>0.0</td>
<td>-</td>
</tr>
<tr>
<td>CDM 6.5 Transport by motorbikes, passenger cars, and light commercial vehicles</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>133</td>
<td>0.5</td>
<td>0.3</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>CCM 6.15 Infrastructure enabling low carbon road transport and public transport**</td>
<td>-</td>
<td>-</td>
<td>0.0</td>
<td>-</td>
<td>-</td>
<td>0.0</td>
<td>-</td>
<td>-</td>
<td>0.0</td>
</tr>
<tr>
<td>Of which: non-taxonomy-eligible activities</td>
<td>109 200</td>
<td>97.5</td>
<td>98.2</td>
<td>23 773</td>
<td>97.9</td>
<td>99.2</td>
<td>276</td>
<td>66.8</td>
<td>66.5</td>
</tr>
</tbody>
</table>

* The analysis of the economic activity “Product-as-a-service and other circular use- and result-oriented service models” (CE 5.5) was limited to taxonomy eligibility only in 2023. The analysis of taxonomy alignment pursuant to Delegated Regulation (EU) 2023/2486 will take place in the 2024 financial year.

** Due to a change in application of the materiality assessment, turnover in connection with the taxonomy-eligible economic activity “Infrastructure enabling low-carbon road transport and public transport” (CCM 6.15) is no longer being reported in the 2023 financial year.
The total figures of the Group underlying the calculation in accordance with the EU Taxonomy for the reporting year were EUR 112.0 billion (2022: EUR 114.2 billion) for turnover, EUR 24.3 billion (2022: EUR 38.5 billion) for capital expenditure, and EUR 0.4 billion (2022: EUR 0.4 billion) for operating expenditure. Turnover and capital expenditure were determined on the basis of the consolidated financial statements. Operating expenditure relevant to the EU Taxonomy represents only a small proportion of total operating expenditure. This includes costs that relate to research and development; building remediation measures; short-term leases; maintenance and repair; and any other direct expenditures relating to the day-to-day maintenance of property, plant and equipment. You will find more information on the reporting principles and KPIs for the EU Taxonomy in the non-financial statement in our Annual Report.

As Deutsche Telekom’s core business is not yet adequately covered by the criteria in the EU Taxonomy, an aggregate view of the taxonomy eligibility of all economic activities results again in 2023 in very low proportions of taxonomy-eligible turnover (2.5 percent; 2022: 1.8 percent), capital expenditure (2.1 percent; 2022: 0.8 percent), and operating expenditure (33.2 percent; 2022: 33.5 percent) for the Deutsche Telekom Group. The slight increase in turnover and capital expenditure compared with the prior year is mainly attributable to the first-time disclosure of taxonomy-eligible turnover and capital expenditure from the lease of terminal equipment in accordance with economic activity CE 5.5.

In the 2023 financial year, the taxonomy-aligned proportion of all economic activities of the Deutsche Telekom Group was 0.2 percent (2022: 0.5 percent) of turnover, 0.0 percent (2022: 0.0 percent) of capital expenditure, and 0.5 percent (2022: 0.4 percent) of operating expenditure. The taxonomy-aligned proportion is attributable to economic activity CCM 8.2 “Data-driven solutions for GHG emissions reductions.” The decline in taxonomy-aligned turnover is due mainly to the life-cycle analysis required by the Taxonomy. The industry benchmarks against which the greenhouse gas savings of our cloud solutions are compared were updated for this analysis in the reporting year.

In relation to the Systems Solutions segment, the taxonomy-aligned proportion of turnover is 3.6 percent (2022: 12.3 percent), 0.0 percent for capital expenditure (2022: 0.1 percent), and 0.0 percent for operating expenditure (2022: 0.8 percent).

You will find more information in the sections on taxonomy activities CCM 8.1, CCM 8.2, and CE 5.5.

EU taxonomy: industry view and outlook

Further development

The bulk of our business model is not yet included in the EU Taxonomy because the Taxonomy does not include criteria for the economic activity "Provision and operation of a network infrastructure for telecommunications." We can therefore only reflect the added value of our activities for digitalization and the associated environmental benefits within the EU Taxonomy to a very limited extent. We are helping to reduce carbon emissions by increasing the energy efficiency of our network infrastructure and investing in the build-out of state-of-the-art, energy-efficient networks. At the same time, the network infrastructure forms the basis needed for digital solutions that contribute to CO₂ savings in other sectors of the economy. For this reason, we are actively involved in various business and industry associations to ensure that relevant and appropriate criteria for our network infrastructure are added to the EU Taxonomy. We have set out our position in a range of position papers, for example, here with ETNO.

In particular, we took part in the joint feedback process of the European Commission and the Platform on Sustainable Finance on the EU Taxonomy in 2023. The Sustainable Finance working group of the European Telecommunications Network Operators' Association (ETNO) and the Global System for Mobile Communications Association (GSMA) has developed a proposal for taxonomy criteria at Deutsche Telekom's initiative. These criteria can provide stronger incentives for investments in climate change mitigation in the area of network build-out and operation for fixed and mobile networks. This industry proposal will be evaluated by the Platform on Sustainable Finance and the European Commission in the course of 2024.

In addition to EGNO and GSMA, we are active within the European Round Table (ERT), and at national level we are part of the e-conscience network and several other organizations and stakeholder dialogs.

In its current form, the EU Taxonomy concentrates on environmental objectives. It is to be expanded in the future with the inclusion of a "social taxonomy." The aim of this is to give businesses the opportunity to reflect their social contributions, too. Given the demanding regulatory environment currently facing businesses, these plans have been temporarily suspended. However, in October 2022, the Platform on Sustainable Finance expert committee took the initial step of compiling a proposal for fleshing out the minimum social standards that are already part of the EU Taxonomy. The experts suggest focusing on the following areas: respect for human and labor rights, anti-corruption, taxes, and fair competition. It is not yet clear to what extent the European Commission will make these expert recommendations legally binding.

The application of the Corporate Sustainability Reporting Directive, which entered into force on January 5, 2023, will progressively increase the number of businesses that are obligated to disclose taxonomy-related information. Going forward, this will help us to check the taxonomy alignment of goods and services we purchase, as required by the EU Taxonomy.
Taxonomy activity 8.1: Data processing, hosting and related activities

We cover the taxonomy-eligible economic activity “Data processing, hosting and related activities” (CCM 8.1) with our Systems Solutions segment. As well as data centers operated by T-Systems, we also included data centers operated on co-locations in the evaluation of taxonomy eligibility.

The economic activity CCM 8.1 accounts for the largest proportion of taxonomy-eligible turnover, investment expenditure, and operating expenditure: Taxonomy-eligible business activities for data processing and hosting amounted to 1.0 percent of turnover in 2023 (2022: 1.0 percent), 0.9 percent of capital expenditure (2022: 0.4 percent), and 19.1 percent (2022: 19.0 percent) of direct expenses (based on the relevant Group total figures). To illustrate taxonomy eligibility at segment level, too, we also report supplementary KPIs for the Systems Solutions segment. The taxonomy-eligible proportion is 35.0 percent (2022: 36 percent) in relation to the external turnover of the segment, and 66.0 percent (2022: 62.6 percent) in relation to capital expenditure.

Data centers must comply with the European Code of Conduct for Energy Efficiency in Data Centres to be considered as making a substantial contribution to climate change mitigation in accordance with the EU Taxonomy. Five of the eight sites operated directly by T-Systems currently comply with this Code of Conduct. Compliance with the Code of Conduct has not yet undergone external auditing, which is a requirement of the EU Taxonomy. We are therefore classifying the data centers used for economic activity CCM 8.1 as non-taxonomy-aligned in the reporting year.

In addition, the EU Taxonomy stipulates that the refrigerants used in data center cooling systems may not exceed a global warming potential value of 675. This criterion is currently met by one data center that was fully refurbished in 2022. At present, the other sites still use industry-typical refrigerants that meet the criteria of the EU Regulation on fluorinated greenhouse gases. The taxonomy-aligned turnover, capital expenditure, and operating expenditure for economic activity CCM 8.1 are therefore all 0.0 percent.

We will make the change to taxonomy-aligned refrigerants as part of the regular refurbishment program for our data centers. We will carefully review the individual data centers’ compliance with the criteria for preventing significant harm to the remaining environmental objectives in each case as soon as they fulfill the aforementioned climate change mitigation requirements in full. This will enable us to continually increase the taxonomy alignment of our data centers.

Taxonomy activity 8.2: Data-driven solutions for GHG emissions reductions

We associate those solutions and products that are predominantly aimed at the provision of data and analytics enabling GHG emission reductions with the economic activity Data-driven solutions for GHG emissions reductions (CCM 8.2). These are, in particular, solutions and products that we have incorporated into our Enablement Factor and Sustainable Revenue Share ESG KPIs, and/or that have been awarded our #GreenMagenta label.

We have identified the following taxonomy-eligible services within our Group-wide business activities:

- Business-related video conferences (save travel-induced CO₂ emissions)
- Workplace and cloud solutions (increase energy efficiency by improving server utilization)
- IoT solutions (save CO₂ emissions through route optimization, for example)

We provide these services to a significant financial extent in the Germany segment, in our major subsidiaries in the Europe segment, and in the Systems Solutions segment. Taxonomy-eligible solutions under economic activity CCM 8.2 represent 0.8 percent (2022: 0.8 percent) of turnover.

A life-cycle analysis is required as evidence of taxonomy alignment. This must show that a solution results in substantial greenhouse gas emission reductions both over and beyond its entire life cycle in comparison with the relevant reference solution available on the market. We understand reference solutions to be alternative solutions that would typically be used in a company in our footprint markets. This assumes that the companies are aligned with best practices. The technical screening criteria do not stipulate a specific threshold for “substantial” reductions in greenhouse gases in comparison with the reference solution. In the prior year, we therefore defined a threshold based on scientific findings. We rate greenhouse gas reductions resulting from taxonomy-eligible solutions exceeding this threshold value as “substantial.” The requisite life-cycle analyses have been prepared for business-related video conference solutions and for the cloud solutions Future Cloud Infrastructure, Open Telekom Cloud, and SAP Cloud Services. To date, we have not prepared a life-cycle analysis for the IoT solutions and therefore we do not report them as taxonomy-aligned for the reporting year.

In contrast to the prior year, the taxonomy-eligible business-related web conferencing solutions were analyzed by comparing them with hybrid meetings to take account of market trends (previous year: in-person meetings). Significant greenhouse gas savings were demonstrated. In comparison with hybrid meetings, purely virtual meetings contribute to greenhouse gas savings of 62 percent (small meetings with fewer than five participants) or 32 percent (large meetings with more than five participants).

Of the workplace and cloud solutions examined, the life-cycle analysis of the Future Cloud Infrastructure (including the SAP Cloud Services run on this infrastructure) shows that greenhouse gas emissions reductions of 9.7 percent (in comparison with decentralized data centers operated by our customers themselves) can be achieved. Future Cloud Infrastructure is based on an infrastructure-as-a-service model; the customer’s IT systems are brought together on a platform hosted by T-Systems. Centralizing the service in this way not only reduces the consumption of materials for hardware but, thanks to the highly energy-efficient operation of our data centers, also cuts greenhouse gas emissions.
However, the demonstrated greenhouse gas reductions of 9.7 percent are lower than the threshold value defined in the prior year. This is because the industry benchmarks against which we compared our solutions were updated. Future Cloud Infrastructure and SAP Cloud Services cannot therefore be reported as taxonomy-aligned for the 2023 financial year.

The Open Telekom Cloud is also offered as an infrastructure-as-a-service model. Via a platform operated by T-Systems, businesses can flexibly purchase computing capacity, memory resources, and network resources, among other things. Improved server utilization and the highly energy-efficient operation of our data centers mean that, according to the life-cycle analysis, using the Open Telekom Cloud leads to savings in greenhouse gas emissions of 47 percent in comparison with the reference scenario. This scenario is based on the assumption that our customers use their own, decentralized server infrastructure for storing and processing data, rather than the cloud solution. In view of the demonstrated reduction in greenhouse gases, we classify all web conferencing solutions and the Open Telekom Cloud included in the life-cycle analysis as taxonomy-aligned.

For the aforementioned solutions, we exclusively use infrastructure located in Germany. The requirements for the “Circular economy” (CE) conform to current EU legislation, which we implement as part of our environment management activities at our EU sites. We also require our business partners to provide evidence that the hardware used in the data centers is actually reconditioned or recycled at the end of its service life. The taxonomy-aligned solutions for reducing greenhouse gas emissions represent 0.2 percent (2022: 0.5 percent) of turnover, 0.0 percent of capital expenditure (2022: 0.0 percent), and 0.5 percent (2022: 0.4 percent) of operating expenditure. For the Systems Solutions segment, the taxonomy-aligned proportion of turnover was 3.6 percent (2022: 12.3 percent), 0.0 percent of capital expenditure (2022: 0.1 percent), and 0.0 percent of operating expenditure (2022: 0.8 percent).

**Result including cloud solutions with greenhouse gas reduction potential of around 10 percent**

Taking the Future Cloud Infrastructure and SAP Cloud Services cloud solutions additionally into account, which reduced greenhouse gas emissions by 9.7 percent according to the life-cycle analysis, the taxonomy-aligned proportion for the Group would be 0.5 percent (turnover), 0.0 percent (capital expenditure), and 0.5 percent (operating expenditure). For the Systems Solutions operating segment, including Future Cloud Infrastructure and SAP Cloud Services would lead to a proportion of 11.5 percent (turnover), 0.0 percent (capital expenditure), and 0.4 percent (operating expenditure).

**Taxonomy activity CE 5.5: Product-as-a-service and other circular use and result-oriented service models**

Following the expansion of the EU Taxonomy in 2023, we have identified a taxonomy-eligible economic activity that is assigned to the “Circular economy” (CE) environmental objective. We record the lease of terminal equipment such as routers or fixed-network telephones to business customers and consumers in the Germany operating segment under the taxonomy-eligible economic activity “Product-as-a-service and other circular use and result-oriented service models” (CE 5.5). We take back the leased devices from our customers and remanufacture them so that they can be used for as long as possible. We generated relevant taxonomy-eligible turnover from the lease of terminal equipment in accordance with economic activity CE 5.5 that accounted for 0.6 percent of the Group’s total turnover. This economic activity is additionally associated with relevant capital expenditure of 0.7 percent, based on the total figures for the Group. As required by law, we will publish information on taxonomy alignment for economic activity CE 5.5 for the reporting year 2024 starting in 2025.

**Additional taxonomy activities (e-mobility)**

Deutsche Telekom has a vehicle fleet that includes both company cars and service vehicles. The economic activity “Transport by motorbikes, passenger cars, and light commercial vehicles” (CCM 6.5) is therefore relevant as a cross-cutting activity with a supporting function for our core business.

As we are pushing forward with the transition to a fully electric fleet, especially in Germany and the EU, some of the new vehicles purchased already meet the CO₂ thresholds set by the EU Taxonomy. We were also able to provide evidence of the alignment of these vehicles with the other key EU Taxonomy requirements, which are based on current EU legislation for new vehicles. As the choice of tires is left to the vehicle users themselves, we could not provide evidence of the taxonomy alignment of tires for the reporting year. We therefore report capital expenditure associated with our vehicle fleet as non-taxonomy-aligned.

**Investor communication**

We have observed that investors are increasingly incorporating SRI approaches in their investment strategies. In addition, investors, analysts, and rating agencies are increasingly inquiring more specifically about our CR activities. To meet these requests, we use different formats – both in our reporting and for direct dialog. In 2023, we held more discussions with investors on this issue than ever before, testimony to a substantial increase in interest.

We publish this CR report annually. The Management and Facts section provides readers with detailed information that helps them assess our CR performance. In addition, we have also prepared under “Specials” relevant sustainability issues in a straightforward, clear manner for a broad readership. Our annual report also includes a non-financial statement that allows us to meet the current EU requirements for sustainability reporting. We also offer ESG information for financial market players on our company website, under “Responsibility”, and on our investor relations portal, under “Socially Responsible investment”. In addition, we provide social indicators in our HR Factbook. This year we are also reporting for the first time the requirements from the SFDR as a service for our investors by providing an overview of the PAIs (Principal Adverse Impacts).

We strive to engage in personal dialog with investors and regularly hold national and international information events as SRI roadshows. We also regularly take part in SRI conferences or meetings, and, upon request, present our CR strategy as best practice.
We also keep interested investors up-to-date on ESG issues in quarterly presentations and also answer numerous related direct inquiries. In the year under review, we again ran our investor dialogs, including our SRI roadshows, virtually entirely online.

**Taxes**
The Group Tax department is responsible for ensuring that the Deutsche Telekom Group pays taxes at the national and international level in accordance with the applicable laws. This includes the Group’s income taxes, which must also be regularly reported in our IFRS financial statements, as well as VAT and income tax on salaries payable within the context of customer transactions and for Group employees and other taxes that are triggered for the Group.

Group Tax also ensures that the Group has an efficient tax structure within the framework of German and foreign tax laws as applicable in each country (avoidance of any unnecessary tax burden not prescribed by law). The goal is to achieve sustainable tax efficiency for the Group. In the view of Group Tax, transparent, trust-based cooperation with local tax authorities – for example, in connection with operationally advisable company reorganizations – plays an essential role in any efforts toward that goal.

In addition, Group Tax undertakes to contribute as much as possible to the success of Deutsche Telekom’s operations, e.g., by providing detailed advice regarding new business models or innovative technological developments. In such matters, it focuses particularly on directly clarifying any unresolved issues related to tax law, as well as on providing practical solutions to meeting all applicable tax requirements.

The company’s “Tax Compliance, Sustainable Tax Efficiency, Tax as Valued Business Partner” tax strategy (incl. tax policy) has been approved by the Deutsche Telekom Board of Management.

For detailed information on the work of Group Tax, its principles, and its responsible approach to taxation, please refer to the detailed document “tax strategy”.

**Further information with regard to taxation of Deutsche Telekom**
Additional information with regard to our taxes – for example, about our country-based reporting, and additional details about tax rates – is provided in the documents on Country-by-Country Reporting and the Cash Tax Rate Reconciliation.

In addition, Deutsche Telekom participates in initiatives aimed at developing a comprehensive approach to determining and publishing meaningful information about tax payments by enterprises and enterprise groups. The aim is to give a full and differentiated view of the various contributions to the financing of the public domain that are made in connection with or otherwise result from enterprises and entrepreneurial activities. In this context, for some years now, Deutsche Telekom has determined “Total Tax Contribution” figures for our key national companies in the telecommunications sector. This approach is explained in greater detail in the document on Total Tax Contribution, which also contains the respective information relating to our Group. Deutsche Telekom also intends to collect and publish such information in the coming years, and to potentially extend its scope to additional national companies.

**Tax strategy – Tax Compliance, Sustainable Tax Efficiency, Tax as Valued Business Partner**
The Group Tax department is responsible for ensuring that the Deutsche Telekom Group pays taxes at the local, national and international level in accordance with the applicable laws. This includes the Group’s income taxes, which must also be regularly reported in our IFRS financial statements, as well as indirect taxes (e.g., VAT, sales/use, telecom) and income tax on salaries payable within the context of customer transactions and for Group employees.

Group Tax also ensures that the Group has an efficient tax structure within the framework of German and foreign tax laws as applicable in each country (avoidance of any unnecessary tax burden not prescribed by law). The goal is to achieve sustainable tax efficiency for the Group, for which Group Tax regards transparent, trust-based cooperation with local tax authorities as essential, e.g., in the context of company reorganizations that are advisable in business terms.

In addition, Group Tax undertakes to contribute as much as possible to the success of Deutsche Telekom’s operations, e.g., by providing detailed advice regarding new business models or innovative technological developments. In such matters, it focuses particularly on clarifying upfront any unresolved tax law-related issues as well as providing practical solutions to meeting all applicable tax requirements.

**Organisation of the Deutsche Telekom tax function**
The three pillars of the Tax Strategy – Tax Compliance, Sustainable Tax Efficiency, Tax as Valued Business Partner – were approved by the management board of Deutsche Telekom and are consistent with the approaches to tax management applied by the tax departments of non-German group companies.

On a regular basis, the management board of Deutsche Telekom inter alia addresses tax implications and topics when dealing with various board presentations. Important separate tax topics are presented to the management board of Deutsche Telekom by the director of Group Tax and the CFO of Deutsche Telekom.

Group Tax and the director of Group Tax (Senior Vice President Tax) directly report to the CFO of Deutsche Telekom. Like for example Treasury, Accounting and Legal, Group Tax is part of the Deutsche Telekom Group’s central functions and located within the Group’s parent company Deutsche Telekom AG. The director of Group Tax reports on specific issues on a case-by-case basis, for example per e-mail, as well as monthly in a personal exchange directly with the CFO of Deutsche Telekom and also participates in regular weekly meetings of the finance function steering committee (Senior Leadership Team Finance), in the course of which aspects of Group taxes are addressed.
The director Group Tax is also a member of the executive leadership circles of the top 250 and the top 50 business leaders of the Deutsche Telekom Group, which meet for example annually at exchange meetings over the course of several days, in particular also to ensure a best possible information flow and networking between the business leaders as well as the headquarters’ central functions of Deutsche Telekom Group.

Group Tax is organized in several sub-departments, which are managed by a respective leadership function directly reporting to the head of Group Tax. In addition to the departments for wage taxes and exercise taxes there are departments for profit taxes reporting including tax compliance (filing of tax declarations and support of tax audits Imaging) as well as for the tax advice and support of reorganizations and M&A transactions.

In the course of the establishment of a Tax Compliance Management System (Tax CMS) Group Tax has comprehensively defined and documented its responsibilities and processes as well as its approaches, guidelines and principles. Regular updates and controls are implemented. The Tax Compliance Management System was presented to the Deutsche Telekom management board. In addition, a Tax Risk Management Report is regularly set up, which identifies, evaluates and documents tax risks as well as suggests measures for risk mitigation.

In addition to Group Tax, various group companies have also their own, sometimes very large tax departments, which ensure the tax compliance in the individual countries and constitute the local points of contact for the respective local tax administrations. This applies in particular with respect to larger “natcos” of Deutsche Telekom Group, some of which are themselves publicly listed stock corporations with outside shareholders. Group Tax works trust-based with all such local tax departments, for example through calls dealing with specific issues, through monthly alignment calls and working visits at the respective company and annual or biennially meetings of the tax function of Deutsche Telekom Group as a whole over the course of several days. Some of such local tax departments have – in addition to the groupwide aligned three pillar tax strategy - their own further guidelines, which are aligned with local requirements.

**Establishment of a detailed Tax Strategy, respective resolution and updates**

The present detailed Tax Strategy was set up by Group Tax and presented to the CFO of Deutsche Telekom as well as resolved upon by the CFO and also the management board of Deutsche Telekom as a whole. The CFO resolves on respective updates, upon by the management board of Deutsche Telekom as a whole (“Tax Compliance – Complying with all Tax Requirements No Matter What (“Correct Tax Numbers Always and Everywhere”), it applies to all group companies of Deutsche Telekom, i.e. such German and non-German group companies that are indirectly or directly majority-owned by Deutsche Telekom AG.

The Group Tax approach is as follows:

- Determination of the relevant facts, the business, economic, financial, legal and other motivations and aspects
- Development of viable, practical, and robust solutions in cooperation with the other parties involved
- Formulation of sound tax analysis
- Documentation of the facts and the tax positions taken including the respective analysis
- Use of efficient processes to correctly comply with tax declaration obligations
- Engagement in a close, trust-based working relationship with the tax authorities
- If necessary, assertion of the own tax opinion with the finance courts

A great deal of emphasis is placed on the professional and personal qualifications of employees. Many Group Tax employees are qualified as tax advisors and/or lawyers, as well as having additional relevant qualifications such as studies abroad or other academic titles; the majority of them have a degree in business studies or law. The regular training of employees is ensured by means of internal and external, regular and ad hoc seminars, meetings, conferences, and through other forms of knowledge sharing. Employees are involved in a wide range of relevant working groups and committees of industry associations to ensure that the latest topics and developments are addressed. Appropriate specialization and coverage of special issues ensure the necessary specialist knowledge. Development measures not addressing the expert qualifications, in particular regarding team building, include for example keynotes and workshops with respect to inter alia energy management, attitude, leadership as well as working environment, collaboration and communication.

To the extent necessary or appropriate, Group Tax makes use of the external tax expertise of legal and tax advisors worldwide. Budget restrictions practically do not exist in this respect in view of the financial relevance respectively the importance of compliance.
Nevertheless, the efficient application of resources is of course a major focus of Group Tax as well.

In the context of digitalization, special IT tools are increasingly being created for and by Group Tax to support the efficient documentation of tax-relevant facts and compliance with tax obligations as well as to create the best possible working environment for the tax authorities for tax audits. In addition to the so-called VAT Validation Tool, which already for many years is successfully ensuring the VAT compliance in the German part of the Group, this concerns in particular the TEO - tax everything online IT-solution, developed by Group Tax in collaboration with an IT consultancy firm specialising in tax IT-development and used within Deutsche Telekom Group as well as by several further groups of companies on a licence basis (“TEO User-Group”), which also furthers the professional exchange. In addition to the Group’s tax reporting, TEO massively supports the project regarding the carrying out of a timely tax audit (“zeitnahe Betriebsprüfung”) agreed upon between Deutsche Telekom in Germany and the German tax administration, aiming at a tax audit and a final assessment regarding a relevant tax year already in the subsequent year.

The project of the timely tax audit enables a significant reduction of tax risks within the German part of Deutsche Telekom Group through leaving only one or two “open” tax years, which are still subject to tax audit (filing of all tax declarations as a rule in the first half of the subsequent year, commencement of the tax audit in the second half of such subsequent year, conclusion of the tax audit through the final audit meeting and issuance of the final tax assessments three to four quarters subsequently).

Accurately analysing the tax situation and providing support to ensure the tax efficiency of issues and projects requires a precise and profound knowledge of the business, economic, and financial issues as well as their legal and other aspects and relevant general conditions. We therefore also focus on ensuring a close relationship to the business units and to other relevant departments in the Group. To this end, special opportunities have been created in the Group Tax department in particular for short secondments and other opportunities for exchange (for example so-called “Tax Days Off” which are spent in another part of the Group), in addition to the other usual sources of networking and information.

Group Tax is involved in the decision-making process for all of the Group’s significant measures. In this context, the relevant facts are comprehensively determined and considered for the tax analysis. In the event of multiple suitable alternatives to achieve the same purpose, Group Tax will recommend the most tax-efficient option. Of course, tax aspects are not usually the deciding factor, rather the process weighs up all relevant aspects. To prepare for decisions, Group Tax works efficiently with all other departments involved.

Tax analyses are carried out, for example, with respect to:

- the development of new and amendment of existing business, production, and sales models, the development of new markets
- the acquisition and disposal of shares, business operations, entities, and groups of companies
- corporate restructurings and other restructuring measures, as well as changes in the relevant internal processes
- financings
- other relevant projects and transactions

Our responsible approach to tax

It is the aim of Group Tax to facilitate the business and value creation in the Group as much as possible, not to hinder it, and to make a constructive contribution to the formulation of solutions and approaches that are as robust and practicable as possible from a tax perspective through a deep knowledge of the Group's business activities and processes. Group Tax is committed to creating value for the shareholders of Deutsche Telekom by means of sustainable tax efficiency and by contributing to the joint success of the Group. As such, the decisions and approaches taken by Group Tax also take into account the consequences for business activities and the Group’s internal processes as well as any other implications, for example, for the reputation, profile, or policies of the Group.

Group Tax endeavours to minimize disputes with the tax authorities, and to limit such disputes to instances where its positions are supported by the law. We seek to rule out or minimize in advance tax risks wherever possible and reasonable on a case-by-case basis by obtaining binding statements from the competent tax authorities. Also due to the already-mentioned project regarding the timely tax audit with the German tax administration, potential tax risks regarding the German part of the Group are in any case as a rule limited to one to two open tax years (so-called “all in one year” tax audit process).

Group Tax addresses its collective responsibility for society as a whole also by supporting the law-making activity of the tax legislators. In particular, the intention is to point to practical taxation consequences for businesses as well as to avoid systemic contradictions in values within the state fiscal framework, in both cases based on the practical experience and expert knowledge of Group Tax and as a rule channelled through business associations, but also through scientific work.

Approach to transfer prices, publication of tax information and transparency as well as to tax structures and tax risks

Transfer pricing

For transfer pricing matters, the Deutsche Telekom Group has a Transfer Pricing Guideline, which applies the current arm’s length principle. The Transfer Pricing Guideline is implemented on a groupwide basis and binding. It provides the employees of Deutsche Telekom with information regarding the tax requirements with respect to the setting of prices for intra-group supplies and gives respective instructions. We ensure through appropriate processes that the arm’s length principle is taken into account when agreeing the terms and conditions of intragroup relationships. In this respect the implementation of the Transfer Pricing
Guideline is secured by transfer pricing experts of Group Tax through the carrying out of expert communication exchanges with and the monitoring of business units.

Publication of tax information and transparency
Deutsche Telekom implements comprehensive transparency, in particular towards the local tax administrations, but also towards the public.

The Deutsche Telekom Group is implementing the reporting obligations arising in connection with the BEPS developments, including country-by-country reporting. A project team was set up early on and a specific IT tool developed for this purpose. The respective information and documents are sent to the competent tax authorities on time.

Our published annual reports as well as further publications and statements that are accessible to the general public contain extensive data and other information regarding the tax framework and the tax circumstances of the Group, also with respect to our segments, and in this context also relevant country-related information concerning some jurisdictions of particular relevance, including respective derivations and explanations; in order to avoid repetition here we would like to make full reference thereto.

In addition, various of our group companies are themselves organised as stock corporations, the shares of which are as such also publicly traded at a number of stock exchanges and which have outside shareholders not within Deutsche Telekom Group respectively free float. Therefore, such group companies comply themselves also with comprehensive reporting requirements regarding tax according to the regulations applicable to them, including inter alia any capital markets regulations. Reference is made to such specific further publications.

In addition, Deutsche Telekom publishes further information with respect to taxes at Deutsche Telekom, for example country-by-country reporting and additional explanations regarding tax rates, which can be accessed via the chapter on taxes of the CR report. This annually includes the so-called Total Tax Contribution of the major telecommunication companies of the Deutsche Telekom Group, which information has been assembled by Deutsche Telekom for several years now in order to determine and make visible the contributions of the respective entrepreneurial activities to public financing and finances. The determination of the Total Tax Contribution shall be continued also in future years, potentially with a further extended scope.

In the course of the project of the timely tax audit the German tax administration furthermore receives comprehensive information packages in agreed format in advance, and therefore a particularly high degree of early transparency is achieved prior to and in the course of the timely tax audit. This also supports the alignment with the tax authorities, in particular the local tax audit, regarding present respectively future sets of facts with the aim to achieve further increased efficiency, specifically regarding the subsequent tax audit.

Approach to tax structures and tax risks
Due to the high importance of local telecommunication infrastructure as well as local permits for the carrying out of respective activities our core business is from the outset specifically local and as a rule also addressed by relevant tax laws and regulations. Therefore, the locally generated added value is as a rule also locally taxed. Deutsche Telekom Group has less of an international business model, but rather a multi-national one: The customers are served locally by local group companies with local infrastructure.

In accordance with our profile as an international telecommunications group, we have business activities in a large number of countries. Generally, we conduct local business activities through subsidiaries in the respective country. As an international group, Deutsche Telekom aims to set our activities on an international footing and not to concentrate them entirely in Germany, so as to further good international cooperation and partnerships within the Group.

For example, in the Netherlands, which are, respectively were, a key location for the Deutsche Telekom Group, we conduct, respectively conducted, substantial business activities through a number of subsidiaries. Among other things, T-Systems has a presence there, as in many other countries, through a Dutch subsidiary, which is responsible for local activities. For many years we were extensively involved in mobile communications there, through the subsidiary T-Mobile Netherlands, which had additionally taken over the activities of the Dutch Orange and Tele2 group. Due to the Netherlands being a market-standard jurisdiction for this, we already established a Group financing company as well as our international holding company there very many years ago.

From a tax perspective, inappropriate profit transfers are prevented from the outset by applying the arm’s length principle. Furthermore, the shift of the taxable basis out of Germany is impossible due to the applicability of the tax provisions regarding the German controlled foreign company rules and other rules and regulations.

There is no artificial shifting of created value to low-tax countries.

We do not have any artificial special purpose entities without economic substance in low-tax countries.

There is no use of jurisdictions without transparency or of so-called “tax havens” for tax avoidance.

We do not operate any aggressive tax structures without economic substance exclusively for tax avoidance.

Group Tax engages in robust tax planning based on a comprehensive analysis of the tax laws and regulations. Substantial risks due to tax uncertainties regarding the application of the law are, to the extent possible and sensible, addressed through binding rulings or similar pre-alignments with the tax administration. Due to the timely tax audit regarding the German part of the Group, tax risks in that jurisdiction are as a rule limited to only a few open tax
In accordance with the obligation to generate value for the Deutsche Telekom Group and its shareholders, Group Tax is also subject to efficient cost control.

**Tax governance and control framework, risk management**

Proper implementation of the detailed Tax Strategy is ensured by Group Tax. Responsible is the head of Group Tax who directly reports to the CFO of Deutsche Telekom.

Tax participates in the general governance and control framework as well as in the general risk management of Deutsche Telekom. This applies with respect to regular requests regarding risk reporting, regular risk documentation and evaluation, regular updates of important tax parameters, regular internal controls, regular internal revision audits, regular and comprehensive audit activities of external auditors, regular succession planning processes etc. The tax procedures, respective controls and the risk management are therefore comprehensively integrated into the respective infrastructure of Deutsche Telekom, to which reference is hereby made. This applies also with respect to the AskMe- and TellMe-portals of Deutsche Telekom, the centralized points of contact of the Group for any questions regarding compliance and for any, also anonymous, reporting of (potential) compliance issues (so-called whistleblowing).

Group Tax is in constant and close exchange with all relevant business units and departments of the Group in order to ensure the correct tax evaluation of the activities and to monitor the compliance with tax rules and regulations. In this respect, a multitude of regular meetings and alignment processes is established. Group Tax also conducts on a case-by-case basis specific trainings and workshops regarding relevant tax topics within and outside Group Tax. Group tax moreover publishes relevant tax information in the intranet. Consecutive tax knowhow trainings within Group Tax shall result in the identification by all members of Group Tax of risks, chances and respective topics for further analysis, which are recorded in respective documentations. Processes to be carried out in regular intervals within Group Tax result in the recording of and dealing with potential tax risks, this through the application of IT-solutions specifically developed for such purpose.

In addition, within the framework of its Tax Compliance Management System Group Tax comprehensively revises and controls its procedures and potential risks. This includes a description of all processes with responsibilities, risk assessments and measures for risk mitigation etc. Furthermore, regularly a Tax Risk Management Report is compiled, which identifies, evaluates and documents tax risks as well as addresses measures for risk mitigation.

Group Tax is furthermore represented in numerous associations and organizations addressing tax questions and therefore thus receives up-to-date information on relevant tax topics and participates in respective exchanges. A focus is laid on initiatives regarding the advancing digitalization of tax and tax-relevant processes with the aim of further enhancing the respective procedures.

**Inclusion of stakeholders and management of stakeholders’ tax concerns**

Deutsche Telekom has established general processes regarding enquiries by stakeholders, in particular by shareholders respectively investors, as well as all other interested parties and the public. This includes enquiries relating to tax. Through such channels, all enquiries with a tax aspect reach Group Tax and are dealt with by Group Tax within a short period of time.

Group Tax attaches the utmost importance to a trust-based, transparent cooperation of integrity with the competent tax authorities. Within the framework of the project regarding the timely audit the German tax authorities receive agreed information packages in advance using specifically developed IT tools for such purpose, which enable the tax authorities to carry out comprehensive audit activities. In the course of numerous regular as well as specific meetings and workshops a close exchange regarding a great number of issues and relevant questions takes place. Audit findings are dealt with by Group Tax within a short period of time.

In addition, Group Tax participates extensively in tax expert discussions within the framework of a number of industry organizations and tax working groups of various institutions. Members of Group Tax contribute as speakers or panelists to expert seminars and conferences and thereby receive also extensive up-to-date information regarding relevant topics. Furthermore, direct exchanges on relevant tax issues, with a focus on practicability, take place with tax authorities, including representatives of the highest tax administration bodies. These exchanges concern on the one hand potential consequences of possible tax law changes, the practicability and the consistency with the tax legislator’s aims and purposes, on the other hand tax expert contributions regarding the development of tax laws on the international level and respective practical consequences. One focus of Group Tax is to find possibilities of a further digitalization of tax-relevant processes; in this respect Group Tax is involved with respective institutions.

**Group Tax is award-winning**

Group Tax won the renowned Juve Award for Best Inhouse Tax Team 2016 for its special efforts with regard to its good working relationship with the tax authorities and its efficient digitalization of tax processes, as well as its participation in the special project for a timely tax audit.

**Social commitment: Pro-bono consulting**

Deutsche Telekom welcomes and promotes the social engagement of its employees. As such, it expressly supports Group Tax staff who want to contribute their expertise in the form of pro-bono consultations for charitable purposes. The Corporate Responsibility unit provides them with help, where necessary, in finding suitable opportunities for such work. A framework policy from 2012 governs the exact approach for this kind of pro-bono work – e.g., the drafting of articles of association that satisfy public benefit criteria for tax purposes – by individual Group Tax employees.
Research and development

As a future-oriented telecommunications business, we support and participate in ongoing research.

- We collaborate, for instance, with various universities, with a view to supporting current research activities and promoting digital literacy. Here the focus is on the issues of innovation, talent acquisition, and training. In 2023, the Magenta Campus Team set out to build a network for all employees that are active in universities and who want to address young talent. The network is designed to promote ongoing knowledge sharing between the academic community – i.e., students, academic staff, and professors – and Deutsche Telekom’s innovation and technology units so they can learn from each other. We also aim to attract graduates as future Deutsche Telekom employees.

- We are also involved in an internal research project known as Green NFT (non-fungible token). Using a blockchain system, we are investigating to what extent Deutsche Telekom’s upstream and downstream CO₂ emissions (Scope 3) can be measured reliably and tracked transparently across the suppliers’ value chain. As part of a pilot test in 2023 with one of our suppliers, this supplier manually entered into the system the emissions figures from their business activities. After a plausibility check of the data, they then received in return an NFT that contains an actual recording of all emissions figures – a sort of digital certificate. This method might allow us to trace emissions more effectively. In this pilot test the emissions are no longer recorded at company level, but assigned to the specific product orders. This way we might receive more accurate data in the future. Another advantage of the Green NFT approach would be the prompt provisioning of emissions data, which we can receive the moment an order is issued – currently data is provided with up to a year’s delay.

- More and more people are resorting to online video streaming services which, among other things, consume large amounts of energy. Deutsche Telekom is a partner of the “Green Streaming” project funded by the Federal Ministry for Economic Affairs and Climate Action (BMWK). In May 2023 the company started looking into how this increasing media usage can be made more energy-efficient and more sustainable. As part of the project, we are analyzing all components along the streaming process chain in respect of their energy efficiency. Using machine learning, a digital twin of the process chain is being developed. It helps define the optimum system parameters for more energy-efficient operation and environmentally friendlier use of streaming content. The relevance of the research project was confirmed in October 2023 with the Green Tech Innovation Award.

We invested a total of EUR 25 million in research and development in the Group in 2023.

For the third year in a row, Telekom Deutschland and T-Mobile US teamed up to run the T-Challenge in November 2022 – a competi-
Our approach to sustainable procurement
Our Group-wide procurement strategy and derived implementation guidelines take full account of the issue of sustainability. These guidelines affect the entire procurement process. The strategy is put into action using internal and external performance indicators and management tools.

- The responsibility for ensuring sustainability in procurement lies with the Finance Board department and the Group’s purchasing functions. Other departments and Corporate Responsibility provide support on specific topics.
- The issue of sustainability is taken into account throughout the procurement process. Right from the onboarding process, suppliers must always adhere to our Supplier Code of Conduct. This includes our ambitious CR targets and requirements.
- As part of tenders, we also generally apply a 20 percent weighting to our suppliers’ environmental objectives, their carbon footprint and, in the case of individual product groups, other social sustainability criteria. Particular importance is attached to the carbon footprint of our suppliers and their commitment to achieving ambitious climate targets; after all, the reduction of CO₂ emissions in our supply chain (Scope 3) plays a key role in achieving our goal of being climate-neutral (net zero) by no later than 2040 along the entire value chain.
- In close collaboration with the telecommunications company Orange we have developed, as part of our joint venture “BuyIn”, a set of common, product-specific criteria for IT and network/hardware products as well as for passive products such as fiber-optic cables. Since the year under review, we have applied these criteria to tenders over EUR 10 million for IT/NT hardware products and fiber-optic cables/hardware products.
- We monitor potential sustainability transgressions by our suppliers through third-party providers. In the event of a relevant violation of our requirements, we initiate a corresponding risk process in accordance with the Supply Chain Due Diligence Act (Lieferketensorgfaltspflichtengesetz – LkSG). The information is also used in the recurring risk analysis which we conduct with the involvement of the relevant Group units.
- Our employees have received various sustainability information and training courses relating to the requirements of the Supply Chain Due Diligence Act (Lieferketensorgfaltspflichtengesetz – LkSG). The information is also used in the recurring risk analysis which we conduct with the involvement of the relevant Group units.

- We ensure business partners and suppliers are up to the mark by offering workshops on specific topics. Corruption and bribery may cause long-term economic losses, prevent fair competition and needs-based investment, destroy jobs, and accentuate poverty and inequality in the population. As part of the impact analysis of our materiality assessment process, we have also analyzed in detail our suppliers’ sustainability performance. We identified a moderate risk here for the issues of corruption and bribery. We are therefore committed to promoting, among other things, the responsible procurement of minerals and do our utmost to substitute conflict materials. We also offer our suppliers e-learning courses on compliance.

Suppliers

Supplier Code of Conduct
Our Supplier Code of Conduct forms part of our General Terms and Conditions for Purchasing and must therefore be accepted by our suppliers. In line with our own Group Policies, ethical, social, and ecological principles as well as fundamental human rights are enshrined in the Code of Conduct:

- Code of Conduct
- Code of Human Rights

With our Supplier Code of Conduct, we have furthermore made a commitment to complying with the internationally recognized norms and standards such as the ones set forth by the International Labour Organization (ILO) and the Organisation for Economic Co-operation and Development, the Universal Declaration of Human Rights, and the UN Global Compact.
- ILO and OECD guidelines
- Universal Declaration of Human Rights
- UN Global Compact
- Tripartite Declaration of Principles Concerning Multinational Enterprises and Social Policy (MNE Declaration)
- United Nations Guiding Principles on Business and Human Rights ("Ruggie Principles")

Furthermore, it also includes requirements relating to additional relevant issues such as data protection, corruption, and artificial intelligence. For our strategically important and particularly risk-prone suppliers, we have on-site audits conducted regularly by external auditors to verify compliance with the Supplier Code of Conduct. As of 2022, our Supplier Code of Conduct also meets the requirements set out in the Act on Corporate Due Diligence in Supply Chains (Lieferkettsorgfaltspflichtengesetz – LkSG).

**Global Procurement Policy**
Our sustainability principles for procurement are set out in the Group's Global Procurement Policy.

**Procurement guidelines**
The Procurement guidelines provide specific instructions for procurement in Germany and serve as recommendations for our national companies.

**Other policies**
The Group Policy on Avoiding Corruption, the Statement on Extractives, and the list of prohibited materials are binding for our suppliers, too.

**Implementation in the company**
Our strategic decision to integrate sustainability into procurement is derived from our CR strategy and is anchored in the procurement processes used throughout our Group. The responsibility for ensuring sustainability in procurement lies with the Finance Board department and the Group's purchasing functions. Other departments and Corporate Responsibility provide support on specific topics.

**Steering tools**
The ESG KPIs are an important steering tool for Procurement.

**Reporting against standards**
**Global Reporting Initiative (GRI)**
- GRI 205 3-3 (Management of material topics)

**Supplier compliance**
With our Supplier Code of Conduct, we place our suppliers under an obligation to uphold the principles and values anchored in our Code of Conduct and in the Code of Human Rights. As of 2020, suppliers of solutions involving artificial intelligence (AI) must also comply with the requirements of our AI guidelines. Deutsche Telekom suppliers are also under the obligation to do everything necessary to prevent active and passive forms of corruption. We expect our suppliers to impose the same requirements on their subcontractors too.

The Supplier Code of Conduct forms part of our General Terms and Conditions for Purchasing, but does not, of course, supersede the laws and regulations of countries in which our suppliers operate. Rather, it is designed to facilitate compliance with these laws and regulations and ensure that legal requirements are implemented faithfully and effectively. Since 2014, we have offered online compliance training for our suppliers.

When selecting business partners, we conduct integrity checks. In addition to suppliers, and development and joint venture partners, this applies in particular to certain groups of consultants whose use may be associated with compliance risks.

**ESG KPI “Procurement Volume Without CR Risk”**
The ESG KPI “Procurement Volume without CR Risk” – for which the target is 95 percent by 2025 – measures the procurement volume from direct business partners for whom, in the period under review, checks by an established external service provider turned up no negative media reports. It also includes suppliers for whom such reports were identified and who took suitable action to correct the issues involved. The procurement volume so assessed for risks accounted for a 99.98 percent share of the total relevant volume in 2023 (previous year: 99.6 percent). This ESG KPI, along with the ESG KPI “Procurement Volume Verified as Non-Critical”, is calculated with respect to the reviewed Group-wide procurement volume shown in the Group's standardized procurement-report system (not including the category “Network Capacity” and not including TMobile US).

**Reporting against standards**
**Indicators for telecommunications providers from the GSM Association (GSMA)**
- GSMA-SUP-02 (Supplier Assessments)

**ESG KPI “Procurement Volume Verified as Non-Critical”**
The ESG KPI “Procurement Volume Verified as Non-Critical” – target for 2025: 60 percent – measures the share accounted for by suppliers checked for social and ecological criteria by means of dedicated reviews – e.g., via EcoVadis, the Carbon Disclosure Project (CDP), social audits, or supplier visits. In 2023, such CR-verified suppliers accounted for a share of 66.17 percent (previous year: 64.1 percent). This ESG KPI, along with the ESG KPI “Procure-
ment Volume Without CR Risk”, is calculated with respect to the reviewed Group-wide procurement volume shown in the Group's standardized procurement-report system (not including the category “Network Capacity” and not including T-Mobile US).

Supply chain management
To be able to enter into a business relationship with us, strategic suppliers have to register on our supplier portal and undergo a qualification process. The data provided gives us comprehensive information on our suppliers, including on their CO₂ sustainability goals. Suppliers themselves also receive detailed information via the mandatory Supplier Code of Conduct on Deutsche Telekom’s fundamental principles and values - also regarding corporate responsibility and sustainability. In the year under review, we updated the Supplier Code of Conduct (SCoC) to allow us to meet the requirements of the German Supply Chain Due Diligence Act more effectively. In another effort in this context, we require our suppliers to guarantee compliance with the SCoC along their entire supply chain. As part of our adapting to new circumstances, we have also adopted the UN Guiding Principles on Business and Human Rights and also stipulated that our suppliers must provide complaint management.

When selecting suppliers, our procurement organization focuses on ensuring that we cooperate with efficient, reliable suppliers that work with sustainability in mind. This will allow us to safeguard our capacity to innovate and competitiveness over the long term. When selecting suppliers, we include sustainability criteria in the decision. CO₂ emissions are generally weighted with 20 percent as part of tenders.

As part of supplier management, there are various processes that aim to minimize the risks in the supply chain and to increase its sustainable further development. We set out our minimum requirements for our suppliers in the SCoC to ensure compliance with the requirements along the value chain. With strategic procurement processes, suppliers are registered on our supplier portal. The supplier qualification then begins where suppliers are vetted in relation to various criteria.

We also use the following Group-wide ESG KPIs as additional monitoring and control tools:
- ESG KPI “Procurement Volume without CR Risk”
- ESG KPI “Procurement Volume Verified as Non-Critical”
- ESG KPI “CDP Supply Chain Program”

To improve sustainability performance in our supply chain, we implement a specially designed development program in close cooperation with selected suppliers. In 2020, the program was transferred to the Joint Alliance for CSR (JAC). We also hold regular workshops with selected suppliers on relevant sustainability topics. The topics covered by the workshops included emissions management, avoiding hazardous substances and using alternative materials in products, extending the product life span, reducing electrical scrap and launching take-back programs, as well as designing for greater sustainability and innovation.

We also provide our suppliers with an external training video, which can be accessed freely via the Deutsche Telekom website.

The main objective of our sustainable supply chain management is to minimize potential risks while generating long-term economic benefit for all parties involved.

Reporting against standards
Global Reporting Initiative (GRI)
- GRI 2–6 (General Disclosures)

German Supply Chain Due Diligence Act risk process
Our corporate procurement organization conducts annual risk analyses of direct suppliers with all companies affected by the German Supply Chain Due Diligence Act. Suppliers also undergo ad-hoc analyses where there is well-founded knowledge of transgressions. These two measures help identify and mitigate risks and transgressions. If a supplier cannot meet the sustainability requirements anchored in our Supplier Code of Conduct to our satisfaction or there are specific transgressions, we ask the supplier to provide an explanation. We also look to talk to the supplier concerned and set out our requirements for suitable measures in these discussions.

If the discussions held on various levels and the derived measures do not lead to the shortcomings being remedied, the responsible decision-makers consult with each other to reach agreement about how to proceed with the supplier. In the worst case, this could lead to the business relationship with the supplier being terminated.
Everyone who identifies irregularities in our supply chain regarding compliance with laws, internal guidelines, and standards of conduct, can report these – and can do so anonymously if they wish – using our TellMe portal. We also receive information on possible irregularities via the audits as part of the cross-industry Joint Alliance for CSR (JAC) or the media.

**Receipt of violations through recurrent risk analyses or via reporting channels**

The corporate procurement organization conducts annual risk analyses for direct suppliers connected with the system. An ad hoc analysis is also conducted where violations are substantiated, i.e., considering evidence that gives credence to a potential breach of human rights or environmental obligations. These analyses identify high-risk suppliers.

We acquire substantiated knowledge through the following sources: the TellMe whistleblower portal, information in the media (including via external data providers), civil society reports, the Joint Alliance for CSR (JAC), or reports from employees. Identified transgressions against objects of protection under the Supply Chain Due Diligence Act are then transferred to the expert committee. This committee comprises representatives from the Sustainability and Compliance functions and is coordinated by the corporate procurement organization.

**Documentation of the risk event**

The person reporting the transgression uses a document created specifically for this purpose to prepare details of the incident for the members of the expert committee. The corporate procurement organization coordinates the provisioning of information by the person reporting the transgression and presents this information to the expert committee at regular meetings.

**Determination of the risk’s relevance**

The expert committee produces a recommendation or takes a decision regarding the relevance of risks presented by the respective violation reports. They stipulate what action to take next accordingly. Where necessary, decisions on preventive and remedial action are taken at this point.

**Supplier’s statement**

Depending on the decision, the expert committee commissions the unit to obtain a statement from the supplier using a supplied template. This includes a description of the incident and questions on mitigation measures and other aspects. The statement must be submitted within 14 days (or as decided earlier in the expert committee). If no response is received by then, a reminder is sent.

**Derivation of measures based on the statement**

The expert committee and the relevant functions discuss the supplier’s statement and derive effective mitigation measures. The unit agrees the timetable for implementing the measures individually with the supplier and passes this information onto the expert committee that documents the measures. Either Deutsche Telekom stipulates the measures that the supplier must accept or, alternatively, the supplier can stipulate its own mitigation measures.

**Confirmation and notification regarding successful implementation of measures**

If the statement including confirmation of the mitigation measures proves sufficient, an implementation timetable is agreed and the implementation must be confirmed. The unit is responsible for following up on the remedial measures, including the involvement of the expert committee where any anomalies arise in subsequent months.

**Insufficient measures and, where applicable, escalation to the LkSG Risk Board**

If the statement including confirmation of the mitigation measures proves insufficient, the unit contacts the supplier again. If the feedback remains unsatisfactory, the expert committee escalates the case to the LkSG Risk Board.

**Determination of the risk's relevance and further action**

The LkSG Risk Board produces a recommendation regarding the relevance of the risk presented by the transgression and the particular supplier. The unit then decides how to proceed in respect of the supplier, whether to continue or terminate the business relationship, for instance.

**Final documentation of the incident**

The unit informs all involved stakeholders about the final decision and the corporate procurement organization finalizes its documentation of the incident.
Risk monitoring
In Procurement, we work with a comprehensive supplier risk monitoring scheme. We first conduct a risk assessment of all material groups at a predefined material group level and subject suppliers to comprehensive risk analysis. Specialized companies evaluate all suppliers with regard to financial, CR, and compliance risks.

The German Supply Chain Due Diligence Act requirements have given rise to the following classifications of material groups for the year under review:

- High-risk material groups: 32
- Medium-risk material groups: 22
- Low-risk material groups: 53

With selected strategic and high-risk suppliers, supplier assessments are also conducted in addition to the risk analysis. For this purpose we use EcoVadis, the platform for ESG ratings for businesses. Where specific infringements of our sustainability requirements or an increased predisposition for risk are found, we also directly conduct audits on location. Our primary aim is to address deficits together with the supplier and take appropriate corrective action. Only if no solutions are possible do we have to cut ties with suppliers.

Supplier sustainability reviews (excl. T-Mobile US)
In 2023, we conducted a total of 150 supplier reviews – 137 of which were on-site reviews (social audits) and 13 mobile surveys. 62 direct and 88 indirect suppliers were involved in the checks.

For the on-site reviews, we let the supplier know the approximate time of our visit in advance ("semi-announced audit"). This is necessary to make sure that relevant contacts in key functions are present for the audit. The mobile surveys give our suppliers’ employees the opportunity to provide anonymous information about the social and ecological situation at their company. The surveys are primarily used to gain an initial impression of the local working conditions in order to then initiate further measures as needed, such as specific on-site reviews (social audits).

<table>
<thead>
<tr>
<th></th>
<th>Number of reviews</th>
<th>Number of findings</th>
<th>Number of completed finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social audits (by external audit firms)</td>
<td>137</td>
<td>890</td>
<td>365*</td>
</tr>
<tr>
<td>Mobile surveys **</td>
<td>13</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>EcoVadis (2014–2023)</td>
<td>418</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CDP Supply Chain ***</td>
<td>219</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>787</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

* Due to a change of service provider in the reporting year, the completed findings from previous audits are no longer provided.

** Mobile surveys with selected suppliers, in particular to assess the situation of workers at the operating sites.

*** CDP’s supply chain program is used for direct suppliers with high emission intensity.

Auditing procedures
We focus our audit activities on strategically important and particularly risky suppliers. They are routinely audited every two to three years. This group includes roughly 250 of our over 20,000 active suppliers. Together, they cover around 80 percent of our procurement volume. These audits give us transparency about the risks in large parts of our supply chain. We also collaborate as partners with selected suppliers to constantly improve their sustainability performance. Our previous Supplier Development Program, which we used to encourage the continued development of strategically relevant suppliers in key sustainability issues such as environmental protection, working hours regulations, and health and safety, was transitioned to the Joint Alliance for CSR (JAC) industry initiative in the reporting year. The program is currently being refined in the JAC.

We hosted the JAC Initiative General Assembly in the year under review where we participated in an industry dialog with other telecommunications companies. Issues discussed in the dialog included the further development of auditing requirements, improvements in transparency, and the effective identification of measures for telecommunications-specific industry risks. One outcome of this dialog was the establishment of dedicated working groups, in which Deutsche Telekom AG will participate in 2024.

The majority of our audits are conducted within the scope of the JAC. The audits cover the following areas:

- Labor standards
- Social standards
- Living standards
- Environmental requirements

The JAC Guidelines require, among other things, that our suppliers:

- Pay a fair wage that enables employees to enjoy a decent standard of living;
- Respect the right to freedom of association and collective bargaining, and provide a healthy, safe working environment and
- Do not exceed a 48-hour working week and a weekly maximum of twelve hours’ overtime, and grant at least one free day after six consecutive days of working.

The graphic shows the areas in which we audit the suppliers participating in our program.
Compliance with all these requirements is reviewed regularly during our on-site audits and the findings are documented to assess the effectiveness of the measures. This also includes inspection of the features and quality of the working, sleeping, and cafeteria areas.

Deutsche Telekom does not require its suppliers to obtain external environmental or social certification. But if suppliers cannot show any environmental and social responsibility certificates, we do expect equivalent management systems to be used. Our auditing experience shows, however, that the majority of our relevant manufacturing suppliers have an external certificate or equivalent management systems.

Verification of important social and ecological aspects as well as fundamental human rights during our audits is in line with internationally recognized guidelines and standards such as the ILO core labor standards, the UN Guiding Principles on Business and Human Rights, and the OECD Guidelines for Multinational Enterprises.

**Audit results**

In the audit program, which has been established and is controlled at Group level, a total of 150 on-site audits were carried out in 2023.

As in previous years, we concentrated our auditing activities on suppliers in Asia, Europe, Latin America, Oceania, and Africa.

Audited suppliers included manufacturers in the areas of IT hardware, software and services as well as networks and devices.

All violations identified in the course of such audits enter into a correction and measures plan, and the timely implementation of measures is regularly monitored. In the audits carried out in the period under review, no serious transgressions in the areas of working conditions and other basic infringements of human rights – such as discrimination, forced labor, and child labor – were found. In addition, no cases of bribery or corruption, and no critical violations of general compliance rules, such as rules governing the right to intellectual property, were found.

- Of the 150 suppliers we audited in 2023 (14 of which were in accordance with the validated audit processes of the Responsible Business Alliance), around 41 percent (62 audits) were direct suppliers and 59 percent (88 audits) were tier 2 and 3 suppliers – that is, indirect suppliers.

- The audits carried out in 2023 revealed a total of 890 violations of Deutsche Telekom’s supplier requirements. These findings break down as follows: 394 cases regarding occupational health and safety, 157 cases regarding working hours, 102 cases regarding environmental protection, 53 cases regarding working conditions, 87 cases regarding wages and remuneration, 58 cases regarding corporate ethics, 21 cases regarding freedom of association, eight cases regarding disciplinary measures, and 10 cases regarding discrimination. In addition, the violations included 120 transgressions that needed to be addressed on a priority basis and an additional 546 serious findings. A total of 365 violations were corrected in 2023, including several open improvement measures from previous years. Examples of critical violations in 2023 and improvement measures can be found in the table below. As in previous years, most violations (44 percent) were linked to occupational health and safety (2022: 42 percent), followed by violations linked to working hours at 18 percent (2022: 12 percent). At 11 percent, environmental violations constituted the third-biggest issue (2022: 19 percent).

**Reporting against standards**

**Global Reporting Initiative (GRI)**

- GRI 407–1 (Freedom of Association and Collective Bargaining)
<table>
<thead>
<tr>
<th>Areas</th>
<th>Findings at suppliers</th>
<th>Initiated improvements</th>
<th>Status (end of 2023)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment</td>
<td>A factory that experienced an incident involving pollutant emissions from a power generator failed to submit a control report because it had not carried out any controls.</td>
<td>The factory has identified the factors that led to the pollutant emissions, and it has commissioned an external company to check the system annually for emissions. In addition, a plant inspection was carried out to determine whether the plant has additional emission sources that also need to be checked annually.</td>
<td>complete</td>
</tr>
<tr>
<td>Business ethics</td>
<td>A supplier lacked procedures for assessing bribery risks throughout all the activities within its sphere of influence.</td>
<td>The risk and opportunity assessments for potential bribery cases are now reviewed every six months.</td>
<td>complete</td>
</tr>
<tr>
<td></td>
<td>A factory failed to conduct reviews of its system for managing compliance with proper business ethics.</td>
<td>The company introduced regular reviews of its system for business-ethics management, and it continually follows up on the results of such reviews.</td>
<td>complete</td>
</tr>
<tr>
<td>Forced labor</td>
<td>A supplier’s employment contracts with workers exposed to occupational health risks failed to address the areas of occupational health and safety, working conditions, and protection against occupational hazards.</td>
<td>The employment contracts were amended to include suitable provisions on the areas of occupational health and safety, working conditions, and protection against occupational hazards. The supplier’s procedures for managing occupational health and safety issues in the workplace were suitably revised, and extended to cover the areas of occupational risks and protective measures.</td>
<td>complete</td>
</tr>
<tr>
<td>Occupational health and safety</td>
<td>In its employee sleeping areas, a factory lacked illuminated emergency exit signs for its escape-route stairs.</td>
<td>Illuminated emergency exit signs for the escape-route stairs were installed in employee sleeping areas.</td>
<td>complete</td>
</tr>
<tr>
<td></td>
<td>In its plant area for storage and usage of corrosive chemicals, a supplier had installed neither an eye-washing station nor an emergency shower.</td>
<td>Such equipment was installed for employees exposed to risks of eye and skin contact with chemicals.</td>
<td>complete</td>
</tr>
<tr>
<td></td>
<td>A factory had failed to affix safety labels on containers with hazardous chemicals. In addition, hazardous chemicals were not being stored in leakproof containers.</td>
<td>All hazardous chemicals were stored in leakproof containers, and all containers containing hazardous chemicals were marked with suitable safety labels.</td>
<td>complete</td>
</tr>
<tr>
<td>Working hours</td>
<td>A supplier’s factory granted its employees only 98 days of paid maternity leave and only 10 days of paternity leave. The laws of the country in which the supplier is located require that employees receive 178 days of maternity leave and 15 days of paternity leave, however.</td>
<td>The supplier’s provisions on leave for employees were suitably revised and the changes were communicated to the employees. In addition, the supplier developed a new employee handbook that covers the relevant country’s legal requirements.</td>
<td>complete</td>
</tr>
<tr>
<td>Wages &amp; salaries</td>
<td>In review of a supplier’s records, and via a survey of its management, the supplier was found to have been delaying final salary payments for employees who had left the company, with the delays ranging from 4 to 30 days after the employees’ employment relationships had ended.</td>
<td>A suitable system for final salary payments for employees who leave the company was put in place. The system is designed to ensure that such employees receive their final salary payments within three days after their employment relationships have ended.</td>
<td>complete</td>
</tr>
</tbody>
</table>
Expenditure analysis 2023
Our suppliers come from various industries and countries. To capture the diversity of our more than 20,000 suppliers, the following graphic depicts the types of suppliers we commission; the overview includes the share of our expenditure (CapEx and OpEx) attributable to them and their geographical distribution.

<table>
<thead>
<tr>
<th>Supplier Category</th>
<th>Number of Consolidated Suppliers</th>
<th>Number of domestic subsidiary suppliers</th>
<th>Number of foreign subsidiary suppliers</th>
<th>Number of critical subsidiary suppliers</th>
<th>Number of risky subsidiary suppliers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building, facilities, furniture, and rel. services</td>
<td>1,661</td>
<td>1,942</td>
<td>1,423</td>
<td>58</td>
<td>1</td>
</tr>
<tr>
<td>Civil works</td>
<td>4,284</td>
<td>5,117</td>
<td>1,134</td>
<td>156</td>
<td>0</td>
</tr>
<tr>
<td>Consulting, contracting, temp. labor, and service centers</td>
<td>737</td>
<td>837</td>
<td>519</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>Electrical household appliances</td>
<td>84</td>
<td>95</td>
<td>64</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Enduser communication technology and equipment</td>
<td>1,010</td>
<td>1,305</td>
<td>929</td>
<td>42</td>
<td>0</td>
</tr>
<tr>
<td>Energy, fuel, gas, water</td>
<td>107</td>
<td>112</td>
<td>80</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Financial services, insur, fees, investig, cert.</td>
<td>777</td>
<td>935</td>
<td>710</td>
<td>27</td>
<td>1</td>
</tr>
<tr>
<td>Fleet and travel</td>
<td>629</td>
<td>682</td>
<td>476</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>Food and catering</td>
<td>333</td>
<td>364</td>
<td>294</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>HR services, training, and translation</td>
<td>2,450</td>
<td>2,717</td>
<td>1,527</td>
<td>45</td>
<td>0</td>
</tr>
<tr>
<td>Information technology</td>
<td>5,060</td>
<td>6,745</td>
<td>4,581</td>
<td>178</td>
<td>1</td>
</tr>
<tr>
<td>Logistics and mail</td>
<td>584</td>
<td>683</td>
<td>403</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>Marketing, media, content, print, fairs</td>
<td>5,302</td>
<td>5,930</td>
<td>3,346</td>
<td>128</td>
<td>1</td>
</tr>
<tr>
<td>Network capacity</td>
<td>886</td>
<td>1,349</td>
<td>1,201</td>
<td>42</td>
<td>0</td>
</tr>
<tr>
<td>Network infrastructure</td>
<td>2,137</td>
<td>2,884</td>
<td>1,976</td>
<td>82</td>
<td>4</td>
</tr>
<tr>
<td>Office equipment, office technology and stationery</td>
<td>550</td>
<td>628</td>
<td>360</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>Service platforms</td>
<td>681</td>
<td>828</td>
<td>506</td>
<td>28</td>
<td>0</td>
</tr>
<tr>
<td>SIM cards</td>
<td>39</td>
<td>62</td>
<td>22</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Tools and protection equipment</td>
<td>493</td>
<td>553</td>
<td>346</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>Undefined/Undefined</td>
<td>1,376</td>
<td>1,481</td>
<td>1,021</td>
<td>41</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>930</strong></td>
<td><strong>8</strong></td>
<td><strong>In total with no regards to the corresponding category</strong></td>
<td></td>
<td><strong>In total with no regards to the corresponding category</strong></td>
</tr>
</tbody>
</table>

**Definitions and examples**

- Consolidated supplier = Group level
- Domestic subsidiary of the supplier = Subsidiary of the relevant company with headquarters in Germany
- International subsidiary of the supplier = Number of subsidiaries of the supplier that have their headquarters outside of Germany
- Consolidated suppliers are counted once, at the Group level; local suppliers are counted more than once in cases in which they have multiple plants/locations
- Critical supplier: Supplier with compliance, financial, and resilience risks
- Supplier with CR risk: Compliance risk with regard to defined ethical, ecological, and social requirements
CDP Supply Chain Program

Since as early as 2016, we have been disclosing our activities to bring on board suppliers as part of CDP’s supplier engagement rating. This rating assesses how well companies have been able to integrate the topic of climate protection into their supply chain. In 2023, we made it onto the Climate Leader A List, as in the previous year. This has secured our place on the Supplier Engagement Leader Board. An important step in achieving this was calculating the supplier-specific emission intensities based on supplier responses to the CDP Supply Chain Program. This involved calculating the ratio between a supplier’s overall emissions (Scopes 1 and 2 and Scope 3 for the upstream supply chain) and the supplier’s overall sales.

The ESG KPI “CDP Supply Chain Program” indicates the degree to which our procurement volume from carbon-intensive suppliers is covered by the CDP Supply Chain Program. In 2023, around 51 percent of the procurement volume was covered by the CDP Supply Chain Program.

Supplier relationships

The percentage of audited procurement volume increased slightly from 21.1 percent in the previous year to 22.3 percent in 2023. At the same time, the percentage of procurement volume covered by EcoVadis increased slightly to 43.6 percent.

Responsible procurement of raw materials

We require our suppliers to protect the environment and use resources responsibly. This requirement is enshrined both in our Code of Human Rights and in our Supplier Code of Conduct, which sets out requirements that must generally be accepted by all suppliers.

In the case of relevant material/product groups, the use of hazardous materials and conflict materials is checked and assessed as part of the supplier and product selection. In the case of critical suppliers in particular, we request disclosure of information about their activities (via EcoVadis and CDP) and we perform supplier audits in the form of social audits. In these audits, we check whether our suppliers use an environmental management system, including a waste management system, and review how they manage their energy and water consumption.

In addition, we always check whether there is a management system in place to address the issue of conflict resources. When selecting suppliers and products, we review and evaluate, for example, the use of hazardous and conflict materials as well as rare-earth metals – especially in light of the OECD Due Diligence Guidance for Responsible Supply Chains.

In the period under review, we readjusted the requirements placed on our suppliers and tightened them up significantly, particularly in relation to environmentally responsible action, including against the background of the Supply Chain Due Diligence Act (Lieferkettensorgfaltspflichtengesetz – LkSG) that came into effect in the year under review. Since then, contributions to environmental protection and climate change, responsible waste management, and the handling of that only degrade very slowly in the environment, have been enshrined in our Supplier Code of Conduct along with a ban on manufacturing any products containing mercury.
Our approach to sustainable products and services
Our core business consists of operating and expanding our networks. Our networks provide the foundation for digital participation. Since 2021, 100 percent of the electricity for our networks throughout the Group has been obtained from renewable resources. Also, by providing innovative, network-based, and digital solutions, we support our customers in reducing their own CO₂ emissions and in contributing to climate protection.

We want to make our entire product range more and more sustainable. Furthermore, we take a holistic perspective on this issue. That is why we also factor in the aspect of a circular economy when developing customer offerings and devices – a product-life-cycle approach that extends to production, sustainable packaging, product use, product refurbishing, and product recycling. This requires thoroughgoing measures along all stages of the value chain. Consequently, we begin with procurement and strive to ensure that our suppliers comply with our ecological, social, and ethical sustainability requirements.

For us, the social aspect is equally important as the environmental aspects of our products and services. For that reason we strive to provide digital participation for everyone. We believe this requires a triad of Access – technical access to fast networks as well as barrier- and discrimination-free design, Affordability – rate plans and devices that factor in people's different financial possibilities, and Ability – the ability and motivation to use digital media competently.

Our labels
We have developed our #GreenMagenta and #GoodMagenta labels as tools for informing our customers about sustainability benefits. The #GreenMagenta label highlights products, services, projects, measures, and initiatives that are especially noteworthy in the areas of climate action and responsible use of resources. #GoodMagenta is applied to projects, actions, and initiatives that make a positive contribution to overcoming social and societal challenges in the digital world. Awarding of the two labels is subject to strict rules of our own definition. In each case, the product or effort, etc., has to show proven sustainability benefits. For awards of the #GreenMagenta label, we carry out extensive impact assessments. In cases in which societal or ecological impacts emerge that are clearly adverse, the #GreenMagenta and #GoodMagenta labels may not be awarded, regardless of whatever benefits the product or effort provides. In 2023, the year under review, TÜV Rheinland validated the award process for the sustainability label, including impact measurement, and awarded a certificate.

In addition, we permit products to carry recognized third-party environmental labels when this is appropriate. For example, several of our router and mesh devices received the TÜV Rheinland “Green Product” label (TÜV Rheinland is a leading international provider of technical services, including certification). We use the strict requirements of the independent labels to help us see how we can further improve our products.

In 2021, working in cooperation with other mobile network operators, we developed a sustainability ranking system for mobile phones – the Eco Rating. It enables customers to see at a glance which phones score well with regard to durability, re reparability and recyclability, climate compatibility, and resources conservation. For more information, click here.

Packaging
We have also been making our product packaging more and more sustainable. Since mid-2022, and on a European-wide basis, all of our own new products are being sold in sustainable packaging for which we have developed suitable sustainability criteria. Packaging for smartphones we source from our suppliers must also meet these criteria. We did not become aware of any violations of the packaging guideline by suppliers in the year under review. We verify compliance with the criteria by means of regular factory audits. When shipping technical equipment in Germany, we reduce package sizes with the help of special packaging machines. Increasingly, we are relying, for example, on PaperFoam, a bio-based and biodegradable alternative to conventional packaging materials, as a means of protecting our products within the packaging.

All new Deutsche Telekom-branded products, such as the T Phone, are shipped in plastic-free packaging. Most of the paper used is already recycled, or comes from sustainable forestry (FSC*-certified).

Responsible use of resources
Our efforts to use resources responsibly begin right with the earliest stages of production. In our Speedport Smart 4 router, for example, we limit the use of harmful substances (such as in electronic components) beyond the degree required by law. Furthermore, a total of 95 percent of the housing of the Speedport Smart 4 consists of recycled plastic.

We introduced a MagentaTV Box in Hungary and North Macedonia in 2023 with a housing made of bio-based polycarbonate. Bio-based polycarbonate is a more environmentally friendly plastic that is manufactured solely from renewable raw materials. The box has already acquired the #GreenMagenta label. In 2022, we began...
making our SIM cards out of recycled plastic as another example. That change alone is saving some 63 metric tons of CO₂ per year. The SIM cards carry the #GreenMagenta label. At the same time, we are aiming to do away entirely with plastic SIM cards and use only eSIMs. Via various measures, including customer advising, we are gradually increasing use of eSIMs. This is saving additional resources.

At the end of products’ life cycles, we help to ensure that they are reused or properly recycled. In fact, we have been collecting and buying back used mobile devices in various countries for this purpose since 2003. Since then, in Germany alone, we have helped to conserve resources by recycling, or providing for reuse, more than 3.6 million used devices. In November 2022, we reorganized our smartphone-collection system in our shops. Now, when customers return an old smartphone that has little residual value, and we cannot make them a purchase offer, they still receive a small consideration for their trouble provided the device can still be switched on and used. This provides an incentive for phone returns. If a smartphone can be given a second life, anyone interested can use our “Handyankauf” (phone buyback) service. These devices are then professionally refurbished and remarkekted. The buyback portfolio currently has over 1 700 used models in stock. Via the ReUse MyMobile portal, we sell products that are fully refurbished and completely free of any technical defects. Each such product comes with a fresh 24-month warranty. For more information take a look at the Germany segment and the Environment section.

To promote sustainability, we are also committed to ensuring that routers and media receivers are not simply disposed of after being replaced. With our “Rent instead of Buying” service, we conserve resources, reduce the volume of electronic waste, and thus avoid CO₂ emissions. Last year, we provided almost one million refurbished devices to our customers in Germany using the service.

Affordable 5G access and promoting digital participation: T Phone and T Tablet
Affordable access to 5G technologies is a key issue at Deutsche Telekom within the framework of access and affordability as aspects of digital participation. As of 2022, we are offering our new T Phone and T Phone Pro 5G smartphones in a total of nine European countries and in the USA, with a view to enabling the largest possible numbers of people to profit from our 5G-network build-out. The phones also went on sale in Germany in January 2023. The T Tablet has been available in Germany and eight other European countries plus the USA since the year under review. With these relatively affordable products, we aim to provide more people with access to the digital world and, in particular, also drive forward digitalization in education with the T Tablet.

Digital participation for seniors
As part of our efforts to ensure that everyone can take part in digital society, regardless of their age, we offer special equipment and products for seniors. The resources available for facilitating seniors’ use of digital technologies include big keyboards, uncluttered displays, with large fonts and icons, and emergency-call buttons.

Subsidized rates
In Germany and at several national companies, we offer various subsidized rates, to enable customers on low incomes and people with disabilities to make calls at reasonable prices.

Subsidized rate plans
Telekom Deutschland offers special rate plans to promote digital participation among different groups in society. What’s more, German Red Cross employees and firefighters can get special rates for Telekom rate plans thanks to corresponding framework agreements.

Digitalization in schools
For more than 20 years now, we have been offering free broadband lines up to 16 Mbit/s to all general and vocational schools in Germany as part of the Telekom@School initiative. In 2023, more than 17 000 schools were making use of our offer. In the reporting year, over 9 000 additional schools took advantage of our subsidized Telekom@School prices to upgrade to bandwidths of up to 1 000 Mbit/s. In the year under review we funded the Telekom@School initiative with around 10 million euros.

Since 2020, school authorities may opt for a flat rate for education, which provides pupils with an unlimited data allowance for educational content, for a low monthly charge. In addition, school authorities can provide tablets or laptops to disadvantaged students, also with the help of funds from the Federal Government’s Digital Pact for Schools campaign. This gives children and young people the opportunity, irrespective of their family background, to learn how to use digital media. We consolidate our commitment to schools in our Group-wide Digital Education and School program. In the year under review, there were more than 14 000 active SIM cards in the Education mobile rate plan, which is earmarked exclusively for state-approved school authorities and educational establishments. The services included in the rate plans are envisaged for own use by the customer and by the authorized users (e.g., school students) on a mobile device. The funding for the Education mobile rate plan totaled around 11 million euros in the year under review.

Together with Microsoft, we have been supporting schools in Germany with an extensive digital education package (only available in German) since 2021. The package includes laptops or tablet PCs and special educational licenses for Microsoft 365 software. A team of Deutsche Telekom experts – specially certified by Microsoft – provides the service and helps set up the devices. Schools can test the package free of charge and without obligation.

As part of tenders for equipping schools, we make sure that our software and hardware suppliers are committed to compliance with sustainability aspects and can present appropriate certifications.

With our Magenta Classroom product, we accompany schools and school authorities on their way toward digital education. Our IT service supports schools from needs assessment for technical
infrastructure, installation and operations management, and even training courses and support – on site and remote. Working together with selected schools, we developed standards that should ensure a positive everyday classroom experience for everyone involved – whether on a smart board or tablet PC.

The mental health of children and young people must not be underestimated when it comes to increasing digital participation in the classroom – especially when young people are increasingly facing mental health issues. The “FeeLee” app attempts to combat this trend by putting students’ mental health front and center. By using the app, young people should be able to understand their own feelings and reinforce their mental resilience in a fun way. They are asked several times a day about their emotional state – with emojis available to help them answer. “FeeLee” looks at habits and can provide tips on how to change or adapt these. The free, ad-free app from Deutsche Telekom is aimed specifically at young people, healthcare professionals, and educational establishments.

In 2022, we published our first Education Report which outlined the challenges and opportunities associated with digitalization in German schools. We also demonstrated what contribution Deutsche Telekom and its partners were making in this area. A revised version of the report is due to be published in early 2024. More information on the topic of digital participation through media skills is available here.

Video conferencing solutions for the home office
We offer our business customers secure solutions that enable their employees to work from home efficiently. Our home office configurator helps small and medium-sized businesses, for example, to develop customized solutions for staff working from home. Likewise, our Digital Schutzpaket Business (digital business protection package) keeps sensitive customer data safe.

In addition, we offer videoconferencing solutions of various established providers, including some solutions with added, proprietary functions of our own that support energy-efficient work from home offices.

Measuring progress
We use various key performance indicators to measure our progress with sustainable products and services:

- We use the ESG KPI “Enablement Factor” to calculate the positive CO₂ effects generated as our products are used by customers.
- With the “Sustainable product packaging” KPI, we show what share of Deutsche Telekom-branded products consists of products with sustainable packaging.

Reporting against standards
Global Reporting Initiative (GRI)
- GRI 301 3-3 (Management of material topic)

Continued analysis of our products’ sustainability benefits
To date, there is no industry-wide established system that provides sustainability information about ICT products and services. Since 2014 at Deutsche Telekom, we have been using an in-house analysis method to assess the sustainability of our products. This includes, for example, examining the safety of the products, or how well they can be recycled.

We inform our customers about how our products are contributing to sustainability. The results of our analyses also allow us to position ourselves as a responsible company with respect to the competition. In the year under review, our analysis included a review of selected products in light of EU taxonomy criteria.

Correlation with SDGs
In the year under review, we reviewed – with support from internal experts – the sustainability benefits of a number of our products in light of the Sustainable Development Goals (SDGs). The degree of detail depended on the revenue generated with the product under review. If revenues were high, we considered the impact on all SDGs; where revenues were limited, we only took the impact on the most relevant SDG into account.

Results of the analysis
In the year under review (2023), we studied 39 product groups in detail, analyzing both their contribution to sustainability and their business potential (as of the end of 2023).

Sustainable products are a key factor in competition for us. We use the ESG KPI “Sustainable Revenue Share” to determine the proportion of sales (excluding T-Mobile US) generated with products that make a contribution to sustainability. Revenues for individual product clusters are partially determined using a percentage allocation based on assumptions. In 2023, this share amounted to almost 43 percent (prior year: 42 percent).
We have recorded this indicator since 2014 using our own methodology, which we adapted in 2022. As previously, a product can only be assigned to the sustainable product portfolio provided it is highly likely that the product does not entail any of the seven risks defined in our methodology. The risk analysis covers the following issues: pollution involved in the manufacturing of ICT products, avoidable non-recyclable electronic waste, unethical working conditions, the use of conflict minerals during production, social exclusion, radiation and its impacts on health, and information security. Additionally, a product must offer at least one of five sustainability benefits. Reduced energy consumption, a reduction in CO₂ emissions, efforts to achieve a circular economy, a reduction in time required, and enabling social participation are taken into consideration for this. Cost savings are still considered as additional information. However, a cost benefit does not constitute a sustainability benefit in and of itself. Revenues from the rental of devices in the fixed network were included for the first time this year, making up around 1 percentage point of the total value. It is difficult to differentiate between data and voice revenues when taking mobile broadband revenues into account, which is why this is based on assumptions. Owing to the fact that the EU Taxonomy does not cover the major part of our business model at present, we are also reporting this KPI in parallel for the reporting year.

Smart Innovation

Deutsche Telekom pursues the approach of human-centered technology. Technology must be beneficial to people and should not be seen as an end in itself. The aim of responsible technology development is therefore not only to optimize processes and increase economic efficiency. It is also to sustainably improve people’s living conditions, to better address their needs, to extend their freedom to act, and to protect their autonomy, all on the basis of ethical principles. Technology progress such as the Internet of Things (IoT) and artificial intelligence (AI) offers numerous opportunities in this respect and also with regard to the environmental challenges. We see a human-centered approach and attitude when designing and using technology as a key prerequisite for the future success of our business.

Internet of Things

The IoT combines physical objects with the virtual world, with smart devices and machines connected to one another and to the internet. They use sensors to collect information on their immediate surroundings, to analyze and link that information, and to provide the data in a network. The data provides in-depth insights into possible inefficiencies in processes. IoT technology can help cut costs, increase profit – and also reduce the consumption of resources such as water, energy, and raw materials and so prevent CO₂ and waste.

Types and application of IoT

At Deutsche Telekom we are utilizing future-oriented and widely available technologies to make cities viable for the future and to develop solutions for social challenges. For this reason we offer our customers various network technologies: NB-IoT, LTE-M, and 4G/5G. Depending on the IoT project and use case, customers can choose the right technology and, in turn, also optimize energy consumption (see below for details of network technologies and usage examples).

NB-IoT and LTE-M are available in all towns and cities in Germany. Deutsche Telekom now offers NB-IoT in 32 countries. LTE-M, which was rolled out in Germany in 2020, is now available in 24 countries. The 5G wireless standard was available through the end of 2023 in over 95.9 percent of the population in Germany; in Europe the same figure was 67.2 percent. Find out more about our IoT network here.
The following subsection presents a few smart innovations and usage examples of the four wireless standards. The associated business models make an environmental and/or social contribution.

NarrowBand IoT (NB-IoT):
- NB-IoT is an energy-saving wireless standard that is best suited for small data volumes sent at long intervals. NB-IoT devices have a large operating range and long battery service lives. Consequently, this technology provides the basis for many innovative uses that are both cost- and energy-efficient. Particularly useful areas of application for NB-IoT include smart parking, smart waste management, smart air quality monitoring, smart metering, as well as transport and logistics solutions. We use NB-IoT to support, among other things, the networking of irrigation systems.

LTE-M:
- The LTE-M standard offers sufficient bandwidth for medium volumes of data, low-cost hardware, and sufficient battery service life for long use without access to a power supply. This makes it ideal, for instance, for e-health solutions where vital signs are sent to the cloud, or for monitoring cold chains in logistics.

4G/5G:
- 4G technology is suitable for IoT applications with high data requirements such as VR (virtual reality) glasses or video surveillance. If fast response times are also needed, for instance with self-driving vehicles or for the use of video drones, 5G technology provides the better solution.

IoT supports various applications, such as smart metering that measures energy data using electronic meters that can be read remotely. Heat suppliers Danpower and energy contracting are using automated reading and processing of meter data to optimize their heat generation and, in turn, to cut CO₂. The companies are using a solution from Deutsche Telekom to provide secure remote meter reading. The IoT solution not only meets the statutory requirements of the European Efficiency Directive. It also ensures regular consumption monitoring and optimization of energy consumption.

Deutsche Telekom together with the company PSysotec has developed the “IoT Energymonitor” for more sustainable energy management. The energy measurement system can efficiently determine the consumption figures for electricity, gas, heat, and water of buildings thanks to wireless technologies. Data is provided securely using LTE-M and NB-IoT in the Telekom Cloud of Things platform by being transferred via a gateway over the mobile communications network and is always available. Constantly measuring and supplying data allows the energy consumption in buildings to be adapted rapidly, improving energy efficiency in the process.

To combat pollution of the seas, the Dutch company RanMarine Technology has developed an autonomously floating drone for cleaning water. The drone swims purposefully around polluted waterways swallowing up waste. It uses Deutsche Telekom’s Precise Positioning system for pinpoint navigation. It enhances the accuracy of conventional GPS systems by using a global network of base stations that measures local interference of the signals from GPS satellites and sends this data to the cloud. From there, corrected position data is sent to the floating drone. This means the drone does not need any breaks or detours and can find its way reliably to the charging and unloading station. Thanks to Deutsche Telekom’s Precise Positioning solution the drone moves along the defined course more efficiently. It requires fewer charging cycles and can collect more waste in the water in the same amount of time.

Heavy rainfall events are on the increase due to climate change. Together with software company Spekter, Deutsche Telekom offers an innovative heavy rain early warning system for towns and cities. IoT sensors measure precipitation and water levels and give an early warning when critical values are exceeded. The Deutsche Telekom wireless standard NB-IoT is used to network precipitation and water level gauges.

Artificial intelligence
Artificial intelligence (AI) offers huge potential to allow more people to participate in the digital world, to promote education and healthcare, and to make our everyday lives fundamentally easier. The development of new AI application scenarios, however, opens up new ethical challenges. The use of AI can, for instance, undermine the diversity of opinion, exacerbate inequalities, or spread prejudice. We are one of the first companies worldwide to have developed ethical AI guidelines as guardrails for the use of AI at Deutsche Telekom. Find out more here.

AI-based solutions are also conceivable for modern-day environmental problems, such as for combating the climate crisis, maintaining biodiversity, water security, or resilience against natural disasters. AI can help detect forest fires or floods early on and to initiate remedial measures in good time. It can also help develop and optimize production processes, for instance with saving important resources. Yet the use of AI also poses major challenges in an environmental context. As technologies become increasingly complex, energy consumption rises for training and using AI models. Likewise, as user numbers rise, so does energy demand. This raises issues of sustainable resource utilization – such as in relation to cooling water in data centers.

Our aim is to design AI to be as sustainable as possible right from the development stage and during usage. Since 2021, Deutsche Telekom has been sourcing all its energy as green electricity. At the same time, we aim to use AI specifically to enable and drive forward sustainable solutions. For example, we are currently testing how many people are located near to certain mobile antennas at which times of the day. Based on the results, a demand-based algorithm can be used to automatically switch certain frequency bands on and off – and so help save energy. To achieve our AI-related goals, we are collaborating across units at Deutsche Telekom.
We are discussing the opportunities of technological developments and the associated challenges, looking at relevant solutions, beyond the confines of our Group. For instance, at this year’s Digital X or also as part of the “Grüne künstliche Intelligenz (Green artificial intelligence)” episode of the sustainability magazine show “Heute retten wir die Welt! Ein bisschen (Today we’re saving the world! A little bit; only available in German),” launched at MagentaTV in the year under review.

**Accessible products and services**

We want to make it easier for everyone to have access to the knowledge and information society. With that in mind, we offer barrier-free, non-discriminatory access to our digital and non-digital products and services. To this end, we also offer people with disabilities access to specially tailored services and are also committed in our national companies to providing barrier-free access to our services. Further information is available in the respective segments.

**Service for people with hearing difficulties**

We set up a hotline (Deaf Hotline) in Germany for the deaf and hearing-impaired in 2003. In the year under review, this service was requested 4500 times in Germany. Customers and consultants can see each other using a video-based live chat application and can communicate with each other in sign language. Also, we offer a chat service in which specially trained staff advise deaf and hearing-impaired persons in simplified language.

For deaf customers and members of the German deaf association, Deutscher Gehörlosen-Bund e.V., we operate a special online distribution site. There, we offer a discounted mobile-communications and fixed-line portfolio that is tailored to the exact needs of hearing-impaired persons. Via the website, customers can either book desired rates directly or contact our Deaf Hotline.

Since 2018, hearing-impaired people in Germany have had access to a 24-hour emergency-call service with sign language interpreters for emergency situations. The service is jointly financed by the mandatory social security contribution paid by Deutsche Telekom to Germany’s Bundesnetzagentur (Federal Network Agency).

**Barrier-free program on the Special Olympics World Games 2023**

In summer 2023, Deutsche Telekom supported the Special Olympics World Games Berlin as a premium partner. We provided telecommunication services and broadcast the pre-event and live reporting from Berlin via our streaming service MagentaTV as part of the German Media Alliance. Deutsche Telekom was the only company from the eleven partners in the Media Alliance to provide the content on the summer games entirely barrier-free – on MagentaTV and on the eponymous YouTube channel with subtitles, audio description, and in German sign language.

**Support through simple or simplified language**

According to studies, 12 percent of people in Germany are not able to grasp complicated texts. For that reason, parts of our www.telekom.com website, of the Teachtoday Academy and individual thematic pages under “Specials” are offered in this CR report in simple language.

“Schubkraft” (“Thrust”) program: funding options for sustainable digitalization

Through our “Schubkraft” program we are supporting businesses and municipalities to leverage the advantages of digitalization while also helping achieve climate targets in Germany.

Our program offers:

- **Access to funding options:** We provide an overview of around 3000 government funding programs. By doing so, we would like to break down barriers and, with our expertise, help businesses and municipalities access financial resources for sustainable and innovative projects. More information is available here (only available in German).

- **Digital support:** Our free app “Meine Förderung” (“My Funding”), (available in the app stores for iOS and Google Play) informs businesses and interested parties about suitable funding options. Since its rollout, the app has already been downloaded over 6000 times.

- **Personal advice:** Our team of experts is on hand to provide individual advice. As part of direct conversations, we can address specific requirements and questions and suggest tailor-made solutions.

Through “Schubkraft” we aim to ensure that digitalization in Germany is not only structured from an economic, but also from a socially and environmentally responsible viewpoint. With this approach we would like to make a positive contribution for society, while promoting the competitiveness and innovativeness of our customers.

**Germany segment: digitalization as facilitator for a sustainable future**

**Telekom Nachhaltigkeitsmanager**

Digital solutions for sustainability management and reporting make it easier to fulfill upcoming reporting obligations. Since 2022, the “Telekom Nachhaltigkeitsmanager (Telekom Sustainability Manager)” (only available in German) has been offering the Germany segment a digital toolkit, which is being constantly extended to fulfill more and more new requirements. The central platform consolidates sustainability data, calculates emissions across all three scopes, and creates legally compliant sustainability reports. Sustainability targets can be defined by recording the enterprise’s environmental impacts, and measures managed to reduce emissions.

“Digital X” – Technology at your fingertips

In September 2023, we again became an official cooperation partner for “Digital X” in Cologne – Europe’s leading digitalization initiative. On an area of two million square meters, it offered inspiration, new perspectives, and technology up close for visitors over two days. This year’s motto was “Be digital. Stay human.” “Sustainability & Responsibility” was one of the four megatrends alongside “Connected Business”; “Security” and the “Future of Work”. To focus the event on sustainability, we have targeted the initiative. On an area of two million square meters, it offered inspiration, new perspectives, and technology up close for visitors over two days. This year’s motto was “Be digital. Stay human.” “Sustainability & Responsibility” was one of the four megatrends alongside “Connected Business”; “Security” and the “Future of Work”. To focus the event on sustainability, we have targeted the areas of climate protection, resource efficiency, and the circular economy and, among other things, paid special attention to easy
accessibility of the event venues by public transport. 50,000 visitors attended the event along with 250 speakers.

**Systems Solutions segment: products and customer enablement**

T-Systems has set itself the goal of becoming the leading provider for sustainable IT services and also making a major contribution in this role to reducing CO₂ emissions of Deutsche Telekom. To this end, the segment set up its own program in 2020, which not only looks at its own processes, but also examines the products on offer and the enablement of business customers. T-Systems enables its customers and partners to increase their sustainability performance by transparently structuring their own value chain, and offering leading digital sustainability solutions and consulting.

**Enablement of customers**

T-Systems continually determines the environmental impact of its products and services and makes this transparent to customers. To do so, the company uses various technologies and tools developed in-house such as the “susTain Calculator”. This tool allows prospective new customers to calculate what CO₂ emissions they can save by switching to the IT infrastructure and the services of T-Systems. To determine the carbon footprint of solutions, T-Systems uses an impact measurement approach in accordance with the Groupwide Impact Measurement Blueprint, that also includes social and economic factors and looks at the entire value chain. An important factor in impact measurement consists of the positive carbon footprint impacts our customers realize through the use of T-Systems’ ICT solutions. To constantly improve the methodology, T-Systems collaborated in the year under review with Telekom Deutschland and Group Corporate Responsibility to develop a tool for calculating the carbon footprint of products.

**More sustainable products and solutions**

T-Systems’ goal is to continually increase the number of more sustainable products and digital solutions in its portfolio. The segment offers industry-specific and cross-industry solutions.

Together with the technology consulting provider Detecon, T-Systems supports business customers with developing digital sustainability strategies based on its “DigiTainability” approach. DigiTainability entails striking a balance between the following elements: The use of digital technologies to increase resource efficiency, the reduction of negative environmental, economic, and social impacts, while also designing digital technologies to be more sustainable. The consulting lineup includes strategic consulting for transformation, ESG transparency and reporting, sustainable supply chain management, green IT initiatives, and data intelligence for sustainability.

With its solutions, T-Systems helps its business customers to collect, monitor, document, and improve all sustainability-related data for their organization and beyond. The T-Systems’ products include the Syrah SDG Dashboard or the Supply Chain Transparency Suite, a solution designed to fulfill obligations under the German Supply Chain Due Diligence Act (Lieferkettensorgfaltpflichtengesetz – LkSG). With Ambika, T-Systems has also rolled out a cloud-based infrastructure management system for electric car charging stations. T-Systems also helps its customers implement digital solutions that are ideal for their specific sustainability requirements. T-Systems provides solutions for the mobility and logistics sectors that facilitate the wide-ranging digitalization of airports, thereby helping make workflows more efficient. For the public sector, T-Systems offers a solution in the shape of PEGA that promotes the digitalization of government administrative processes and, among other things, saves paper and reduces travel. Examples of the impact that our solutions have can be found here.

Besides the focus on products and services that can make customers more sustainable, T-Systems is increasingly working on taking account of sustainability criteria right from the actual development process. To minimize the carbon footprint of new and existing solutions, T-Systems has developed nine principles for sustainable solution design and published these internally in the year under review. The Environmental Sustainability Design Principles should provide a guide for all T-Systems’ employees that helps them design applications and solutions more efficiently from a carbon footprint and energy consumption viewpoint. T-Systems also provides its employees with supporting web-based training courses to make the issue easier to understand. More information on environmental product design at Deutsche Telekom can be found here.

**Cooperative partnership**

Together with our customers we are working on accelerating the digital transformation and investing in new business models that focus on the decarbonization of society. With Co-Creation Advisory, T-Systems set up an initiative in 2023 to promote cross-industry collaboration in the field of sustainability. Over 100 T-Systems’ customers took part in the accompanying three-part event series, the Co-Creation Advisory Board for Sustainability, and were actively involved in developing specific solutions. Together with them, we have developed nine new solutions for the area of sustainability in the year under review. The initiative will continue in 2024 under the name X-Creation and a close partnership with the United Nations Global Innovation Hub. Interested parties from business, the research sector, organizations, and the public administration will again gather in the Co-Creation and work together on ideas.

T-Systems remains in close contact with customers and suppliers to consistently reduce CO₂ emissions. Memoranda of understanding were signed with key suppliers Lenovo, Cisco, and Fortinet to work jointly to address the topics of energy efficiency and climate neutrality. T-Systems and the technology company Lenovo, which supplies components for the cloud solution Future Cloud Infrastructure (FCI), are working on reducing greenhouse gas emissions in the supply chain, for instance.

Additionally, T-Systems is an industry partner to legislators and the research sector. One example of this is our partnership with the Fraunhofer Institute, with whom we are developing innovative green technologies for cloud computing. Another example, this time at international level, is our partnership with the University of Granada, which sees us establishing a Chair of Innovations in Digital Sustainability to drive research activity in this area.
Network expansion

Our approach to infrastructure rollout

Having access to state-of-the-art information technologies is a precondition for economic performance and participation in a knowledge and information society. That is why we are continuing to rapidly expand our infrastructure and improve transmission speeds with new, secure technology.

Demand for faster data services with full-coverage availability is growing continuously. In 2023, we invested more than EUR 16 billion Group-wide, primarily in building and operating networks. Around EUR 4.6 billion of this figure was earmarked for the Germany operating segment alone. This is in addition to the investments that we make in acquiring mobile spectrum. Hence, the majority of the Group’s investment volume in Germany is for the build-out of broadband networks. This build-out is based on the goals of our Europe-wide integrated network strategy, which we use to help achieve the EU Commission’s network build-out targets and the Federal Government’s Digital Agenda and broadband strategy. The strategy is founded on the two pillars of building out mobile and fixed networks, with the focus of the former being on 5G coverage – the most powerful technology standard currently available.

Thanks to our investments, our customers are enjoying better network coverage and fast mobile broadband service. In mobile communications, we set ourselves apart from our competitors with the quality of our network that has been singled out for awards with independent network tests. Further information on our awards can be found here.

In the fixed network, we are focusing on rolling out our optical fiber to provide our customers with a reliable connection at gigabit speeds. With our FTTH (fiber to the home) expansion, we are installing fiber-optic connections directly in customers’ homes. Our aim is to close gaps in the network in rural areas and provide urban centers with the high bandwidth they require. We have almost completed our FTTC (fiber to the curb) build-out in the fixed network in Germany. We want to continue this rollout efficiently and, to this end, are also participating in funding programs. In the coming years, we expect to provide FTTH to over 2.5 million households per year.

As well as the pure fiber-optic lines, we are also offering other innovative products: for example, our hybrid router, which combines the transmission bandwidths of fixed-network and mobile communications, thus attaining higher transmission speeds – particularly in rural areas.

Germany segment: progress with network build-out

We continued to build out our network infrastructure in Germany throughout the reporting year. At the end of 2023, our 5G network covered 95.9 percent of the population, with over 80,000 antennas transmitting 5G across Germany. Around 10,000 of these antennas use the fast 5G spectrum in the 3.6 GHz band. Our rigorous focus on 5G will continue in 2024. In the year ahead, 5G standalone will also be made available for use by consumers. Our business customers already use this technology with functions like network slicing, e.g., for live TV broadcasts of media, or in 5G campus networks for industry and research.

In the fixed network build-out, optical fiber continued to take center stage. By the end of 2023, we had made more than 2.5 million more fiber-optic lines available in Germany. In other words, we achieved our build-out target for the year, bringing the total number of households and businesses with the option to subscribe to a fiber-optic line to around 8 million.

In the reporting year, Deutsche Telekom established its own civil engineering company to ensure further acceleration of the network build-out. This move serves to address the pressing need for civil engineering capacities on the German market. The civil engineering company Deutsche Telekom Tiefbau GmbH is a wholly-owned subsidiary of Telekom Deutschland and will focus on connecting homes.

In addition to its own build-out efforts, Deutsche Telekom also relies on partnerships as an important mainstay of the build-out. We have a total of around 40 partnerships in place on the joint construction, operation, or use of fiber-optic infrastructure. Alongside collaborating with regional partners (among other places in several districts in the Stuttgart region, in Upper Franconia and the Upper Palatinate, in Bavarian Swabia, and in North Hesse), we have also agreed framework conditions with organizations including the central association of the German housing industry for our fiber-optic build-out to properties managed by this sector. Furthermore, June 2023 marked the start of the implementation phase of the Saxon State Ministry of Education and Cultural Affairs’ broadband access initiative to connect schools across Saxony to our fiber-optic network.
Europe segment: progress with network build-out
In the countries of our Europe segment, too, we substantially intensified the network build-out in the reporting year. As of the end of 2023, our national companies covered on average 67.2 percent of the population in our European footprint with 5G, representing a significant increase year-on-year.

We also made particularly good progress with the build-out of our fixed network in our European national companies in 2023. At the end of 2023, a total of around 9.1 million households, which means around 1 million additional households compared with the prior year, had access to our fiber-optic network offering gigabit speeds.

We continue to systematically execute on our strategy regarding the shared use of networks, and to this end, our national companies in Europe also agreed and finalized further partnerships on the fiber-optic build-out in the reporting year. Alpen Glasfaser, a cooperation between Magenta Telekom and Meridiam, started operations in Austria in March 2023. In Poland, T-Mobile Polska entered into an agreement with Vectra Group in the second half of 2023 on access to Vectra’s fiber-optic network, and announced it is establishing a cooperation with Polish Open Fiber that will give us access to their fiber-optic network.

United States segment: progress with network build-out
As of the end of 2023, T-Mobile US’ 5G network covered around 98 percent of the U.S. population, with over 300 million people benefiting from Ultra Capacity 5G (5G UC). T-Mobile US has thus hit its year-end target for 2023 for 5G UC coverage.

On September 12, 2023, T-Mobile US agreed with U.S. cable network operator Comcast to acquire spectrum licenses in the 600 MHz band in exchange for total cash consideration of between USD 1.2 billion and USD 3.3 billion. The transaction is expected to be closed in the first half of 2028.
Rollout of the new 5G mobile generation

With 5G, we are creating a highly reliable mobile network with extremely low latency and high data throughput. Over 80,000 antennas are now operating at the 5G standard in Germany. As of the end of 2023, over 10,000 of these antennas in more than 800 towns, cities, and communities were using the fast 5G spectrum in the 3.6 GHz band. By the end of 2023, 95.9 percent of the population of Germany was already covered by our 5G network. By the end of 2025, 5G is set to cover 90 percent of Germany, reaching 99 percent of the population. We additionally want to offer 5G standalone for consumers in 2024. Deutsche Telekom’s business customers already use this technology with features like network slicing, e.g., for live TV broadcasts or in 5G campus networks for industry and research. As of the end of 2023, our national companies covered on average 67.2 percent of the population in our European footprint with 5G. T-Mobile US’ 5G network covered around 98 percent of the U.S. population at the end of the reporting year, with over 300 million people benefiting from Ultra Capacity 5G.

Since 2022, Telekom Deutschland has been directing the 6G-Take-Off research project, which is being funded by the German Federal Ministry of Education and Research (BMBF). The project is aimed at developing a consistent 6G architecture for communications networks, consisting of satellite access stations, airborne infrastructure platforms and satellites. A total of 22 industry and scientific partners are collaborating in the effort. The first 6G networks are expected to become operational in 2030.

Updating and stabilizing the network architecture

The fundamental aim is to operate our networks in the most stable and failure-free manner possible. Major events such as festivals and summit meetings place networks under particular strain. We make sure, however, that voice calls and data are still transmitted in the quality our customers have come to expect by temporarily setting up extra mobile masts or laying additional fiber-optic cables.

In emergency situations, it is especially important for networks to function properly, so that emergency calls can be made and responses organized. In emergencies, such as floods or large fires, in which network equipment is damaged to the point that mobile and fixed-line services cannot be quickly restored, our Disaster Recovery Management (DRM) comes into play. It operates mobile containers with communications equipment that can quickly stand in for disrupted cellular and fixed-line service.

In the interest of even faster network restoration following extreme events, Deutsche Telekom’s DRM team is working to provide a satellite-based mobile base station. Such a station would make it possible to establish a mobile network within just a few hours. This project is currently in its pilot phase in the lower Franconian city of Fuchsstadt. The first trials with the new system have been promising, and it seems as if it will indeed be possible in the future to restore service very quickly following extreme events.

Reporting against standards

Sustainability Accounting Standards Board (SASB)
- TC-TL-SS0a.2 (Managing Systemic Risks from Technology Disruptions)

Continuing expansion of the fiber-optic network

Deutsche Telekom’s fiber-optic network is the largest in Europe, with a length of over 750,000 kilometers in Germany alone (as of December 2023). As global data traffic continues to grow rapidly, we are continuing to expand our fiber-optic network. To do this as quickly and efficiently as possible, we use planning software and modern deployment methods such as trenching. Via our build-out tracker (only available in German) for Germany, we provide clear reports on our progress.

To expand the fiber-optic network, we are using FTTC (fiber to the curb) technology with super vectoring and are building out FTTH (fiber to the home) as well.

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<th>DSL 16 000</th>
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Our approach to top service quality in Germany
At Deutsche Telekom we put people front and center, especially our customers and our employees. We examine our workflows from our customers’ perspective and invest in our employees’ expertise as well as in IT tools for them and our customers. Our aim is to handle customer inquiries quickly and fully right from the first contact and to be perceived as friendly and reliable as we do so. In the reporting year, our investments in the area of customer service and the associated customer satisfaction were rewarded: in 2023, we made it into the top 10 most valuable brands in the world in the “Brand Finance Global 500” study. We also remain the most valuable corporate brand in Europe. The Brand-Z study by Kantar also confirmed that Deutsche Telekom is the most valuable German brand - partly due to the high level of trust customers place in our brand.

The following examples show how we implement our service offering in the Germany segment:

Very active service in 2023
In 2023 in Germany, we had a total of 30,000 employees providing service to our 60 million mobile and fixed-network customers, making a total of 60 million personal contacts in the process. We solve around 70 percent of inquiries in the first customer contact. Also in the year under review, callers to our service hotline had to wait less than 90 seconds on average to speak with a service representative. In the same year, the percentage of service technician appointments that failed to take place was 0.6 percent. Our good service is paying off: Since 2017, we have been able to cut the number of customer complaints in Germany by a total of 90 percent.

Arranging appointments with Deutsche Telekom
The online appointment booking tool (only available in German) is an easy way for customers to book their consultations and service appointments. They can decide for themselves in which form they would like to receive advice. They can choose between a consultation in a Telekom Shop or at home. Deutsche Telekom engineer appointments can also be booked online. Customers can also use the tool to arrange an appointment for queries which can be resolved via phone call or video chat.

Customers using the “Mein Telekom Techniker” (My Telekom Engineer) app can see with a tap on their smartphone when they can expect our service engineers to arrive. They will also be sent a text message in advance, reminding them of the scheduled visit. This message includes a link to access virtually real-time updates on the engineer’s anticipated arrival time. If customers’ plans suddenly change, they can reschedule appointments with just a few taps on their phone. And once a job is underway, it is also possible to monitor the service engineer’s progress step by step. This can be helpful, for example, when excavation work is required.

Always available – even in the crisis
We also reacted swiftly after Russia began its war of aggression against Ukraine in early 2022: On top of their day-to-day work, our sales and service employees helped out with initiatives such as distributing free SIM cards to refugees at the Telekom Shops and central points of contact – sometimes even outside of their working hours. They were on hand to respond to any questions or issues from refugees. Employees have joined forces to coordinate various relief measures and are continuing this work together.

Customer service from the region for the region
We have established a total of 14 regional centers, known as “Regiocenters,” in major cities in Germany, with the last opening in April 2022. These centers’ service teams serve customers’ needs throughout their regions, including customers in both urban and rural areas. Each such center offers a full range of service expertise and products in the region, from back-office support and technical customer service to field service, shops, and equipment. Customer calls are automatically forwarded to the relevant Regiocenter, which will be able to directly handle all types of concerns – mobile network, fixed network, service disruption, or a field service request.

Promoting skills
We continuously provide our service employees with training on products and services. They can learn about and try out the latest solutions in specially equipped rooms at our service centers. We have also intensified our personal coaching by team leaders in everyday work. Knowledge databases and digital tools are enabling our employees to address customers’ concerns more and more quickly.

The high quality of our services has been independently verified by numerous successes in tests. For example, in 2023 the business magazine Focus Money once again honored us as a “Service King.” For its awards, Focus Money conducted a survey of almost 300,000 people, asking which companies they thought gave them the best service. Awards such as these show that we are on the right track. You can find details of other awards for Sales & Service here.
Improving contact and process quality
We want to give all customers the best service experience. To meet that goal, several million responses from our customers are annually collected and analyzed by our quality management team. Customer satisfaction and resolving their request on first contact are our top priorities.

Our surveys are conducted either directly after a contact (for example, via the hotline, in a shop, on a field service call, or after an online inquiry by email or chat) or a completed process (for example, after service provisioning).

If a customer tells us in a survey that their request has not yet been resolved, a callback offer is made to clarify the request once and for all. The results of customer surveys are also used for internal training of our customer advisors.

In the year under review, we managed to increase the Net Promoter Score (NPS), which we use to measure customer satisfaction, to 40 (23 in the prior year). The classification uses a scale of -100 to +100. We attribute the improvement to our “Green-to-Magenta” transformation program and various measures designed to increase customer satisfaction: For instance to the increase in the first-call resolution rate from 56.1 percent in 2022 to 69 percent in the year under review and to the reduction of the waiting times to an average 90 seconds at present. We have also driven forward the training of our employees and the Day-1 attitude that requires our employees to constantly examine processes and workflows for the need for optimization.

Measuring customer retention and endorsement
We use the TRI*M index to gauge customer retention and regularly participate in benchmarking. The recorded data is based on a customer survey conducted in all markets and segments (excluding T-Mobile US). To measure the TRI*M value, customers are asked four standardized questions – for example, whether they would recommend Deutsche Telekom to others; their answers are compiled in a key performance indicator. The TRI*M value for the Deutsche Telekom Group is calculated as an overall value from the individual measurement results of the countries or segments.

At the end of the year under review, the indicator for the Group (excluding T-Mobile US) came in at 76.2 points versus an adjusted value of 75.0 points at the start of the year (both determined on a comparable basis). Following changes to the revenue shares contributed by each country and in order to create an equivalent basis for comparing the Group's expectations with actual figures, we recalculated the baseline figure for 2023 on the basis of the new structures these changes entailed. The new baseline thus diverges from the figure of 76.0 reported as of December 31, 2022. As a result, the index value improved, and we firmly achieved our Group aim of increasing it slightly. The Germany and T-Systems segments contributed to the very positive development in particular with significant improvements in customer loyalty. The EU segment also contributed to these results with an increase in customer loyalty.

At 72.4 points, the TRI*M index for Germany is significantly higher than in the previous year (71.6). It is also considerably higher than the comparable figures for the competition when it comes to both consumers and business customers. We also experienced a slight improvement in our EU business segment, from 70.4 to 70.6, while the TRI*M index for T-Systems actually increased to 95 from a baseline of 91 points. In sum, we once again reached our overall goal of a slight increase for the Group as a whole. Thanks to the figures achieved at Telekom Deutschland and T-Systems in particular, we are in a leading position compared with the competitor benchmark. We expect to maintain these figures for 2024. Our aim for the EU segment is to achieve a slight improvement.

Customer satisfaction and loyalty scores are factored into both the long-term variable remuneration scheme for our board members and, to an extent, the performance assessments of our managers, meaning some of their variable salary components are linked to these ratings.
Our approach to consumer protection

Consumer protection is a multi-faceted topic at Deutsche Telekom. A core element is keeping our customers’ data safe and secure. Data protection and data security are therefore top priorities for us.

Children and young people, in particular, need to be shielded from dangers online. That’s why protecting children and young people also plays a big part in what we do. We take youth protection aspects into consideration in our product and service design. When we develop services that are relevant in terms of youth protection in Germany, we consult our youth protection officer for suggestions of restrictions or changes. We have appointed a child safety officer (CSO) at each of our national companies within the EU who is responsible for issues pertaining to the protection of minors. The CSO acts as a central contact for stakeholders from the community in the respective country and plays a key internal role in coordinating issues related to youth protection. We thereby strengthen Deutsche Telekom’s lasting and transparent commitment to protecting minors.

In addition, we strive to ensure that our networks are safe to use. We study the latest scientific research on mobile communications and health, and we provide our customers with transparent updates in this regard.

Our approach to protection of minors in the media

We want to protect children and young people when using digital media. We pursue a three-pillar strategy to do this:

- We provide attractive, age-appropriate offers for children. We give parents and legal guardians the information they need in order to be able to protect their children against inappropriate content.
- We participate in combating child abuse and its depiction to the extent that this is permitted in relation to the rules governing net neutrality and in the framework of European and national law.
- We implement various measures to ensure that young people acquire media skills and can interact safely with online content.

We also collaborate closely with prosecuting authorities and NGOs as well as other partners from business, politics, and society to ban online content that is harmful to children and young people. We have anchored our commitment to protecting minors from unsuitable media content in Germany in relevant codes and introduced minimum standards. In 2007, we committed ourselves to fighting child pornography on the internet throughout the European Union. GSMA (an association representing the interests of mobile operators worldwide), of which we have been a member since 2008, pursues the same objectives at a global level.

To better coordinate our activities within the Group, we have been following binding general guidelines since 2013 for our activities to help protect minors against inappropriate media content, and have, in turn, set standards in our markets. In consideration of their particular cultural situation and business model, each international subsidiary in the European Union can further specify these measures and adopt additional measures to determine their own strategic focal points.

Cooperation with organizations and programs for the protection of minors

Protecting minors from unsuitable media content poses a challenge that affects many industries. We therefore work together with different organizations for the protection of minors and participate in coalitions that coordinate the involvement of companies and organizations from the internet and media sector.

We assumed a leading role through January 2023 with the “ICT Coalition for Children Online,” a project funded in cooperation with the EU Commission. With our involvement in the ICT Coalition, we pursued a comprehensive and cross-industry approach based on six principles that expressly included helping young people learn media skills. In January 2023, the work of the ICT Coalition was stopped as the EU Commission set new priorities for the protection of minors.

We also promote various initiatives and programs aimed at protecting children and young people in cyberspace. For example, we are a founding member of the association fragFINN, which provides a safe online surfing environment for children between the ages of six and twelve. The search engine on fragFINN.de and its associated browser app turn up websites that are suitable for children and have been reviewed by media educators. We are also a member of JusProg e.V., a non-profit association that works to improve protection for children and young people online. Its youth-protection program JusProg, which is available for download and use free of charge, filters out age-inappropriate online content.

Reporting against standards

Sustainability Accounting Standards Board (SASB)
- Code TC-TL-220a.1 (Data privacy)
Indicators for telecommunications providers from the GSM Association (GSMA)
- GSMA-INT-03 (Online Safety Measures)

Our approach to safe mobile communication
We want to make our mobile communications infrastructure and our products, as well as the processes on which they are based, as resource-efficient, secure, and safe for health as possible. In Germany these activities are based in particular on voluntary commitments by the mobile sector and a mobile communications agreement with local authorities’ associations. External experts review compliance with these voluntary commitments every two years. In 2022, the mobile network operators presented the latest mobile communications expert report (for 2020 and 2021; only available in German) to the German government, which was coordinated, written and published by the Deutsches Institut für Urbanistik (German Institute for Urban Studies). According to the report, the mobile build-out is progressing smoothly for the most part, with the few controversial issues down to isolated incidents. To provide a representative estimate, the report surveyed over 1,700 municipalities throughout Germany, with 90 percent of them reporting they had few or no controversial cases to decide. The next mobile communications expert report is slated for 2024.

In June 2023, we signed a new commitment with the German government, together with the three other network operators working in Germany. This commitment relates to information, communication, and health measures with the build-out of mobile communications networks and applies for five years, after which it is renewed for another year in each case unless the parties actively terminate the agreement. More details of the content of the commitment can be obtained from the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV; only available in German).

As early as June 2020, together with the leading municipal associations and other German network operators, the existing agreement on the exchange of information for the build-out of mobile networks (only available in German) that has been in place since 2001 was revised and updated. This ensures that cities and municipalities are involved in the setting up of mobile-communication and small-cell networks to facilitate build-out that is as fast and conflict-free as possible.

Policy on Electromagnetic Fields
The Policy on Electromagnetic Fields (EMF), which we updated in the year under review, in force throughout the Group since 2004, plays a primary role: Our EMF Policy contains uniform minimum requirements for mobile communications and health that go far beyond the national legal requirements. Our policy provides our national companies with a mandatory framework that makes sure that the topic of mobile communications and health is addressed in a consistent, responsible way throughout the Group. The European national companies have accepted the EMF Policy and implemented most of the required measures.

Our EMF Policy stipulates the following principles and measures:

Transparency
We are committed to transparency and sincerity in mobile communications, especially when it comes to questions concerning the network build-out and health and safety. We make all relevant information regarding our mobile communications equipment in Germany accessible to the public, e.g., in the site database operated by the German Bundesnetzagentur.

Information
We provide consumer information that is easy to understand and are committed to supplying fact-based, sound information – which is why we provide up-to-date brochures and information on the Group’s website for anyone who may be interested. We also provide our customers with information online on the SAR levels of their mobile devices. Additional details are also available in the shops and through our free environmental hotline.

Participation
We rely on close collaboration and constructive dialog with the cities and municipalities involved. For example, we inform local government of our build-out plans at an early stage, including them in considerations for new locations, and answer critical questions from residents. For us, fairness in the face of critical arguments and readiness to subject our own position to renewed review are vital in order to succeed in achieving compromises.

Scientific facts
Over the past few decades, the effect of electromagnetic fields on health has been the subject of in-depth scientific research. Deutsche Telekom therefore continually monitors scientific research developments and bases its communications on new scientific risk assessments from expert committees such as the International Commission on Non-Ionizing Radiation Protection (ICNIRP) and other recognized specialist organizations.

We conduct ongoing reviews of compliance with our EMF Policy. Our international working group, the “EMF Core Team”, uses the findings to improve individual aspects a to jointly develop solutions.
Mobile communications and health (EMF)

Electromagnetic fields (EMFs) are a prevalent part of our connected world, even if we are not able to perceive them directly. Their effects on our health remain a topic of discussion. Deutsche Telekom, like all providers, must ensure that the statutory threshold values are observed in mobile communications. In Germany, the threshold values are set by the German government and are based on the recommendations of the International Commission on Non-Ionizing Radiation Protection (ICNIRP).

The effects of EMFs have been thoroughly researched over the past decades in numerous scientific studies. The World Health Organization (WHO) analyzes the findings of scientific research and most recently made a statement regarding the results in 2014. In its statement, it concludes that the current threshold values for EMFs ensure that mobile communications technology can be used safely and that research should accompany further development of the technology. In 2020, after evaluating the latest scientific research, the ICNIRP once again confirmed the protection concept for EMFs, as they are used in mobile communications. According to ICNIRP, the threshold values ensure comprehensive protection for people and the environment. This also applies to frequency ranges used by 5G, because, like earlier network types, 5G requires high safety standards. Safe operation of mobile communications technology in Germany is therefore ensured.

Since 2020 the Informationszentrum Mobilfunk (Mobile Communications Information Center) together with the local authorities’ associations have published three information brochures on the issue of mobile communications (only available in German). The content is geared primarily to municipalities and local decision-makers. In the year under review, the range of information (only available in German) was supplemented by videos, articles, and podcasts on socially relevant 5G applications, along with explanatory videos on the mobile build-out. The Information Center also published teaching material (only available in German) on the subject of technology, environment, and sustainability with mobile communications and continued to cooperate with the German government’s communications initiative “Germany talks about 5G” – including with implementing the community consultations with citizens and local politicians.

In cooperation with the three other 5G licensees in Germany, Telefónica Germany, Vodafone, and 1&1 Mobilfunk, we support Informationszentrum Mobilfunk. The portal provides objective, scientifically sound information about basic issues relating to mobile communications, including controversial issues, in the areas of health and safety, technology and network build-out, the environment and sustainability, and politics and legal questions.

Further information on this subject is available under “CR facts”.

Management & facts
Economy
Consumer protection
Our approach to data privacy
The highest standards of data privacy and data security are part of our brand identity. We have developed our active data privacy and compliance culture over many years.

The company’s Human Resources and Legal Affairs Board department, headed by Board of Management member Birgit Bohle, has responsibility for the area of data privacy. The Technology and Innovation Board department, headed by Board of Management member Claudia Nemat, is responsible for the area of data security.

Since 2009, the Group Board of Management has been advised by an independent Data Privacy Advisory Board comprising reputable experts from politics, science, business, and independent organizations. The Advisory Board is also strengthened through the addition of new members from the ranks of the Board of Management and the Supervisory Board of Deutsche Telekom AG.

Ensuring effective data privacy:

- **Global data privacy organization**
  With the help of our globally operating data privacy organization, we work constantly to maintain transparent, high data privacy standards in all of our companies. To achieve this, Deutsche Telekom’s data privacy must be highly organized on both a national and international level.

- **Policies on data privacy and information security**
  To the extent legally possible, our Group companies conform to our Binding Corporate Rules Privacy (BCRP), which define common, high data privacy standards for our products and services. The Group Security Policy includes significant information security and data privacy-related principles followed within the Group, which are based on the international ISO 27001 and ISO 27701 standards. The Policy ensures that adequate, consistent security standards are maintained throughout our entire Group.

- **Consistent transparency vis-à-vis the public**
  At www.telekom.com/data-privacy-and-security we provide comprehensive information about our data privacy activities. We have also published an annual transparency report since 2014. Moreover, in the Consumer protection section of this CR report we explain how we make our products and services safe for users.

- **Information on data handling**
  We provide transparent information regarding which personal data is processed and for what purposes, as well as the length of time it will be stored. As a rule, personal data is not forwarded to third parties. We sometimes use anonymized data for analyses, so we can continually improve the quality of our offering. These analyses help us spot certain trends better, for example, showing us where to improve network coverage.

- **Regular employee training courses**
  Telecommunications companies are obliged to provide new employees, at the beginning of their employment relationships, with information on data privacy regulations. We go above and beyond these legal requirements. Every two years, we provide training in this area to all Group employees and place them under an obligation to uphold data privacy and telecommunications secrecy. The training courses for our employees also cover risks and procedures relating to data security and privacy protection. We have also introduced specific training in the customer and human resources departments. This training includes online courses for independent learning, presentations on data privacy, and face-to-face courses on specific topics such as data protection at call centers. This helps us ensure that all employees have in-depth understanding of the relevant data privacy policies.

- **Regular review and adaptation of measures**
  We carry out a Group data privacy audit every two years, to measure and improve the general data privacy standards throughout the Group. For each such audit, we conduct an online survey of a total of 15 percent of our Group employees, chosen at random. The Group data privacy audit is supplemented by internal and external on-site checks. Group Privacy assesses the results and checks whether action needs to be taken in the respective units. Where necessary, the Global Data Privacy Officer calls for improvement measures and, to this end, holds personal meetings with the responsible directors, managers, and data privacy officers at the different departments. Group Privacy offers advice on the implementation of the measures and determines whether they are effective. We take any unusual audit results into consideration when planning the follow-up audit.

- **Certifications**
  We have the security of our processes, management systems, products, and services certified by external, independent organizations such as TÜV, DEKRA, and auditing firms.
How we handle big data and artificial intelligence

When we process very large volumes of data, we need to take special measures to protect citizens’ privacy. To this end, we created in 2013 mandatory principles for handling big data. In parallel to the technological further development, we have since also updated our arrangements governing the processing of very large quantities of personal data – and in 2018 published guidelines on the data privacy-compliant design of artificial intelligence (AI). In addition, we apply a “Ten-point program for better online security” that defines specific measures to protect data and the network infrastructure. We introduced the program in 2015. In this framework, we have developed a number of special protection products – including the “Telekom Mobile Protect Pro”, which looks for any risks in the mobile network that the smartphone is using.

Reviewing our products

Data privacy and security play an important role that starts during the development of our products and services. Our Privacy and Security Assessment (PSA) procedure allows us to review the security of our systems in each step of the development process. This procedure applies to newly developed systems as well as to existing systems that undergo changes in technology or in the way data is processed. We use a standardized procedure to document the data privacy and data security status of our products throughout their entire life cycle.

Reporting against standards

- Sustainability Accounting Standards Board (SASB)
- Code TC-TL-220a.1 (Data Privacy)
- Code TC-TL-202a.2 (Data Privacy)
- Code TC-TL-230a.2 (Data Security)

Telecommunications companies are legally obliged to support security authorities in their efforts to uphold security. Companies’ obligations in this regard include permitting surveillance/monitoring measures, and providing certain data, when they are ordered to do so by authorities.

Internationally, the legal framework for a transparency report in this area differs widely from country to country. In some countries, we are legally prohibited from providing any information about security measures, while in others authorities may directly conduct surveillance without any participation on the part of telecommunications companies. The support we provide for authorities in this area is always provided solely on the basis of an unambiguous, legally binding legal foundation in the relevant country. Details on the different situations in the relevant countries are available on our website.

We place great priority on transparency in this area. Since 2014, we have published an annual transparency report for Germany; since 2016, we have also published an international transparency report. In these reports, we reveal – to the extent legally permitted – the nature and extent of any information we had to disclose to security authorities.

Reporting against standards

- Sustainability Accounting Standards Board (SASB)
- Code TC-TL-220a.2 (Data Privacy)
- Code TC-TL-202a.4 (Data Privacy)

Cybersecurity

Deutsche Telekom Security GmbH is among the world’s largest digital security providers. This company, the market leader in Germany, Austria, and Switzerland, marshals the cybersecurity expertise available throughout the entire Deutsche Telekom Group. For many years now, it has been successfully protecting our own infrastructure – and offering our customers the same security solutions that protect the Deutsche Telekom Group worldwide. Also, Deutsche Telekom Security is working to continually improve cooperation in the area of protection against digital threats. To this end, it works with many different organizations and associations, often as an active member, in Germany and at the EU level. The organizations it collaborates with include the German Federal Office for Information Security (BSI), Germany’s Bundeskriminalamt (Federal Criminal Police Office, BKA) and the European Union Agency for Cybersecurity (ENISA).

In addition, the company collaborates with research institutes, industry partners, initiatives, standardization bodies, public institutions, and other internet and telecommunications service providers worldwide. Together, we want to fight cybercrime and improve online security.

We also provide up-to-date information about all of our security and data protection activities on our Group website.

Our cybersecurity infrastructure

We are always working to develop new ways to defend against attacks. We launched a Cyber Emergency Response Team (CERT) in the mid-1990s, which is responsible internationally for managing security incidents for our information and network technologies. Since then, we have continued to expand our activities in relation to cyberdefense, and promote more information and information sharing. Since 2020, our CERT has been officially certified according to the SIM3 standard (Security Incident Management Maturity Model). It is now one of only three German CSIRT (Computer Security Incident Response Team) / CERT organizations that comply with this standard.

Cyber Defense Centers

At our Cyber Defense and Security Operations Centers (SOCs), we monitor the security situation 24/7, year-round, for ourselves and our customers. With the aid of artificial intelligence (AI), the SOCs analyze about a billion security-relevant data items, from some 3 000 data sources, every day. Our security specialists detect attacks in real time, and immediately initiate the steps necessary to neutralize them or even ward them off completely. In 2023, we registered peaks of almost 50 million attacks per day against Deutsche Telekom’s “honeypot” systems – systems intentionally
designed to lure attackers. In addition, we actively combat botnets (interconnected computers infected with malware) in the Deutsche Telekom AG network. We are the only internet provider in Europe that safeguards its network in this way. This is how we protect our infrastructure, and hence also our customers' data.

**Threat Intelligence Team**

When we register an attack, our Threat Intelligence team studies it to determine precisely how it has been perpetrated. To such ends, our Threat Intelligence team consults with, and shares findings with, researchers throughout the world. In this way, our team always stays abreast of the latest scientific findings – and well informed about the threats and perpetrators it faces. Even if we cannot always stay a step ahead of cybercriminals, we always try to ensure they are well aware of our presence.

In the same way, we also provide other companies with our measures to fight cyberattacks: More than 30 German DAX companies and SMEs employ our services for their own protection.

**Protection of personal data**

Protecting our customers’ data is one of our top priorities. On our Group website, under "Data protection and data security," we provide regular – daily, in some cases – information about our commitment in this area.

Although we take a wide range of preventive measures, we cannot completely prevent data breaches. In 2023, we recorded a total of 154 data breaches in Germany. We investigated 32 of these breaches as a result of customer complaints, and three as a result of complaints of supervisory authorities. On account of an incident at a subsidiary, these breaches affected a total of 63,295 customers. In none of the cases did the breach amount to a critical violation.

We participate in various projects aimed at continually improving data privacy and data security. The following are just a few examples of our activities.

**International cooperation for cybersecurity**

We have been a member of the “Cyber Security Sharing & Analytics” (CSSA) association since 2014. The association provides a technical and organizational framework via which members' experts can share sensitive information securely – and thereby interact with and support each other.

**Knocking out botnets**

Botnets are illicit networks of hijacked devices, created for various criminal purposes. The bigger a botnet is, the greater its cyberattack impacts can be. To keep hackers from controlling hijacked devices within a botnet, Deutsche Telekom Security GmbH experts analyze the botnet's structures and suppress communications with its controlling servers. Botnets have frequently hijacked devices of our customers. In over 670,000 instances in 2023, we informed customers of botnet problems and helped them remove bots from their devices.

**Uncovering stolen identities**

Identity theft, hacked customer accounts, or malware on a smartphone: All these are not isolated events, but have now become a mass phenomenon – affecting all internet and mobile communication providers. To provide customers with the best possible protection, our fraud scouts (experts from the Deutsche Telekom security team) use a special application to search the entire world wide web for stolen identities, track down the sale of offered customer accounts, and detect the latest malware. When they find such identities, we warn the relevant customers immediately and help them address the problem. If necessary, we block affected accounts. We also inform our customers in connection with other types of security incidents, such as "smishing" (sending of fraudulent text messages (SMS)), malware infections of mobile devices, as well as viruses and spam. In 2023, we provided such warnings about 900,000 times. When our customers require personal assistance, specially trained customer advisors are just an email (abuse@telekom.de) or phone call (0800 55 44 300) away.

**Smart can also be safe and transparent**

We not only want to comply with legal guidelines, we also want to actively ensure that our customers' data is protected. To do so, we continue to enhance technical standards, and promote maximum transparency.

For example, with our "VoiceID" ("SprachID") service, we do not save a customer’s voice file. Instead, we save a mathematical pattern that is calculated from characteristics in the voice. The original voice – and the customer behind it – cannot be identified via such a pattern. At the end of the reporting year, we suspended the service for the time being due to current developments in speech biometrics.

**Strengthening trust in the cloud**

Since 2021, T-Systems has been a member of the "EU Cloud Code of Conduct General Assembly" of SCOPE Europe, an association for the development of a common regulatory framework for the digital economy. With this membership, we express our commitment to the "EU Cloud Code of Conduct," the first cloud-services standard to be accepted by European data protection authorities.

T-Systems now structures all of its cloud services accordingly. T-Systems and Google Cloud also signed a long-term cooperation agreement in 2021. The joint "T-Systems Sovereign Cloud powered by Google Cloud" combines since April 2022 the open-source expertise of both providers, enabling customers to manage workloads in compliance with German and European regulatory requirements (GDPR and Schrems II). T-Systems continually monitors compliance with all three aspects of digital sovereignty (data sovereignty, operational sovereignty and software sovereignty) so that enterprises from regulated industries can process their sensitive data in the cloud in line with sovereignty requirements.

For information about other projects, please refer to our CR facts.

**Reporting against standards**

Sustainability Accounting Standards Board (SASB)

- TC-TL-220a.1 (Datenschutz)
- C-TL-230a.1 (Datensicherheit)
IT security & data protection
A random sample of 50,000 Deutsche Telekom employees are surveyed on the topics of data protection and data security awareness every two years. The findings of the survey are used, for example, to determine the Security Awareness Index (SAI) and the Data Protection Award indicator. The indicators help us to review the effectiveness of our measures in the areas of IT security and data protection. The Data Protection Award indicator was last measured in 2022 and stood at 88 percent (excluding T-Mobile US). In 2023, security awareness index reached 80.6 (excluding T-Mobile US) of a maximum of 100 points (which is higher than for all other companies in the benchmark).

The Security Awareness Index measures our employees’ perception of IT security at Deutsche Telekom. The assessment is based on Deutsche Telekom employee answers on management awareness of the topic, the security culture, the influence of security requirements on their own work, and their personal responsibility for and attitudes toward IT security. The index includes a scale from 0 to 100 – the higher the value, the higher IT security is rated at Deutsche Telekom.

T-Mobile US: data privacy and cybersecurity
T-Mobile US is committed to being a responsible steward of customers’ personal data, and giving customers choices over how their information is collected and used. At T-Mobile US, data privacy focuses on five principles: trust, transparency, control, education, and protection. The segment’s Privacy Center explains how customer data is used and how customers can manage it within the Privacy Dashboard. T-Mobile US provides annual data privacy training and year-round awareness programs so employees keep customer data confidential.

T-Mobile US continues make it even easier for customers to make choices about the use of their data with updated privacy tools and more choices. For example, the Privacy Center was updated to be mobile-friendly and simpler to navigate with a new Privacy Dashboard. This provides customers the ability to choose how their data is used for analytics reporting, and marketing, and highlights how customers can ask T-Mobile US about the personal data collected.

Cybersecurity
T-Mobile US, like any other company, is not immune to criminal cyberattacks and is continuing to make substantial, multi-year investments in strengthening its cybersecurity program. As the cybersecurity landscape evolves, T-Mobile US continues to accelerate investments and upgrades to infrastructure in order to keep its network and digital systems safe. To further build on its robust cybersecurity oversight framework, T-Mobile US continues to improve its cybersecurity management, including cybersecurity technology, security protocols, monitoring and response operations, and compliance.

Through our interactive benchmarking tool, important facts and figures of our national companies can be analysed and compared.
Financial performance indicators

Net value added
The increase in net value added, from EUR 64.9 billion to EUR 68.3 billion, resulted primarily from significantly higher repayments to investors. Conversely, capital expenditures for intangible assets (primarily spectrum licenses) and our investments in the network build-out decreased in 2023. This decline in the year-on-year comparison resulted primarily from high capital investments for spectrum licenses in the United States and Europe operating segments, as well as high capital expenditures associated with our accelerated 5G network build-out and the integration of Sprint in the United States segment. Payments to employees also declined, due to factors such as a lower headcount in the United States, Germany, and Europe operating segments.

In contrast to the statement of income, the net value added only takes account of real payment flows. That means that deferred tax expenses and the accrual of provisions do not impact the net value added of the reporting period. Although these costs are deducted from net profit in the statement of income, they are not linked to any current payments to stakeholder groups, as is the case with net value added. Outpayments in this respect are scheduled for the future and will only be accounted for in net value added in future years.

Net revenue, EBITDA and net profit
A detailed clarification of our financial KPIs is available at www.telekom.com/investorrelations.

Revenue development
In 2023, Deutsche Telekom generated Group revenue of EUR 112 billion. The decrease of around EUR 2.4 billion constitutes a year-on-year drop of around 2 percent. The international share of Group revenue increased by 0.96 percentage points to 76.4 percent.

<table>
<thead>
<tr>
<th>Net revenue (in EUR million)</th>
<th>2023</th>
<th>Change 2022/21 in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>112,0</td>
<td>-2.0</td>
</tr>
<tr>
<td>Germany</td>
<td>25.8</td>
<td>1.5</td>
</tr>
<tr>
<td>International</td>
<td>86.5</td>
<td>-3.3</td>
</tr>
<tr>
<td>Group (total)</td>
<td>112.0</td>
<td>-2.1</td>
</tr>
<tr>
<td>International as percentage of Group revenue</td>
<td>76.3%</td>
<td>77.4%</td>
</tr>
</tbody>
</table>
Revenue per employee
Revenue per employee increased by around 0.9 percent to EUR 547,000 in 2023. In Germany, the revenues per employee increased by about 6 percent. This contrasted with a slight decrease by 0.8 percent internationally.

Personnel costs and personnel cost ratio
Following a record low last year, the ratio fell again this year by 0.2 percentage points to 15.6 percent. This is primarily a result of the reduced headcount.

The disadvantage of the personnel cost ratio is that it ignores external personnel costs. Therefore the total workforce costs ratio is more meaningful for the management of personnel costs at Deutsche Telekom.

HR EBITDA (Ratio)
The “HR EBITDA” of Deutsche Telekom Group (excluding T-Mobile US) puts into ratio the calculated earnings per employee with the investments in training per employee.

Personnel costs are defined as basic personnel costs (wages, salaries) plus ancillary personnel costs (social costs). This figure is adjusted for special factors in conjunction with staff restructuring measures (specific staff reduction instruments). The personnel cost ratio represents personnel costs as a proportion of revenue. The development of this ratio serves as a benchmark for company business. In the Group, the personnel cost ratio fell again this year.
**Human Capital ROI**

The "Human Capital Return on Invest (ROI)" illustrates the company’s return on investment in human capital by building a ratio between revenue, OPEX and the internal workforce costs (IWC).

**Total Workforce Costs**

Deutsche Telekom’s total workforce ratio improved again in 2023. The adjusted ratio for the Group as a whole dropped by 0.4 percentage points in 2023 compared with the previous year. While total revenue decreased by 2.1 percent (EUR 2.4 billion) in 2023, total workforce costs declined by around 3.9 percent year-on-year.

**Total Workforce Ratio**

Total workforce management allows HR to be managed in a holistic manner, enabling qualitative and quantitative personnel planning over the long term. The total workforce ratio describes the relationship between all personnel expenditure and revenue. This means: if the ratio has fallen in comparison with the previous year, either revenue has remained constant while total workforce costs have gone down, or revenue has increased with stable total workforce costs.
Climate strategy
We see ourselves as a responsible company and have made that a core element of our Group strategy. Our Corporate Responsibility strategy is derived from this. We identified four particular focal points where we aim to lead the way, two of which are related to the environment:

- Our strict commitment to climate-neutral business practices
- Our determined efforts to ensure our products and services are compatible with the principle of circularity

More information about our focus topics is available in the relevant section of the strategy chapter.

To support the Group’s climate strategy and achieve the Group’s ambitious targets, the national companies have developed and implemented their own climate change mitigation strategies, concepts, and measures.

Our integrated climate strategy is based on four pillars: emissions from the value chain; renewable energy; energy efficiency; and enablement (positive climate change mitigation effects for our customers). We have defined objectives and/or key performance indicators for each of the four pillars.

Emissions from the value chain
We record all direct and indirect emissions using the globally recognized Greenhouse Gas (GHG) Protocol. As of 2021, all of the electricity we use comes from renewable energy. This has enabled us to reduce the emissions generated to zero (see “Renewable energy”). Additionally, we are modernizing our network to make it twice as energy efficient (see “Energy efficiency”). We are also taking measures to reduce emissions tied to the use of gas or oil. For example, we are transitioning to e-mobility and are carrying out facility-space consolidations. This has enabled us to significantly reduce emissions and contribute to our goal of climate neutrality by 2025 for Scope 1 and 2 emissions.

Indirect emissions from the upstream and downstream value chain (Scope 3 emissions) pose the greatest challenge. Our goal is to become entirely climate neutral by 2040 at the latest. We consult closely with our suppliers in order to reduce the emissions generated during production, and to have products manufactured that are energy-efficient in their utilization phases.

Renewable energy
Since 2021, we have been drawing all of our electricity from renewable sources, having converted the entire Deutsche Telekom network, throughout the spectrum from mobile communications to high-speed DSL, to use renewables-only power. We are scaling up our in-house generation activities and concluding power purchase agreements (PPAs) with a view to reducing our reliance on the electricity grid. A PPA is a long-term electricity supply contract. For us, this additionally means that the electricity supplied always comes from renewable sources. We aim to meet 50 percent of our energy needs through PPAs by 2025. In Germany, PPAs already account for over 26 percent of the power we use. As of the end of 2023, 32.5 percent of the power used throughout the Group was obtained via PPAs. In 2020, we published a guide for the Deutsche Telekom Group, the purpose of which is to support our national companies in choosing the ideal solution for their individual needs by providing information on the various options they have available for the purchase of green electricity.

Energy efficiency
The rapid growth in data traffic and the resultant need for network expansion must not also lead to a corresponding rise in energy consumption. This is why we have committed to doubling our energy efficiency in Germany and Europe by 2024, relative to 2020 levels. This will involve producing more data while using a similar or far lower volume of energy. Two key means of reducing our energy consumption are network modernization and the phasing-out of old technologies.
We are aiming to reach climate neutrality across the Company. Our climate goals are:

- To achieve 100 percent electricity from renewable energy sources across the Group (Scope 2, market-based method) at the end of 2021.
- To achieve 5 percent of the remaining emissions through compensatory measures by the end of 2025 (Scope 1 and 2).
- To offset around 5 percent of the remaining emissions through compensatory measures.

As a general principle, where there are CO₂ emissions that we cannot avoid by using renewable energy, improving energy efficiency, or agreeing climate goals with suppliers, for example, we will offset these using compensatory measures that mean they are removed from the atmosphere in the long term, such as through natural sinks in which natural ecosystems absorb greenhouse gases from the atmosphere. We have set ourselves the quality requirement for offsetting that we only use high-quality removal projects in accordance with Oxford category IV and V, i.e., the removal of carbon through short- and long-term storage.

We developed our Group-wide climate goals in line with the current scientific and political conditions. For the current targets, the SBTi once again confirmed in the reporting year that our climate protection goals contribute to compliance with the Paris Agreement even under its stricter new guidelines. We developed a Climate Target Transition Plan in 2023 that we will detail further in 2024 in accordance with the future requirements of the European Sustainability Reporting Standards (ESRS). The plan enables us to manage and monitor the success of our reduction measures internally. It also helps us to inform our stakeholders about our journey towards net zero emissions. The SBTi also gave a positive assessment of the targets set by our subsidiaries in the United States and Hungary. The national companies are taking different steps to achieve these targets. These include power purchase agreements (PPAs) for procuring electricity from specific sustainable sources, such as wind and solar power. At the end of 2023, we were obtaining 32.5 percent of our electricity through these PPAs (prior year: 27.7%). By 2025, we intend to increase this percentage in Europe to 50 percent of our power consumption. Our aim is to actively support the sustainable production of electricity from renewable energies.
**Impact assessment for our materiality analysis**

Greenhouse gas emissions are associated with a detrimental impact on humans and the environment. For this reason, we have identified climate change mitigation as a key topic throughout the value chain in the impact assessment conducted as part of our materiality analysis. Analysis of the criteria “probability of occurrence” and “severity” has revealed that significant greenhouse gas emissions could be generated in the upstream value chain in particular (during raw material extraction and supplier activities), as well as in the downstream value chain, which comprises the utilization, disposal and recycling of products.

**Reporting against standards**

**Indicators for telecommunications providers from the GSMA Association (GSMA)**

- GSMA-ENV-01 (Science Based Target)

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**Climate Target Transition Plan: our journey towards net zero**

In the reporting year we started developing a Climate Target Transition Plan. The plan will also enable us to manage and monitor the success of our reduction measures internally. The transition plan shown here is an initial, simplified illustration that we use it to inform our stakeholders about our journey towards net zero emissions.

The Transition Plan is based on greenhouse gas calculations from previous years, as well as our short-, medium- and long-term climate targets. These targets include achieving climate neutrality by 2025 (Scopes 1 and 2), as part of which around 5 percent of unavoidable remaining emissions will be offset through high-quality neutralization projects (removal projects). We are also aiming for a reduction in total emissions by 55 percent in absolute terms by 2030 compared to 2020, and achieving net zero emissions by 2040. By this time, we will have reduced at least 90 percent of emissions in absolute terms and offset the remainder through high-quality neutralization projects (removal). The climate transition plan that we want to deploy to put our climate goals into practice particularly focuses on core levers such as the power consumption of our networks, fuel consumption in our fleet, thermal energy consumption in buildings, reducing emissions in supplier production processes, and increasing product efficiency in the utilization phase.

Practical measures to reducing emissions for Scopes 1 and 2 include:

- Continued procurement of electricity from renewable sources, with a focus on expanding power purchase agreements (PPAs) and our own generation
- Energy efficiency measures by using more efficient and decommissioning obsolete technologies
- Space reduction and modernization in buildings
- Electrification and reduction of our vehicle fleet
- Progressive electrification of heating with heat pumps.

In line with our sustainable procurement strategy a Group-wide task force is currently managing an initiative aimed at reducing emissions at supplier and product level. This task force plays a key role in coordinating efforts across all segments and ensures a consistent approach is taken to reducing emissions.

Other measures in a Scope 3 context include:

- extended product life
- Improving the energy efficiency of devices sold
- Increasing the proportion of renewable energy used by suppliers and customers
- sustainable procurement of materials and packaging

In this context, we intend to expand financial planning for implementing the envisaged emission reduction measures. The energy data and the Scope 1 and 2 emissions were integrated into the financial planning processes in 2022, with specific investment funding allocated to the reduction measures. Beginning in 2024, we will also integrate Scope 3 emissions into this predictive planning process. The details of the Climate Target Transition Plan will be fleshed out in close cooperation with the various segments and departments within Deutsche Telekom. The transition plan is based on current information, knowledge and indications and is regularly reviewed, developed and updated.

**Our approach to measuring our progress with climate change mitigation**

We calculate our emissions for our climate targets along the entire value chain, taking account of our own energy consumption (Scopes 1 and 2) and that of our upstream and downstream activities along our value chain (Scope 3), based on the method of the internationally recognized Greenhouse Gas (GHG) Protocol. We have broken down all our CO₂e emissions in detail here.

Indirect emissions from upstream and downstream activities along our value chain make up the majority of our total emissions. By recording them, we lay the foundation for reducing emissions in our value chains through targeted measures together with our suppliers and customers.

The emissions data enter into various KPIs that we use to measure our contribution to climate change mitigation and make our progress transparent. The Carbon Intensity and Energy Intensity KPIs are used to analyze the relationship between our CO₂e emissions or energy use and the transmitted data volume. Using data volume as a reference parameter makes it possible to create a direct link to the performance of our networks. We draw on the additional Enablement Factor and Renewable Energies KPIs to make our climate change mitigation activities more transparent and easier to manage.

The Board of Management is informed each year in detail by the Group Corporate Responsibility (GCR) unit about the status of the programs we have implemented to achieve our climate targets.
Climate target achievement
At the end of the year, our progress toward our targets was as had been forecast.

Electricity from 100 percent renewable energies
Since 2021, 100 percent of the electricity we use, Group-wide, has been sourced from renewable energies (Scope 2).

Climate neutrality by 2025 (Scopes 1 and 2)
Our targets call for us to achieve climate neutrality in the company by late 2025 (Scopes 1 and 2). We intend to offset around 5 percent of the remaining emissions through compensatory measures.

In the year under review, we reduced our Scope 1 and 2 emissions by 95 percent with respect to their 2017 levels.

Climate neutrality by 2040
We want to be climate neutral (net zero) in all three Scopes by 2040 at the latest, so that we no longer have any carbon footprint at all. To date, we have achieved 23 percent of this ambitious target. To allow us to better monitor our progress, in 2023 we replaced our interim target of reducing Scope 3 emissions by 25 percent per customer (compared with 2017) by 2030 with a more ambitious interim target: by 2030, we want to have achieved an absolute reduction of 55 percent in Scope 1 to 3 emissions (compared with 2020).
### Governance

#### Disclosures

**a) Describe the supervision of the Board of Management relative to climate-related opportunities and risks.**

- Since sustainability and climate change are important issues for Deutsche Telekom, efforts to address these issues are managed at the top level of the company. Our CEO, along with the other members of the Deutsche Telekom Board of Management, has responsibility for addressing climate-related issues throughout the entire Group. This extends to our climate strategy, our climate targets, and our climate-related opportunities and risks.

- The Deutsche Telekom Board of Management is informed annually concerning the current status of the company’s climate target achievement and regarding other company-related climate issues. Climate indicators (ESG KPIs “Energy Intensity,” ESG KPI “Carbon Intensity”) also form part of the quarterly report submitted to the Board of Management. As of January 1, 2022, the CEO has this responsibility.

- In addition, Deutsche Telekom’s risk management team reports to the Supervisory Board’s Audit Committee regarding ESG risks and opportunities on a quarterly basis. When unforeseen risks occur outside of the regular-reporting framework, they are flagged on an ad hoc basis, and reported to the company’s Board of Management and Supervisory Board. The key risks for the Deutsche Telekom Group are reported in our annual report.

Further information is available at:
- Current organizational structure
- Risk and opportunity management
- Addressing climate risks
- CDP questionnaire, C.2 Governance

**b) Describe the management’s role in assessing climate-related opportunities and risks.**

- Responsibility for managing the company’s efforts in connection with CR- and climate-related issues lies with the Group Corporate Responsibility department (GCR), supported by the Group-wide risk management team. That responsibility extends to evaluation of climate-related opportunities and risks. Responsibility for implementing the climate strategy rests with the Group business areas and segments.

An overview of Deutsche Telekom’s complete CR-organizational structure is available in the CR report.

Further information is available at:
- Risk and opportunity management
- Addressing climate risks
- CDP questionnaire, C.2 Governance
### Strategy

#### Disclosures

**a) Describe the climate-related opportunities and risks that the organization has identified for the short, medium and long terms.**

- The central climate-related risks include the possible failure of the network infrastructure, as a result of damage to the secondary infrastructure (such as through power failures) or failures of cooling systems. Another risk consists of possible network damage or failure as a result of network-infrastructure damage resulting from extreme weather events or changes in climate conditions. While these risks can result in short, medium and long-term damage, climate-related physical hazards are expected to increase in the future.
- The primary transitional risks mentioned include carbon prices and regulation of products and services – for example, via increased energy-efficiency requirements. In addition, there is a risk of negative stakeholder feedback and reputational damage. For the most part, the time horizon for these risks is seen as medium-term to long-term.
- With regard to opportunities, we have identified our increasing use of energy-efficient technologies, and growing demand for climate-friendly products and services, as significant climate-related opportunities.

Further information is available at:
- Progress in implementation of the TCFD recommendations
- CDP questionnaire, C.3 Risks and Opportunities

**b) Describe the impacts of climate-related opportunities and risks on the organization's business operations, strategy and financial planning.**

- Climate-related opportunities and risks have affected our business operations in many different ways. Energy efficiency, for example, is of great importance for Deutsche Telekom, since the network's energy consumption strongly affects operational costs. It is also important in light of the Group's strategic approach to climate change mitigation and of the growing concerns and expectations of our stakeholders. Consequently, we are now aiming to at least keep our annual energy consumption stable, despite the anticipated increase in data consumption. In Germany and Europe, we have set ourselves the target of doubling the energy efficiency of our networks by 2024 (compared with 2020) and thus reducing energy consumption further. Cutting energy consumption and reducing Scope 1 and 2 emissions image have each been declared as remuneration-related targets, with a 50-percent weighting in each case.
- For this reason, we have launched a number of programs for improving energy efficiency at our locations and in our operations. We have studied our value chain in order to identify potential for enhancing resource efficiency and reducing CO₂ emissions. We have also identified central action areas for future measures that are expected to make our company's operations more sustainable overall. The measures include, for example, labeling of products that are especially sustainable.

Further information is available at:
- Analysis of our products' sustainability benefits
- Energy consumption & efficiency
- Climate strategy
- CDP questionnaire, C.3.3 and 3.4 Business Strategy

**c) Describe the resilience of the organization's strategy, taking account of various climate-related scenarios, including a scenario with 2°C or less of warming.**

- We updated and expanded our physical climate risk assessment in 2023, analyzing physical climate risks at selected Deutsche Telekom locations in Germany and internationally. These locations included mobile and fixed-network sites and data centers whose functionality gives them a significant influence over our business operations. Thus, more than 2,500 locations were analyzed in light of different climate scenarios of the Intergovernmental Panel on Climate Change (IPCC): a business-as-usual scenario (RCP 4.5/SSP2–4.5), with a global temperature increase of more than two degrees, and a four-degree scenario (RCP 8.5/SSP5–8.5). The RCP-2.6/SSP1–2.6 scenario, which entails a temperate increase of less than two degrees, was also available. Further details are provided here in the CR report.
- Currently, we are extending our scenario analysis to additional international locations, with a view to a full assessment of our organization's long-term resilience. In a first step in this effort, we brought several of the largest national companies into the process: the OTE Group in Greece, Magyar Telekom in Hungary, and Hrvatski Telekom in Croatia. With the help of comprehensive materiality assessments, the companies' key locations in this context were identified and analyzed in terms of the physical risks they face. The same physical risks and climate scenarios are applied in all cases throughout the Group.
- In addition, the International Energy Agency's (IEA's) Net Zero Emissions by 2050 Scenario (NZE Scenario), which is a 1.5-degree scenario, was applied with regard to transitory opportunities and risks. That scenario considers political, social and technological changes that the transition to a low-carbon economy would bring and that would lead to various risks and opportunities for our company. The Net Zero Scenario has thus supplanted the Sustainable Development Scenario (SDS) in this role.

Further information is available at:
- CDP questionnaire, C.3.2, Business Strategy – Scenario Analysis
Risk management

Disclosures

a) Describe the organization’s processes for identifying and evaluating climate-related risks.

- In 2023, we updated our climate risk analysis once again: within the framework of various workshops with experts from the areas of technology, procurement, and strategy and risk management, we defined the main climate-related opportunities and risks and began weighting them. In the process, we considered the consequences, for our business operations, that could result from the physical impacts of progressing climate change. In addition, we analyzed the impacts resulting from political, technological, and social developments tied to the transition toward a low-carbon economy that has been initiated. Further details are provided here in the CR report.

- The process for identifying the opportunities and risks tied to climate change comprises the following:
  - Screening of media and NGO publications
  - Actively supporting the work of various industry associations that are studying the issue of climate change, such as GeSI, econsense, Stiftung 2°, ICC, GSMA, and ETNO
  - Initiating and participating in stakeholder dialogs on the issue of climate change
  - Analyzing responses to the CDP supply-chain program
  - Analyzing relevant inquiries of rating agencies, such as S&P Global Corporate Sustainability Assessment (CSA), CDP, Sustainalytics, etc.

- The process for evaluating the opportunities and risks tied to climate change comprises the following:
  - Identifying and quantifying the important trends
  - Calculating the impacts on operations
  - Analyzing the impacts on the value chain - We financially quantified our transitory risks in 2022 in order to verify the qualitative materiality analysis from the workshops. The quantification for a number of risks was already published in the CDP questionnaire 2022. The resulting financial impacts will then be taken into account in the company’s planning. Management instruments for taking account of climate change mitigation in investment decisions are regularly reviewed for feasibility and benefit (instruments such as an internal carbon price, for example).

b) Describe the organization’s processes for addressing the climate-related risks.

- On an expert-knowledge basis, opportunities and risks are evaluated in terms of their potential financial impacts (on EBITDA-AL) and of the probability of their occurrence. Where opportunities and risks cannot be quantified, their potential impacts can be reported in qualitative terms. Once risks and opportunities have been identified, they are analyzed and evaluated, in detail, in terms of the probability of their occurrence and their potential financial impacts. This can be done with the help of a scenario analysis, for example. Then we decide what concrete measures need to be taken in order to reduce the risks or exploit the opportunities. As a next step, in each case the relevant risk owner implements the measures, and monitors and evaluates their effectiveness. As necessary, the above steps are repeated and adjusted in light of the latest pertinent developments and decisions.

Further information is available at:
- Board of Management’s assessment of the aggregate risk and opportunity situation
- CDP questionnaire, C2.2 Risks and Opportunities – Description of processes

c) Describe how the processes for identification, evaluation, and management of climate-related risks are integrated within the organization’s risk management.

- Our processes for identification and evaluation of climate-related risks are completely integrated within company-wide, multidisciplinary processes for risk identification, evaluation, and management. On a quarterly basis, risks and opportunities (with impacts of over EUR 100 million on EBITDA) are identified via a Group-wide risk management process (RMP) that has been developed, and is managed, by the Group Risk Governance department. The RMP provides methods and systems for identification and evaluation of risks and opportunities. The responsibility for reporting on Group risks and opportunities is divided among the relevant business units; consequently, GCR is responsible for climate risks. Further information on the risk process is available in our annual report. The risk area also works closely with GCR to identify material climate-related opportunities and risks, and participates in internal workshops.

Further information is available at:
- Risk and opportunity management system
- CDP questionnaire, C2.2 Risks and Opportunities – Description of processes
## Performance indicators and goals

<table>
<thead>
<tr>
<th>Disclosures</th>
<th>Input</th>
</tr>
</thead>
</table>
| a) Disclose the types of measurements that your organization uses, in accordance with its strategy and risk management process, to evaluate climate-related opportunities and risks. | The most important performance indicators for measurement and management of climate-related opportunities and risks are as follows:  
- Scope 1 to 3 emissions  
- Share of renewable sources of energy  
- Energy consumption  
- ESG KPI “Energy Intensity”  
- ESG KPI “Carbon Intensity”  
- Enablement factor  
- Waste volume (including e-waste)  
- Waste management and recycling  
- Water consumption  
- Land use  
- In addition, we calculate the share of our revenue that is sustainability-oriented, and we continually analyze the sustainability benefits of our products.  
- Historical performance indicators of Deutsche Telekom and its national companies are published in the interactive benchmarking tool of the CR report. |
| b) Disclosure of greenhouse-gas (GHG) emissions (Scope 1, Scope 2 and, if applicable, Scope 3) and of the pertinent risks | Deutsche Telekom discloses its Scope 1 to 3 emissions annually, in its CR report and annual report.  
- The Scope 1 and 2 emissions are calculated in accordance with the GHG Protocol. The calculation of Scope 3 emissions is based on the GHG Protocol.  
- The carbon intensity for Deutsche Telekom’s network operations is published annually in the company’s CR report and annual report (ESG KPI “Carbon Intensity”). This KPI shows CO₂ emissions in relation to managed data volumes.  

Further information is available at:  
- Benchmarking tool  
- CDP questionnaire, C4 Metrics and targets |
| c) Describe the goals the organization uses in the context of efforts to manage climate-related opportunities and risks, and performance, in relation to goals. | The two non-financial performance indicators “energy consumption” and “CO₂ emissions” (Scopes 1 and 2) have been included as components of the variable remuneration of the members of the Board of Management since 2021, and in 2022 were also made relevant for our international executives (excluding T-Mobile US), as well as all Group employees in Germany not covered by collective agreements. For selected important functions, achievement of targets oriented to specific areas of responsibility enters into the calculation of performance-based remuneration. This also applies to goals based on the ESG KPI “Socially Responsible Investment (SRI)” and on the target “Listing of T-Shares in sustainability indexes/ratings”, which reflect climate-change issues and the CR KPIs “Energy Intensity” and “Carbon Intensity,” which are directly related to those issues.  
- Deutsche Telekom AG’s climate targets are published in the CR report.  
- Our targets with regard to energy efficiency are disclosed here.  
- Here, we also publish targets for sustainable procurement. |
Progress in implementation of the TCFD recommendations

In 2020, we carried out a gap analysis to determine the extent to which our measures already conformed to the TCFD recommendations (see here). During the year under review, we supplemented the gap analysis and, operating within the framework of the EU Taxonomy and the Corporate Sustainability Reporting Directive (CSRD, ESRS E1), incorporated other requirements into the corporate climate risk analysis.

In 2023, we again updated our climate risk analysis: within the framework of various workshops with experts from the areas of technology, procurement, and strategy and risk management, we defined the main climate-related opportunities and risks and began weighting them. In the process, we considered the consequences, for our business operations, that could result from the physical impacts of progressing climate change. In addition, we analyzed the potential impacts resulting from political, technological, and social developments tied to the transition toward a low-carbon economy that has been initiated. The analysis also involves a financial quantification of transitory risks.

The important climate-related risks include possible network-structure failures as a result of damage to secondary infrastructure (involving power failures, for example) or failures of cooling systems. Another risk consists of possible network damage or failure as a result of network-structure damage due to extreme weather events or changes in climate conditions.

The important climate-related opportunities we have identified include the increasing use of energy-efficient technologies (in network operations, for example), and growing demand for climate-friendly products and services.

In a next step, we analyzed selected Deutsche Telekom locations in Germany, Hungary, and Croatia with regard to their physical climate risks. These locations included mobile and fixed-network sites and data centers whose functionality gives them a significant influence over our business operations. We analyzed over 2,500 locations in total, using the Climate Change Edition of reinsurance company Munich Re’s Location Risk Intelligence software. The analysis covers nine indexes (see graphic). We considered the risks for the various locations in light of two climate scenarios of the Intergovernmental Panel on Climate Change (IPCC): a business-as-usual scenario (RCP 4.5/SSP2–4.5), with a global temperature increase of more than two degrees, and a four-degree scenario (RCP 8.5/SSP5–8.5). In addition to studying the climate scenarios, we looked at risks in various time frames: currently, for the years 2030, 2040, 2050 and for 2100.

The following graphic shows a simplified excerpt of the results: the risks for the year 2050, in keeping with the four-degree scenario:

The scenario analysis shows that only minor physical risks apply for the majority of the company’s locations in Germany. We anticipate moderate risks, due, for instance, to heat, for our Croatian and Hungarian locations. We are prepared for the impacts of physical risks, such as changes in precipitation patterns and extreme weather variability. As shown by examples such as the fierce forest fires in Greece 2023, and the disastrous floods of July 2021, extreme weather events are already capable of causing local damage to our telecommunications infrastructure. Consequently, our risk management is based on multiple pillars – we structure Deutsche Telekom’s telecommunications networks with built-in resiliency. For example, we use ring structures to ensure that failures of individual network components do not affect the services we provide for our customers. For most of our critical locations, we use uninterruptible power supply (UPS) systems incorporating batteries and mobile and stationary diesel generators. Such systems can normally provide emergency power for several hours in the event of power failures. Our crisis management also helps with rapid recovery in the event of disruptions. The risks of damage to buildings and to Deutsche Telekom’s network infrastructure are covered by insurance policies. Further information is available in the chapters “Addressing climate risks” and “Risk and opportunity management”.

The analysis has been extended to other countries and we are currently working on a full-scale international roll-out.
The continuing refinement of our risk management, in keeping with the TCFD requirements, is also important from a regulatory perspective, especially in light of the EU Taxonomy guidelines. The criteria for the environmental goal “Climate change adaptation” require — as does the TCFD — companies to study physical climate risks and to be aware of the potential impacts on their business activities. With our TCFD process, we have laid the foundation for the climate risk analysis that is needed to fulfill the taxonomy criteria. More information on the implementation and the results of the taxonomy-aligned climate risk analysis can be found in the “EU taxonomy: compliance” section.

Addressing climate risks

In the context of our integrated climate strategy, we determine climate-related risks and opportunities for us as a company and for the management of rescue operations, for example, sometimes even rendering such emergency efforts entirely impossible. In order to be able to react appropriately in these cases, we have defined the necessary responsibilities, processes, and measures in our internal “Group Policy on Continuity and Situation Management.” Additionally, the policy outlines how to handle emergency and crisis situations like floods.

We also take possible consequences of climate change into account when planning our future business activities. For example, our network infrastructure is set up to be better protected from extreme weather events, changes in temperature, and high winds and keep mobile supply infrastructure on hand for emergencies.

Financial risks

Climate change also carries financial risks, whether from levies on CO₂ emissions or through an increase in energy costs. Our contribution to the mitigation of these risks includes measuring our own energy efficiency and developing measures for improvement. To prevent infrastructure failure due to extreme weather events, additional investment in a more robust infrastructure might be necessary.

Prevention

We also help our customers deal with the adverse effects of climate change (adaptation). In the event of an imminent catastrophe, our infrastructure can be used, for example, to send alerts via early warning apps. Climate change adaptation is part of the EU Taxonomy Regulation, which we discuss here.

United States segment: climate targets

The mission of T-Mobile US is to be the best in the world at connecting customers to their world by enabling them to stay digitally connected with the help of its products and services. At the same time, the company recognizes that providing connectivity to its customers also has an impact on the environment. By taking bold steps to reduce its environmental footprint, T-Mobile US can help create a more sustainable future for everyone. Mobilizing network, people, and partnerships to support a thriving planet is a key focus area of the ESG approach adopted by T-Mobile US.

A science-based approach to net-zero

In 2023, T-Mobile US announced its commitment to achieve net-zero emissions across its entire carbon footprint by 2040. This makes it the first in the US telecommunications industry to set a science-based commitment to become net-zero. The target has been validated by the Science Based Targets initiative (SBTi) using its Net-Zero Standard and includes near-term and long-term commitments to bring about a 55 percent reduction in Scope 1, 2 and 3 emissions by 2030 and a 90 percent reduction by 2040, from a 2020 base year.

The Climate Pledge

Knowing that collaboration is key to tackling climate change, T-Mobile US also signed onto The Climate Pledge, a cross-sector community of companies and organizations working together to solve the challenges of cutting global carbon emissions for a sustainable future. The Climate Pledge was co-founded by Amazon and Global Optimism in 2019 to establish a collective commitment to achieve net-zero emissions ten years ahead of The Paris Agreement. Organizations signing up also agree to measure and report greenhouse gas emission on a regular basis.

Climate risk and oversight

The network resilience strategy pursued by T-Mobile US evaluates technology disruptions and climate-related impacts to mitigate risk. We track progress on network resiliency and evaluate our network sites for vulnerabilities to environmental change.
ESG KPI “Carbon Intensity” DT Group
This year sees us reporting our carbon intensity on the basis of two different indicators: data volume and revenue. Both KPIs take into account total CO₂e emissions (Scopes 1 and 2) for all energy sources – electricity, fuel, gas and district heating.

We began to report our CO₂e emissions in proportion to our managed data volumes in 2016 in the form of the ESG KPI “Carbon Intensity” – data volume. Using data volume as a reference parameter makes it possible to create a direct link to the performance of our networks. The data volume is composed of the transmitted IP data volumes (including Voice over IP, Internet, IP-TV).

Our ambition in this connection: reduce the KPI

There has been a significant reduction in carbon intensity, relative to data volume, since 2021.

In preparation for future reporting in accordance with the CSRD, this year we are not only reporting carbon intensity relative to data volume, but also carbon intensity relative to revenue. This allows us to measure our progress in reducing our CO₂e emissions within the context of our economic performance.

Reporting against standards
Global Reporting Initiative (GRI)
• GRI 305-4 (Emissions)

Task Force on Climate-related Financial Disclosures (TCFD)
• The most important key figures for measuring and managing climate-related opportunities and risks

Principle Adverse Impacts (PAIs)
• Greenhouse Gas Emissions

Indicators for telecommunications providers from the GSM Association (GSMA)
• GSMA-ENV-02 (Scope 1, 2, and 3 emissions)

Total CO₂e emissions (Scopes 1 to 3) in the DT Group
We present our Scope 1 to 3 greenhouse gas emissions uniformly so that they can be compared with each other. To that end, emissions are converted into metric kilotons of CO₂ equivalents (CO₂e). In addition to CO₂, we also consider CH4 and N2O, and are working on integrating HFCs (refrigerants) into the calculation as well. Biogenic CO₂ emissions were not recorded separately for the year 2023, as they only occur to a small extent. We break down the emissions that occur along our value chain; this gives us an overview of where in the value chain the majority of them occur.

By making a complete transition to electricity from renewable energies in 2021, we were able to considerably reduce our Scope 2 emissions. In 2023, market-based Scope 1 and 2 emissions throughout the Group amounted to around 217 000 metric tons of CO₂e, or about 6.9 percent lower than in the previous year.
In 2023, Scope 3 emissions decreased in comparison with the previous year – from 11.8 million metric tons to around 10.5 million metric tons of CO₂e. This reduction partly resulted from methodology adjustments for upstream activities in particular. Most of the Scope 3 emissions resulted from the manufacture of products and components (in particular devices and network technology), and from the use of our products and services (for example, sold or rented fixed-line and mobile phones, routers, and media receivers) by our customers. Some 2 million metric tons of CO₂e are additionally generated during the utilization phase of our solutions by devices that our customers purchase from third parties and not from Deutsche Telekom. As we have only a negligible influence on these devices and hence on their energy consumption and emissions, we have reported these emissions separately since 2022. Since 2022, emissions caused by visits to Telekom Shops by our customers have also been included for Germany and Europe.

Currently, we are studying various factors that will influence the quantities of our future emissions (Scopes 1 to 3). For example, our suppliers’ climate-protection efforts are having a positive impact. In addition, lower power mix factors, and improved energy efficiency in the devices used in connection with our products and services, can be expected to lower emissions. The fall in emissions from our employees commuting to and from work also has a small positive impact. On the other hand, it is possible that higher numbers of (new) devices used in connection with our products and services will increase emissions.

Data assured by Deloitte. Data partly based on estimates, assumptions and projections. Includes compensation from purchased certificates.
Reporting against standards
Global Reporting Initiative (GRI)
- GRI 302-2 (Energy)
- GRI 303-3 (Management of material topics)
- GRI 305-1 (Emissions)
- GRI 305-2 (Emissions)
- GRI 305-3 (Emissions)

Task Force on Climate-related Financial Disclosures (TCFD)
- The most important key figures for measuring and managing climate-related opportunities and risks

Principle Adverse Impacts (PAIs)
- Greenhouse Gas Emissions

Total CO₂e emissions (Scopes 1 to 3) in segments
In addition to discussing the emissions of the Group as a whole, we provide separate information on Scope 1 to 3 emissions for the segments. We present our Scope 1 to 3 greenhouse gas emissions in a consistent manner, so that they can be compared with each other. To that end, emissions are converted into metric kilotons of CO₂ equivalents (CO₂e). In addition to CO₂, we also consider CH4 and N2O, and are working on integrating HFCs (refrigerants) into the calculation as well. Biogenic CO₂ emissions were not recorded separately for the year 2022, as they only occur to a small extent. We also break down emissions along our value chain. This gives us an overview of where most of the emissions are produced in the chain.

In all segments, most of these emissions occurred in the upstream value chain, as well as in our customers' use of our products and services. In those emissions, we also include emissions resulting from the use of our services by our customers' own devices, such as laptops or tablet computers.

Further details about all segments are provided here in the benchmarking tool.

Germany segment
In 2023, market-based Scope 1 and 2 emissions for the Germany segment amounted to around 85,000 metric tons of CO₂e. The Scope 3 emissions were 2.1 million metric tons of CO₂e, thereby accounting for the largest emissions share.
United States segment
In 2023, market-based Scope 1 and 2 emissions for the United States segment amounted to around 46,000 metric tons of CO₂e. The Scope 3 emissions were 6.3 million metric tons of CO₂e, thereby accounting for the largest emissions share.

Europe segment
In 2023, market-based Scope 1 and 2 emissions for the Europe segment amounted to around 49,000 metric tons of CO₂e. The Scope 3 emissions were 1.6 million metric tons of CO₂e, thereby accounting for the largest emissions share.
System Solutions segment

In 2023, market-based Scope 1 and 2 emissions for the Systems Solutions segment amounted to around 8 000 metric tons of CO₂e. The Scope 3 emissions were 0.3 million metric tons of CO₂e, thereby accounting for the largest emissions share.

CO₂e emissions (Scope 1–3) for System Solutions

Reporting against standards

Global Reporting Initiative (GRI)
- GRI 302–2 (Energy)
- GRI 305–1 (Emissions)
- GRI 305–2 (Emissions)
- GRI 305–3 (Emissions)
4-year trend: total CO₂e emissions (Scopes 1 to 2) in the DT Group

Our CO₂ emissions are largely driven by fleet fuels, fossil fuels and district heating. The table below contains detailed information about the Group numbers for the Scope 2 emissions resulting from our electricity consumption. We differentiate between the market-based and location-based methods, thereby adhering to the GHG Protocol Scope 2 Guidance. Market-based and location-based emissions are displayed in CO₂ equivalents. This conversion was undertaken to facilitate transparent comparison between Scope 1 to 3 emissions and to align consistently with the requirements of the Science Based Targets initiative to which the new goal is also oriented.

The market-based approach is the main method used in our reporting. This method is used to calculate emissions with a specific emissions factor (provider factor) per DT company. This factor depends on a company’s actual energy procurement (electricity mix); procuring renewable energy (direct purchase, certificates) reduces emissions.

In contrast to the market-based method, with the location-based method the emissions factors for the respective country (the country mix factor) of the International Energy Agency (IEA) are used across the board. A company’s actual energy procurement (electricity mix), including the procurement of renewable energy that goes beyond the country mix, is therefore not taken into account.

Change compared to 2020: The Scope 2 emissions calculated according to the market-based method are about 99 percent lower than in 2020. The marked difference between the 2023 and 2020 figures is a result of the Group-wide use of green electricity, PPAs, and guarantees of origin. Since 2021, we have been sourcing 100 percent of the electricity we use, throughout the Group, from renewable energy sources. By reaching this milestone, we have achieved one of our climate targets.

Reporting against standards
Global Reporting Initiative (GRI)
- GRI 305-1 (Emissions)
- GRI 305-2 (Emissions)

Task Force on Climate-related Financial Disclosures (TCFD)
- The most important key figures for measuring and managing climate-related opportunities and risks

Principle Adverse Impacts (PAIs)
- Greenhouse Gas Emissions

Indicators for telecommunications providers from the GSM Association (GSMA)
- GSMA-ENV-02 (Scope 1, 2, and 3 emissions)
4-year trend: total CO₂e emissions (Scope 3) in the DT Group

The majority of our total emissions can be classified as Scope 3 emissions. Scope 3 emissions are all emissions from upstream or downstream value chains that are produced in supply chains, through business travel, through employee commuting (upstream) or through customers’ use of products and services (downstream). They are determined in accordance with the globally accepted Greenhouse Gas (GHG) Protocol.

In order to reduce our Scope 3 emissions, we are placing increasing priority on climate-protection criteria in our supply chains. This commitment is reflected in our CDP Supplier Engagement Rating, for which we have been repeatedly awarded the top grade of “A” in recent years. The rating for the year under review had not yet been announced at the time of the publication of this report. Our ESG KPI “CDP Supply Chain Program” indicates the degree to which our procurement volume from carbon-intensive suppliers is covered by the CDP Supply Chain Program. We are also leveraging the benefits of blockchain technology and the NFT approach as part of a research project that aims to create a decentralized application for making visible the impact of product manufacture and transport by suppliers on Scope 3 emissions. A blockchain infrastructure is being established for collecting data on CO₂ emissions along the supplier value chain. A unique NFT is being created for the data collected and will be handed over to suppliers in the form of a certificate of participation listing all relevant values. We also began talks with our key suppliers on implementing our climate change mitigation requirements by means of a Supply Chain Emissions Reductions task force.

The graphic presents our Scope 3 emissions from 2020 to 2023, broken down by emission source. In 2023, upstream emissions accounted for about 73 percent of our Scope 3 emissions, while downstream emissions accounted for about 26 percent. The basic data used to calculate Scope 3 emissions are reported in the benchmarking tool. More information about determination of Scope 3 emissions throughout the value chain is available here.

Reporting against standards
Global Reporting Initiative (GRI)
- GRI 302-2 (Energy)
- GRI 305-3 (Emissions)

Principle Adverse Impacts (PAIs)
- Greenhouse Gas Emissions

Indicators for telecommunications providers from the GSMA Association (GSMA)
- GSMA-ENV-02 (Scope 1, 2, and 3 emissions)
CO₂ compensation KPI

Our efforts to prevent greenhouse gases include relying on renewable energies, and reducing our energy consumption through more energy-efficient technologies. So far, however, this has not allowed us to prevent all CO₂ emissions, which is why we offset those emissions by investing in certified climate change mitigation projects (including events in Germany).

Our Event Policy specifies the ways in which we offset emissions generated by events. In 2023, we offset over 17,000 metric tons of CO₂ through various measures. 15,000 metric tons of CO₂ were offset through renewable energy projects. We offset a further 1,400 metric tons of CO₂ through carbon removal projects. The projects are designed to remove carbon from the atmosphere and store it on a permanent basis.

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<thead>
<tr>
<th></th>
<th>2021</th>
<th>2022</th>
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<tr>
<td>Carbon offsets total</td>
<td>18,494</td>
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<td>17,400</td>
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<td>Carbon removal projects</td>
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<td>2,400</td>
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<td>Renewable energy projects</td>
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<tr>
<td>Energy efficiency projects</td>
<td>0</td>
<td>8,646</td>
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</tr>
</tbody>
</table>

We are aiming to reach climate neutrality by the end of 2025. We plan to achieve this goal by investing in measures for capturing CO₂ emissions and have defined the cornerstones of our strategy. We only consider projects that capture and store CO₂ permanently or for the long term and satisfy the Oxford categories IV and V at a minimum. In this context, we conducted an extensive market study and will pursue a mixture of nature-based removals (through reforestation, for example) and tech-based removals (such as technological solutions for carbon disposal), with the aim of successively increasing the technology-oriented share. We also consider the failure of potential projects and their interaction with other requirements (such as local communities) in our planning, to ensure our objective of long-term capture.
Our approach to more renewable energy
We had set ourselves the following goal for the end of 2021: for the Group as a whole to meet 100 percent of its electricity requirements with renewable energy sources. And we have achieved this goal. As a result, we now meet more than 90 percent of our total energy requirements with renewable energy sources. To underscore this commitment, we have joined the global RE100 initiative, which aims to advance the purchase of electricity from renewable sources.

In this context, we are sourcing more green electricity directly, acquiring corresponding guarantees of origin, or concluding special power purchase agreements (PPAs). As of the end of 2023, 32.5 percent of the power used throughout the Group was obtained via PPAs. In Germany and Europe the figure was 30 percent. We aim to increase this figure to 50 percent by 2025 in Germany and Europe. Whenever possible and practicable, we invest in our own power plants, such as cogeneration plants or photovoltaic systems.

As of the end of 2023, we operated over 308 photovoltaic systems in Germany, for our own electricity requirements, with a total generating capacity of about 6.01 MWp (Megawatt-peak). In 2023, we pressed ahead with the construction of further PV systems. In 2024, we plan to commission a three-digit number of PV systems.

We use the ESG KPI “Renewable Energy” to measure our progress. In addition, we have also introduced parameters throughout the Group that are used to assess electricity procurement at all of our national companies in terms of sustainability.

Since 2019, we have been testing a climate-neutral power supply for cellular base stations in which we use fuel cells instead of diesel generators. Fuel cells are economical, silent, low-maintenance and, most importantly, thanks to the use of bio-methanol, carbon neutral.

ESG KPI “Renewable Energy”
The ESG KPI “Renewable Energy” is calculated as the share of renewable energy in the Group’s total electricity consumption. Since 2021, we have been sourcing 100 percent of the electricity we use, throughout the Group, from renewable energy sources. By reaching this milestone, we have achieved one of our climate targets.

We are working to reduce our energy consumption overall, by improving our energy efficiency and implementing energy-saving measures. Further information can be found here.

Although we meet our power requirements wherever possible via PPAs, our own power generation, and direct purchases, capacity limitations require us to also depend on sources for which guarantees of origin (GOs) come into play. GOs are an important element in our efforts to meet 100 percent of our electricity requirements via renewable energy sources and thereby achieve our climate target in this area.
Reporting against standards
Global Reporting Initiative (GRI)
- GRI 302-1 (Energy)

Task Force on Climate-related Financial Disclosures (TCFD)
- The most important key figures for measuring and managing climate-related opportunities and risks

Sustainability Accounting Standards Board (SASB)
- Code TC-TL-440a.1 (Product End-of-life Management)

Indicators for telecommunications providers from the GSM Association (GSMA)
- GSMA-ENV-03 (Energy Consumption)

Renewable energy in the Group
Group-wide, we cover 100 percent of our electricity consumption using renewable energies. To this end, all European national companies can also purchase renewable energy certificates (guarantees of origin) if needed. As of this year, the graphic also includes other renewable energies, such as renewable district cooling.

During the year under review, Vattenfall began work to construct Germany’s largest agrivoltaic installation in Mecklenburg–Western Pomerania. The energy supplier plans to establish a combination of solar panels and agricultural activity over an area of 93 hectares. Telekom Deutschland intends to purchase all of the solar energy produced there once it has been completed. The 79 MW installation has the potential to supply energy to some 2,500 cellular base stations.

The partnership between PASM and energy utility EnBW promises to deliver clean energy from the North Sea. Deutsche Telekom has signed a new PPA that will see it receive 400 GWh of wind energy per year in future from the “He Dreieht” (Dutch for “He turns”) wind park, one of EnBW’s largest offshore wind parks in Europe. Construction is due to begin in May 2024.

Energy from photovoltaic systems
Deutsche Telekom continued to fit photovoltaic systems to more of its roof surfaces and open spaces in 2023. The addition of new buildings in the year under review means that the Group’s photovoltaic capacity has increased in many locations. These properties will also be fitted with photovoltaic panels in coming years. For the sake of efficiency, PASM works with energy start-ups such as ENVIRIA and Emondo, among others.

Building our own power storage systems
Power storage plays a key role in the generation of green energy, which is weather-dependent. For this reason, PASM began to build large storage systems in 2022. These systems store surplus renewable energy for subsequent use as required. Construction work commenced on some of the storage solutions in 2022 and was continued at four Deutsche Telekom sites in Germany in the year under review. Once this work is complete, the company will have a total storage capacity of 300 MWh. With these efforts, Telekom Deutschland is leading the way in the telecommunications industry.

Germany segment: renewable energy
The Germany segment aims to expand and operate its networks on a responsible, environmentally friendly and sustainable basis. To this end, like all other Group departments, it is meeting its energy needs entirely using renewable sources.

Purchasing electricity from renewable energy sources
Power purchase agreements (PPAs) for green energy are a key instrument in Germany’s energy transition. Deutsche Telekom subsidiary Power & Air Solutions (PASM), which supplies Telekom Deutschland with energy, is steadily increasing the proportion of energy it purchases under these PPAs. Some 495 GWh of energy were purchased via PPAs in 2023.
Our approach to energy-efficient networks
We operate our own fixed-line and mobile networks in Europe and the United States. The majority of our energy requirements come from operating this network infrastructure. We are continuously increasing the capacity and performance of our networks to handle growing amounts of data and improve the speed and quality of data transmission. We are also aiming to stabilize our energy consumption and increase our energy efficiency by 2024, in spite of growing data traffic and our network expansion. In a Group-wide technology-innovation project, we are studying and developing new ways of making our network operations even more energy-efficient and sustainable. In the process, we are looking especially carefully at the areas of energy transport, energy availability, and energy efficiency. For example, we plan to optimize energy consumption in our mobile and fixed-network operations, and to develop innovative solutions for generating and storing renewable energy for use at cellular base stations.

In 2020, we published an energy guideline applicable throughout the Group. It helps our national companies implement our Climate Strategy. The guideline compiles selected measures and proposed solutions for better energy efficiency, including operational energy-saving functions, optimized energy management, decommissioning of legacy systems, and/or the use of more energy-efficient technologies.

We are pursuing various approaches to stabilize our energy consumption and increase energy efficiency:

- We are updating our network infrastructure and investing on an ongoing basis in new and more efficient network technologies to this end. Legacy technology is being replaced as part of this process.
- We have established specifications and requirements that firmly anchor energy efficiency within the architecture and design phase when selecting new technologies. This applies, for instance, to the lighting, monitoring and, above all, cooling of our plants.
- We are expanding our use of photovoltaic systems at Deutsche Telekom locations. In the process, we are emphasizing use of power storage systems and intelligent load management. Power & Air Solutions is testing innovative technologies such as fuel cells; energy generation from waste heat, via gas turbines; and ice-storage systems for support of mechanical cooling systems.
- We are working with a telecommunications supplier in the renewable energy sector to enhance the sustainability and efficiency of the energy generation activities at our cellular base stations. Making integrated use of solar energy at these stations allows us to optimize energy consumption, as confirmed by initial tests. The first successful lab tests have also laid the foundation for using zero-emission fuel cells to supply climate-neutral energy to the cellular base stations. We are still in the pilot phase here.
- Also, in the framework of our energy management in Germany, we are working to reduce the energy requirements of our buildings. We continuously monitor consumption values and use this data to identify potential for improving efficiency. The energy management practices of our internal energy service provider Power & Air Solutions have also been ISO 50001 certified since 2013.

Impact assessment for our materiality analysis
In the impact assessment for our materiality analysis, we have identified energy-intensive processes along our value chain. The use of fossil-fuel energy in the upstream and downstream value chain is still widespread, making a particularly large contribution to global warming and placing pressures on humans and the environment. The disposal of electronic waste can also pose further problems for the environment and human health. At the same time, providing infrastructure for optimizing energy efficiency is a proven way of reducing the energy consumption of other industries and individuals.

In order to address these risks, we involve our suppliers in our environmental initiatives as part of our supplier management process.

Reporting against standards
Global Reporting Initiative (GRI)
- GRI 302 3–3 (Management of material topics)
- GRI 305 3–3 (Management of material topics)
Investing in renewable energy at scale helps the segment to diversify its portfolio. T-Mobile US has also continued to expand its portfolio of long-term community solar agreements across the US. Supporting these projects enables the company to use its electricity purchasing power for good, bolstering their financial viability and sending clean energy to local utility grids.

T-Mobile US also has shorter-term Retail Renewable Agreements with the remaining portion of its portfolio matched with unbundled Renewable Energy Certificates (RECs). The company has three on-site solar energy projects in development with the first one due to become operational in 2024.

**Germany segment: energy consumption and efficiency**

The Germany segment is working to successively increase energy efficiency and minimize energy consumption. Total energy consumption stood at 2.3 TWh in the year under review.

**Increasing energy efficiency**
The Germany segment has once again implemented several measures during the year under review to increase energy efficiency. One key aspect of these efforts was the use of power saving features to minimize energy consumption in mobile operations. The process for dismantling outdated Synchronous Digital Hierarchy (SDH) platforms was accelerated. These measures supplement initiatives that have already been implemented, such as dismantlement of the obsolete Public Switched Telephone Network (PSTN) to make way for the more advanced Integrated Services Digital Network (ISDN), and optimization of technical infrastructure, including modernization of rectifiers.

**Energy-saving ideas from employees**

During the year under review, Telekom Deutschland encouraged its employees to submit energy-saving ideas at MagentaG – the quarterly town hall meeting providing updates on activities within the segment. A total of 130 ideas were submitted, including practical proposals such as switching off PCs rather than putting them into standby mode, or installing motion sensors for reducing the electricity consumption of lighting.

**United States segment: energy management**
The approach adopted by T-Mobile US to sustainable energy management includes investing in energy efficiency measures to conserve energy where possible and purchasing renewable energy to account for the electricity consumed. Mobilizing its resources, people, and partnerships to support a thriving planet is one of the four pillars of the ESG approach at T-Mobile US.

As customers’ data consumption continues to grow, T-Mobile’s aim is to power its network more efficiently and avoid a corresponding increase in its energy consumption. To track this, the segment set a bold goal of reducing its energy consumption by 95 percent per petabyte of data traffic by 2030 from a 2019 baseline.

T-Mobile US is committed to minimizing the environmental impact from its energy use. In early 2018, the segment joined RE100, a global corporate renewable energy initiative, and set out to source all of its electricity from renewable energy by 2021 — another US wireless first. T-Mobile US has achieved this goal on schedule since 20211, and remains committed to maintaining this position while exploring new renewable energy projects to further diversify its portfolio.

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**Europe segment: energy efficiency**

We improved our energy efficiency by around 20 percent in the Europe segment during the year under review, with data volume growing faster than the consumption of energy used to provide services. This has been made possible by investments in modern technology, as well as the deactivation of legacy network technologies.

Our networks account for around 70 percent of our total energy requirements in the Europe segment, approximately 50 percent for mobile and 20 percent for fixed network. The expansion of these networks has led to an increase in our energy demand, which the national companies have offset by implementing modernization, modification, and other savings measures in mobile and fixed-network operations.

For example, the Greek OTE Group has successfully tested an AI-based tool, which has delivered savings in the mobile network. Some 15 GWh of savings were achieved in 2023. Energy savings were also made in the mobile sector as a result of deactivating the 3G networks in North Macedonia, Montenegro, and Slovakia. Additionally, a network partnership concluded with O2 in Slovakia in 2023 is enabling significant reductions in energy consumption in the mobile network.

**Smarter buildings**

Renovations at several of the company’s corporate offices and Customer Experience Centers provided an opportunity for T-Mobile US to create greener buildings by switching to LED and motion-activated lights, as well as touchless faucets in bathrooms.

**Energy-saving ideas from employees**

**Increasing energy efficiency**
The Germany segment has once again implemented several measures during the year under review to increase energy efficiency. One key aspect of these efforts was the use of power saving features to minimize energy consumption in mobile operations. The process for dismantling outdated Synchronous Digital Hierarchy (SDH) platforms was accelerated. These measures supplement initiatives that have already been implemented, such as dismantlement of the obsolete Public Switched Telephone Network (PSTN) to make way for the more advanced Integrated Services Digital Network (ISDN), and optimization of technical infrastructure, including modernization of rectifiers.

**Energy-saving ideas from employees**

During the year under review, Telekom Deutschland encouraged its employees to submit energy-saving ideas at MagentaG – the quarterly town hall meeting providing updates on activities within the segment. A total of 130 ideas were submitted, including practical proposals such as switching off PCs rather than putting them into standby mode, or installing motion sensors for reducing the electricity consumption of lighting.

**United States segment: energy management**
The approach adopted by T-Mobile US to sustainable energy management includes investing in energy efficiency measures to conserve energy where possible and purchasing renewable energy to account for the electricity consumed. Mobilizing its resources, people, and partnerships to support a thriving planet is one of the four pillars of the ESG approach at T-Mobile US.

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The switch from copper to fiber-optic cables in the fixed network is helping to achieve faster and more efficient data transmission and thus to reduce energy consumption. We have made progress on this front in many countries.

We also cut our energy consumption by making more efficient use of office buildings. This involved consolidating our locations by subletting and selling vacant space. Air-conditioning units and heating systems were run in economy mode at the remaining locations. Additionally, we introduced AI- and other software-based savings measures. The Hungarian national company successfully
tested an AI-based application at its headquarters during the year under review. This application uses sensors to detect when employees enter the building and adjusts the heating or air-conditioning accordingly. This software enabled Magyar Telekom to optimize the use of its building in 2023, delivering some 1.78 GWh in energy savings. One of the OTE Group’s buildings in Attica, Greece was also certified “good” under the Building Research Establishment Environmental Assessment Method (BREEAM) during the year under review; prior to this, it had been renovated in accordance with international environmental and energy standards.

**System Solutions segment: energy efficiency throughout the value chain**

As part of Deutsche Telekom, the System Solutions segment has also committed itself to the Group-wide climate targets. The segment set up its own program to this end in 2020, with a focus on two areas: its own processes on the one hand and its product offering and business customer enablement on the other.

**Data center energy efficiency**

T-Systems is gradually making its data centers more energy-efficient, with the aid of innovative technologies and artificial intelligence. As an operator, T-Systems is careful to use energy-efficient server and storage hardware. As part of its Data Center Next program, launched in 2019, it is making use of efficiency-enhancing measures, such as selective cooling of individual areas, and operating temperature increases within possible ranges – always in conformance with defined thresholds. Testing is being carried out with regard to gradually raising the operating temperature at data centers, with a one degree increase corresponding to an energy efficiency gain of approximately 1 percent. Software features which allow unused hardware to be switched off entirely without affecting currently running applications will be used for further optimizations. The medium- to long-term goal is to refine the cloud applications to meet energy efficiency requirements (green coding). T-Systems continue to work on optimizing energy efficiency in all data centers. Since launching the Data Center Next program, we have already reduced energy consumption in our data centers by over 37 percent.

T-Systems has participated in the EU Code of Conduct on Data Centre Energy Efficiency (EU DC CoC) since 2014. EU DC CoC is voluntary in nature and aims to motivate operators and owners of data centers to reduce energy consumption and hence their negative impact on the environment, the economy, and energy supply security. The initiative refers to this type of involvement as “participation.” The related European Commission page provides transparent, detailed information about the participation of individual data centers. T-Systems also joined the Climate Neutral Data Centre Pact (CNDCP) in 2021. With this move, it has committed to making all of its own data centers, and the externally operated data centers within its sphere, climate neutral by 2030 at the latest. T-Systems were certified as an official member by the CNDCP in 2023, following an audit of the following five areas: energy efficiency, renewable energy use, water efficiency, circular economy for electronics, and circular economy for heat. T-Systems’ data centers around the world have been running on 100 percent renewable energy since 2021. To this end, renewable energy is sourced directly wherever it is available. Where this is not possible electricity requirements are covered by concluding power purchase agreements (PPAs), generating our own energy, or purchasing guarantees of origin. You can find more information on renewable energy at Deutsche Telekom here.

The European Commission presented the T-Systems data center in Biere with the European Code of Conduct Award in 2023. The award recognized the data center for its PUE score, best practices and energy-efficiency methods, among other things. With a PUE of 1.3, the data center in Biere is one of the most energy-efficient in Europe.

At the end of 2023, T-Systems operated a total of 16 FMO (Future Mode of Operation) twin-core data centers in Europe at eight sites – eight for internal and eight for external processing – in addition to four local customer-specific data centers. Seven of the eight internal European FMO twin-core data centers, plus one external FMO twin-core data center, have been included in the EU Code of Conduct list since 2023. By taking part in the “EU Code of Conduct”, T-Systems meets an important criterion for achieving taxonomy alignment under the EU Taxonomy for sustainable activities (EU Taxonomy). More information about the commitment within the framework of the EU Taxonomy is available here.

![Data centers are becoming more energy-efficient](image)

**Raising awareness among employees**

The company’s employees, at all of its production sites and in all countries in which it is located, are being made more aware of the need to think and act with sustainability in mind (for instance, by promoting alternative mobility solutions, participating in “campaign days” focused on sustainability, participating in sustainability-oriented workshops, and providing information about ways to reduce power and resource consumption). The susTain Roadshow was held for the first time during the year under review, with 120 colleagues in four German cities using the opportunity to find out about T-Systems’ sustainability activities. There were presentations as well as opportunities for attendees to get involved.
These activities were supplemented by an open call to raise awareness of sustainability issues among employees around the world as well. 377 participants dialed in to learn more and engage in dialog. We also ran formal dialog events and smaller learning units with our international subsidiaries in which we provided information on sustainability and support for implementing the measures locally.

T-Systems supports relevant employee initiatives, such as the Green Pioneers in Germany. Moreover, Sustainability is an integral part of the onboarding program for all new T-Systems employees. An employee training course was developed in 2022 to train up staff members as sustainability ambassadors. Over 600 employees have already completed the course. In the year under review, T-Systems and Deutsche Telekom began to develop a digital Deutsche Telekom Sustainability Campus for all employees, which will comprise three competence levels. The first module is set to be made available during the first six months of 2024.

**Expanding the green fleet**

In January 2023, Deutsche Telekom issued an internal directive in Germany to only order company cars with electric drive systems going forward. This requirement has been applicable internationally for the Systems Solutions segment since 2022. T-Systems had a total of 1,959 company cars in its fleet at the end of 2023, 382 of which were electric vehicles. At this same time, most of our Meet & Connect Hubs had been fitted with charging stations. Meet & Connect Hubs are the central locations of T-Systems and are designed to offer the ideal environment for working in teams. They provide collaboration rooms and innovative spaces that cover a whole range of requirements and uses.

**More sustainable buildings**

T-Systems was able to reduce its building capacity in Germany by more than half during the year under review, which also reduced heating and district heating. T-Systems also plans to offset CO₂ emissions through the use of neutralization technologies such as vertical farming, with a pilot project set to launch at its data center site in Biere in 2024.

**ESG KPI “Energy Intensity” DT Group**

This year sees us reporting our energy intensity on the basis of two different indicators: data volume and revenue. Both KPI figures take into account total energy consumption for all energy sources – electricity, fuel, gas, and district heating.

We began to report our energy consumption in proportion to our managed data volumes in 2016 in the form of the ESG KPI “Energy Consumption” – data volume. Using data volume as a reference parameter makes it possible to create a direct link to the performance of our networks. The data volume is composed of the transmitted IP data volumes (including Voice over IP, Internet, IP-TV).

Our ambition in this connection: reduce the KPI.

Data assured by Deloitte. Data is partly based on estimates, assumptions and projections.

There has been a steady reduction in energy intensity, relative to data volume.

In preparation for future reporting in accordance with the CSRD, we are this year reporting not only energy intensity in proportion to data volume, but also energy intensity in proportion to revenue. This allows us to measure our progress in reducing our energy consumption within the context of our economic performance.

To enable better comparison between this indicator and the ratio of energy intensity to data volume, we slightly modified the calculation methodology for the Group’s values in 2023. Starting in 2023, we now include the energy consumption of all segments, including those outside our fixed-network and mobile business segments (such as cloud business).
Reporting against standards
Global Reporting Initiative (GRI)
- GRI 302–3 (Energy)

Task Force on Climate-related Financial Disclosures (TCFD)
- The most important key figures for measuring and managing climate-related opportunities and risks

Principle Adverse Impacts (PAIs)
- Greenhouse Gas Emissions

Indicators for telecommunications providers from the GSM Association (GSMA)
- GSMA-ENV-03 (Energy Consumption)

ESG KPI “Energy Intensity” in segments
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Our ambition in this connection: reduce the KPI

Germany segment
In the reporting year, the energy intensity in relation to the data volume for the Germany segment amounted to around 28 kWh/terabyte.

United States segment
In the reporting year, the energy intensity in relation to the data volume for the United States segment amounted to around 154 kWh/terabyte.

The energy intensity over time in relation to data volume shows a steady reduction in the Germany segment.

In the reporting year, the energy intensity in relation to sales for the Germany segment amounted to around 90 kWh/million euros.

In the reporting year, the energy intensity in relation to sales for the United States segment amounted to around 106 kWh/million euros.

Data assured by Deloitte. Data is partly based on estimates, assumptions and extrapolations.
Europe segment

In the reporting year, the energy intensity in relation to the data volume for the Europe segment amounted to around 40 kWh/terabyte.

In the reporting year, the energy intensity in relation to sales for the Europe segment amounted to around 148 kWh/million euros.

Total energy consumption

Total energy consumption decreased by 7.64 percent year-on-year.

Further details on all segments can be found in the key figures tool.

Reporting against standards

Global Reporting Initiative (GRI)
- GRI 302–3 (Energy)

Task Force on Climate-related Financial Disclosures (TCFD)
- The most important key figures for measuring and managing climate-related opportunities and risks

Sustainability Accounting Standards Board (SASB)
- Code TC-TL-130a.1 (Environmental Footprint of Operations)
Indicators for telecommunications providers from the GSM Association (GSMA)

- GSMA-ENV-03 (Energy Consumption)

“PUE” ESG KPI: lower carbon emissions in data centers

We are continually improving the energy efficiency of our data centers through a range of measures. The Power Usage Effectiveness (PUE) metric serves as one indicator for energy-efficiency enhancements in our data centers. We determine this metric using the method recommended by the standard EN 50600 for data centers, which has to take the total energy consumed by data centers into account – and not only that used to operate the servers. The PUE factor is calculated using the ratio between the total electrical energy consumed by the data center and the amount of electrical energy consumed by IT.

In 2023, the average global PUE score for our T-Systems data centers was 1.53. For our data centers in Germany, we reduced the PUE from 1.85 in 2008 to 1.52 in 2023; this value is significantly below the average for all data centers in Germany, which is around 1.70. Our most-efficient high-availability data center has a PUE of 1.24. This will allow us to compensate, in part, for increases in IT systems’ energy requirements as a result of growing volumes of data. Energy consumption is also reduced relative to the increasing processing power of the IT systems as a result of the positive effect on energy efficiency and, by extension, the PUE score. The energy needs of our T-Systems data centers are met entirely using renewable sources.

Reporting against standards

Sustainability Accounting Standards Board (SASB)

- Code TC-TL-130a.1 (Environmental Footprint of Operations)
Enablement factor

Enablement factor: customers reducing CO₂ emissions
ICT solutions enable customers to save on resources, and thus reduce their emissions, through efficiency gains and dematerialization. At the same time, customer savings must not be canceled out by an increase in emissions generated through the provision of digital services. The enablement factor is calculated to give us an overview of this ratio and thus our overall contribution to climate change mitigation – be that positive or negative. The enablement factor shows the savings potential for our customers in relation to our own carbon footprint. An enablement factor of 2, for example, means that customers save twice as much CO₂ when using our digital solutions as Deutsche Telekom consumes in total for those solutions. Our solutions thus make a positive overall contribution to reducing emissions and climate change mitigation.

Since 2014, we have been drawing on data to study the potential savings that various products can achieve on the user side; we carried out 15 such assessments in 2023. Since 2021, we have been recording the emission reductions from the installation of efficient wall charging stations for electric cars, known as wallboxes. The largest savings potential (in Germany) is found in virtual working, that is, in the use of our broadband infrastructure and web- and video-conferencing solutions to enable employees to work from home. Other major savings potential lies with cloud computing, which allows for better utilization of capacity thanks to a modern, energy-efficient, shared IT infrastructure that runs on green electricity. More powerful servers, more energy-efficient data centers, and higher infrastructure capacity utilization can thus cut energy consumption and the associated emissions for our customers by up to 80 percent.

In addition, we are currently supporting the European Green Digital Coalition (EGDC) in its work to develop an industry standard for calculating emissions savings from ICT products. This standard is designed to increase transparency and credibility and lead to improved comparability when calculating savings.

ESG KPI “Enablement Factor” DT Group in Germany
We use the ESG KPI “Enablement factor” to calculate the positive CO₂ effects facilitated for our customers through using our products and shows them in relation to the emissions we generate in delivering these products. This allows us to measure our overall performance in terms of climate change mitigation. According to this figure, the positive CO₂ effects facilitated for our customers in Germany were 378 percent higher in 2023 than our own CO₂ emissions (enablement factor of 4.78 to 1). The year-on-year increase (enablement factor of 3.8 to 1) is due primarily to the reduction in our Scope 3 emissions. The enabled emissions savings remained at almost the same level as the previous year, despite the loss of savings from smart logistics and a significant decline in savings from video conferences.

Our products and solutions generated positive CO₂ effects for our customers amounting to 16.9 million metric tons in the year under review.

Our ambition in this connection: increase the KPI

Reporting against standards
Global Reporting Initiative (GRI)
• GRI 305–5 (Emissions)
**Reporting against standards**

**Global Reporting Initiative (GRI)**
- GRI 305–S (Emissions)

**Task Force on Climate-related Financial Disclosures (TCFD)**
- The most important key figures for measuring and managing climate-related opportunities and risks

**ESG KPI “Enablement factor” in the DT Group in Europe**
The positive CO₂ effects facilitated for our customers across Europe were 260 percent higher in 2023 than our own CO₂ emissions (enablement factor of 3.6 to 1).

Our products and solutions generated positive CO₂ effects for our customers amounting to almost 20.5 million metric tons in the year under review.

We use the ESG KPI “Enablement Factor” to calculate the positive CO₂ effects facilitated for our customers through using our products.
Our approach to circular economy
Consumption of natural resources continues to increase globally. According to the German Environment Agency (UBA), the use of non-renewable raw materials in particular is associated with significant intervention in ecosystems and the water balance, and gives rise to waste and pollution.

Our goal is to make our product portfolio increasingly sustainable. In this connection, we are taking a holistic approach to conserving resources and are working to ensure that resources are used responsibly throughout our entire value chain. We aim to make products and materials as durable as possible and to ensure they are always recycled at the end of their lifetimes. Recycling products and materials and using them for longer not only saves on resources, but also reduces energy use and emissions, thus contributing to climate change mitigation. By 2030, we intend to ensure that almost all of the products we bring into circulation can be returned to the circular ecosystem. This also applies to the network technology we use. Additionally, we work to ensure that the products and services we use at the workstations in our office facilities, in our Telekom Shops and in our data centers are compatible with the circular economy. Office supplies and materials for marketing are one example of such products.

Our approach in this area is holistic, covering the areas “Resource efficiency in operations,” “Green products and services” and “Waste prevention and recycling” (see graphic).

Waste prevention and recycling
We are committed to the reuse and proper recycling of electronic devices. The zero waste approach and the associated ‘waste pyramid’ concept provide the key frame of reference for us in this regard. This is why, for example, we offer products (our routers, for instance) for rental and accept returned used devices (such as cell phones). Wherever possible, we refurbish returned devices for resale and reuse, i.e., put them back into circulation. In some of our flagship stores in Europe, we offer what we call repair bars, where we repair or replace displays, rechargeable batteries, and back covers of devices from several manufacturers. Products that cannot be reused are properly recycled as part of our waste management process. For recycling of copper cables, we have adopted a special guideline that is binding throughout the Group. Such cables are being partially replaced over the course of our fiber-optic rollout.

Green products & services
We are constantly enhancing our range of sustainable offerings – throughout a spectrum from environmentally friendly products and services to our green shops. In addition, we strongly encourage our suppliers to use resources responsibly and to reuse materials wherever possible. This includes reducing the amount of plastic, paper and packaging they utilize, and using recycled materials.

The basis: a certified management system
With our health, safety, and environmental management system (HSE), we have made a commitment to continually improving our performance in these areas. In 2021, it was successfully recertified, until the end of 2024, in accordance with the international standards ISO 45001 on occupational health and safety, ISO 14001 on environmental management, and ISO 9001 on quality management. Surveillance audits were carried out in 2022 and 2023 for this purpose. Our Group environmental policy, which was amended and adopted by the CR Board during the year under review, summarizes all of the current voluntary ecological commitments in effect throughout the Group. The amendments were made in response to the growing relevance of topics such as the circular economy, biodiversity, and water scarcity, and include updates to the EMF Policy.

European targets
Our European national companies have set themselves the target of being fully circular around devices by 2030 within the framework of our EU strategy for resource efficiency. This means introducing appropriate measures to ensure that their device portfolio is fully circular by the end of the decade. This also includes striving to ensure throughout Europe that no electronic waste produced by
Deutsche Telekom’s national companies, and no returned devices, such as smartphones, routers, or laptops, wind up in landfills – and that such waste and devices (where not refurbishable) are properly disposed of or recycled as they would be in Germany (target: "Zero Waste for ICT to Landfill!"). This target was achieved by the end of 2022.

Sustainable packaging
As of mid-2022, all Deutsche-Telekom-branded products launched on the market have been packaged sustainably throughout Europe, in keeping with our Sustainability Packaging Guideline. Packaging for smartphones that we purchase from our suppliers must also meet these criteria. In the 2023 reporting year, we were not aware of any violations of the packaging guidelines by suppliers in this context. We monitor compliance with the criteria by means of regular factory audits.

Measurement of progress
We are continually working to improve our performance indicators to be able to review our Group-wide progress. In 2021, we developed a comprehensive new set of performance indicators. This has enabled us to set clear-cut goals and to report transparently on progress. The ESG KPI “Mobile Device Take-Back” existed prior to the overhaul of our set of performance indicators, and we have also been keeping records since 2021 of the numbers of items of Customer Premises Equipment (CPE) we have collected, for instance. We measure progress toward copper cable recycling with the KPI “Copper Cable Recycling.”

Impact assessment for our materiality analysis
Most resources for the manufacturing and use of our products and network infrastructure are consumed in both upstream and downstream stages of the value chain – with our suppliers and customers. It was here that a negative impact risk was identified as part of the impact assessment for our materiality analysis. Consumption of natural resources continues to increase globally, negatively affecting biodiversity and climate change, and giving rise to waste and pollution. We intend to counteract this with our ambitious circularity target and resulting initiatives.

Reporting against standards
Global Reporting Initiative (GRI)
- GRI 301 3-3 (Management of material topics)
- GRI 306 3–3 (Management of material topics)
- GRI 306–2 (Waste)

Sustainability Accounting Standards Board (SASB)
- Code TC-TL-440a.1 (Product End-of-life Management)

Resource efficiency at the workplace
We also contribute to resource efficiency at the workplace by endeavoring to use as many green office supplies as possible. In 2023, over 80 percent of all of our catalog-based office supplies in Germany were sustainable. We also took the following measures in Germany:
- Our “IT Remarketing” project: Used IT hardware is refurbished so that it can be reused.
- Our partner, the charitable organization “AfB gemeinnützige GmbH”, which offers jobs for people with disabilities, receives some of our used IT hardware (e.g., laptops) for reconditioning and reselling.
- In our catalog of office supplies, over 80 percent of products are classified as sustainable, meaning they have been awarded a label recommended by the German Environment Agency (UBA). This is an increase of 15 percent from the previous year. The labels in question include the EU Ecolabel, the Fairtrade seal, the Organic Farming seal, the Blue Angel eco-label, and the FSC® and PEFC environmental labels. Office supplies are delivered largely in accordance with the carbon neutrality certificate. On our “You and Me UNITED” social network, we also offer our employees a platform where they can exchange used office supplies instead of ordering new supplies.
- Since 2018, we have worked with a paper wholesaler to purchase only environmentally certified paper that has been awarded the Blue Angel certificate. Additionally, we are looking to work with a range of projects and initiatives to further reduce our paper consumption.
- To meet the requirements of the Minamata Convention and curb mercury emissions, we are working to modernize the media technology used in our company.

Less food waste in cafeterias
Since 2020, we have been offering our employees discounted items in the cafeterias after 4 p.m. at two locations in Germany. Employees can purchase food that would otherwise have to be thrown away, such as baked goods, salads, and muesli, at half price. In addition, our staff have had the option, since 2021, of getting their midday meal as a takeaway lunch in reusable containers (“REBOWL”). We also joined forces with Sodexo, the company running our cafeterias in Germany, to introduce the RECUP returnable cup at many Deutsche Telekom sites in Germany in 2018.

Resource efficiency in the network and IT infrastructure
We are currently carrying out projects in this area in various segments. The common goal: we want to achieve our climate change mitigation targets, meet circularity requirements, and introduce a holistic total cost of ownership (TCO) approach for our network and IT infrastructure.
- Projects to promote energy efficiency and energy saving measures in Germany and Europe
- Group-wide innovation project for developing new approaches for optimizing energy use and costs
- Modernizing our network infrastructure
- Network circularity
Our measures for copper cable recycling are a practical example of such a project that we are currently implementing.

**Germany segment: contribution to achieving a circular economy**

The Germany segment uses resources prudently, the goal being to avoid creating waste wherever possible, extend the usage lifetime of products, and recycle valuable materials as fully as possible. The segment is pursuing a range of approaches in this context to motivate customers to use their devices for longer. We also take care to handle electronic waste properly and avoid producing waste that would need to be disposed of in landfill.

**Reuse and recycling of electronic products**

The Germany segment is committed to the reuse and proper recycling of the electronic products used by our customers.

It refurbished almost one million customer devices (such as routers and TV set-top boxes) for reuse in 2023.

Of these refurbished items, the segment sold or rented out around 460,000 fixed-network devices, and offered its customers some 450,000 devices as a replacement.

We only recycle products that we are unable to reuse, ensuring that they are processed properly. This amounted to approximately 600,000 devices in 2023.

**Second life for used smartphones**

Our “Handyankauf” (phone buybacks) scheme in Germany allows customers to give their smartphones a second lease of life by selling them to our partner Assurant for refurbishment. They are currently over 1,700 models in our buy-back portfolio. We also offer refurbished smartphones in perfect working order with a 24-month warranty via our “ReUse MyMobile” service. Refurbishing smartphones in this way allows us to increase their usage lifetime and reduce the annual carbon footprint of the Germany segment and its customers. Our “Handyankauf” and “ReUse MyMobile” programs have both been awarded the #GreenMagenta label.

The Germany segment is working with circular-tech specialist Fox-bile” programs have both been awarded the #GreenMagenta label.

Our measures for copper cable recycling are a practical example of such a project that we are currently implementing.

**United States segment: minimizing waste**

T-Mobile US is committed to diverting as much waste from landfills as possible through recycling, composting, avoidance, and digitization across the business. An important part of these efforts is educating employees on what recycling and disposal options are available to them across facilities.

**E-waste**

As a telecommunications company, managing electronic waste – or e-waste – responsibly across our network is a priority. Every piece of network equipment that keeps us connected contains precious metals, glass, or other raw materials. This is why T-Mobile US aims to recover electronic equipment and products by repairing, reusing, recycling or reselling whenever possible.

T-Mobile US continues to assess its network equipment to see what can be repaired and reused elsewhere across the business to reduce costs and environmental impact.

**Device Reuse and Recycling Program**

For end-of-life treatment of consumer devices, T-Mobile US enables responsible device recycling for customers through its Device Reuse and Recycling Program. This program facilitates collection, upcycling and recycling of smartphones, tablets, smartwatches, hotspots, or IoT items at T-Mobile US stores for free.

For device trade-ins, T-Mobile US provides a trade-in estimator tool that gives customers an immediate offer on eligible devices.

Any device that cannot be repaired for reuse is recycled with partners that are certified to the R2 standard which provides a common set of processes, safety measures and documentation requirements. R2 is rigorously and independently audited, emphasizing quality, safety and transparency, including any devices exported for refurbishment and recycling.

T-Mobile US continues to responsibly manage its e-waste through its repair, reuse, and recycling programs.

**Reporting against standards**

**Global Reporting Initiative (GRI)**

- GRI 301–3 (Materials)
- GRI 306–2 (Waste)
Many of us have discarded or defective cell phones gathering dust in a drawer somewhere. We intend to contribute to saving resources and preventing waste by allowing our customers to return these devices. Obsolete or defective phones will be properly recycled, with valuable resources being extracted in the process. We launched the Good Cause initiative in 2022 to underscore the importance and necessity of saving resources.

All of our national companies from the segment were involved in the initiative. We intend to collect one million discarded devices by the end of 2024 to refurbish them for reuse or to put the valuable resources they contain back into circulation.

All national companies take back used cell phones, primarily at their stores, but also via other channels, such as the targeted take-back campaigns that ran in Poland and Croatia in summer 2023. The ongoing take-back process in Croatia and North Macedonia even carries the #GreenMagenta label. Up until now, most of the national companies have only offered a limited number of refurbished smartphones. Before putting these devices back into circulation, we check whether they are suitable for refurbishment and refurbish those that are. Since the fourth quarter of 2023, our customers, initially in Croatia and Poland, have been able to purchase used smartphones that are in good condition as part of a trade-in scheme. The Hungarian national company has been working with the firm Recommerce since 2023 to offer a large number of refurbished mobile devices. Refurbished cell phones in Austria have been awarded the #GreenMagenta label. Other countries in the Europe segment are planning to launch a similar program in 2024.

For every phone collected, the national companies make a donation to local projects as part of the Good Cause initiative. These projects work in areas such as marine conservation, forest conservation, or ICT solutions to tackle climate change. Alternatively, national companies may support NGOs operating locally with their projects or initiate projects of their own.

We outline selected projects of the European national companies below.

Many of our national companies conducted clean-up campaigns during the year under review with the aim of raising public awareness of the problem of marine pollution and at the same time encouraging people to collect electronic waste themselves. For instance, the OTE Group in Greece worked with NGO Enaleia to support the “COSMOTE BLUE” project in summer 2023. The goal was to clear the beaches and seas of plastic waste in the Thermaic Gulf, Halkidiki, the Argo-Saronic Gulf, and Crete, involving local fishing communities in the endeavor. Our national company in Montenegro organized a similar event for International Coastal Cleanup Day. Held in mid-September each year, it is the country’s largest voluntary initiative, bringing participants together to clean up coasts and riverbanks. Slovak Telekom worked with NGO BROZ in Slovakia to restore and protect wetlands in the Donau-Auen National Park that had been damaged by human activity.

There were also a number of forest conservation and reforestation initiatives for promoting sustainable agriculture, pond cultures, and forestry, along with the production of regional produce. Magenta Telekom in Austria, for example, has been working with NGO Gut Ottenstein since 2022 to support a project around the Ottenstein Reservoir, where extensive damage from storms, bark beetle infestations and the like necessitates the planting of new trees.

The national company in North Macedonia joined forces with the Scout Association of Macedonia to run a reforestation program in regions of forest that had suffered severe fire damage.

In Hungary, our national company is assisting the WWF with using an environmentally friendly, low-cost monitoring system to maintain five newly created wetland areas. The system aids the supply of water to these areas, which will most likely be at risk in future from rising mean temperatures and more irregular rainfall patterns resulting from climate change.

T-Mobile Czech Republic is supporting the “Clever Landscape” project, a long-term endeavor of the Czech University of Life Sciences in Prague. The project is being conducted in an area measuring over 1,700 hectares as part of the “Smart Forest Landscape Jevany” initiative. The goal is to identify and introduce the most effective measures for mitigating the impact of water scarcity and changes in precipitation patterns resulting from climate change. We are leveraging our IoT technologies and data transmission capabilities on the 5G network to help develop an adapted landscape that should withstand the effects of climate change for years to come.

**Reporting against standards**

**Global Reporting Initiative (GRI)**

- GRI 301–3 (Materials)
- GRI 306–2 (Waste)

**Take Back Mobile Devices ESG KPI (including cell phones)**

We report the ESG KPI “Mobile Device Take-Back” based on the reference value “number of mobile devices in circulation.” This makes it possible to show the ratio of collected devices to the number of devices sold. When the devices are used for longer periods of time, the environment benefits and, as a result, this has a positive impact on the KPI.

Our ambition in this connection: increase the KPI.
In 2023, over 8 million cell phones were collected throughout the Group. The corresponding KPI for the Group-wide value is thus 25.5 percent. The aim of the scheme for collection of used mobile devices is to give the devices a second life and, where that is not feasible, to properly recycle them, in order to recover the valuable raw materials they contain. This has conserved resources, and it has helped to improve the life cycle assessments for mobile devices overall.

The quantities of collected devices are reported in kilograms or in numbers of items. When using kilograms, we apply a Group-wide conversion factor of 7.25 items per kilogram, except where a different conversion factor is typically used in the country concerned. The mobile devices in circulation include smartphones, simple phones, tablets, and cordless phones. In the interest of data quality, numbers of items are reported by Procurement.

Reporting against standards
Global Reporting Initiative (GRI)
- GRI 301–3 (Materials)
- GRI 306–1 (Waste)

Sustainability Accounting Standards Board (SASB)
- Code TC-TL-440a.1 (Product End-of-life Management)

Indicators for telecommunications providers from the GSM Association (GSMA)
- GSMA-ENV-04 (Materials Repaired or Reused)

Take Back CPEs ESG KPI (including fixed-line)
In keeping with our circularity strategy, we also promote refurbishment and proper recycling of Customer Premises Equipment (CPE). The CPE category includes modems, routers, repeaters, and TV receivers. The aim of the scheme for collection of such devices is to give the devices a second life and, where that is not feasible, to properly recycle them, in order to recover the valuable raw materials they contain.

We have recorded the ESG KPI “CPE Take-Back” and the numbers of refurbished CPE items involved since 2021. In 2023, more than 4 million CPE items were collected across the Group, and 36 percent of that quantity were refurbished.

Reporting against standards
Global Reporting Initiative (GRI)
- GRI 301–3 (Materials)
- GRI 306–1 (Waste)

Sustainability Accounting Standards Board (SASB)
- Code TC-TL-440a.1 (Product End-of-life Management)

Indicators for telecommunications providers from the GSM Association (GSMA)
- GSMA-ENV-04 (Materials Repaired or Reused)
Waste management and recycling
We are careful with resources – and likewise with waste. Waste management throughout our entire Group is organized consistently in line with the International Waste Management Framework. On the basis of this framework, our national companies define their own measurable targets and monitor progress toward those targets. This enables them to flexibly comply with general conditions specific to each country and company.

The impact assessment in our materiality analysis identified a negative impact resulting from the generation of waste at office locations, network build-out work and our data center operations. We strive to avoid creating waste wherever possible and to recycle as much as possible of the waste we do produce. We are pursuing a range of approaches in this context to ensure that we manage electronic waste in a controlled manner and avoid it ending up in landfills, where waste that is not properly disposed of poses a risk of contamination to soil and watercourses. For example, the waste pyramid provides us with a methodological framework for avoiding creating waste in the first place and for carefully and properly handling any waste that really cannot be avoided. The pyramid is broken down into hierarchical levels that must be followed: prevention, reuse, recycling, utilization (to generate electricity, for example), and disposal. Our focus in this context is not limited to the waste generated by Deutsche Telekom directly; we also take account of the devices that are required to use our telecommunications services and that are sold to our customers through our channels. Further information on the circular economy can be found here. In 2021, our European national companies defined the following common aim: to ensure, by 2024, that no electronic waste they produce, and no returned devices, such as smartphones, routers, and laptops, wind up in landfills – and that such waste and devices are properly disposed of or recycled as they would be in Germany. We achieved this goal by the end of 2022 and are planning to roll out implementation to T-Mobile US and T-Systems in future. Additionally, we are constantly working to refine our Group-wide set of performance indicators for waste management, and we now also collect data on recycling of technology and hazardous waste as well as monitoring quantities of waste produced.

Reporting against standards
Global Reporting Initiative (GRI)
- GRI 306 3–3 (Management of material topic)
- GRI 306–1 (Waste)
- GRI 306–2 (Waste)
- GRI 306–4 (Waste)
- GRI 306–5 (Waste)
Sustainability Accounting Standards Board (SASB)
- Code TC-TL-440a.1 (Product End-of-life Management)

Waste production (including e-waste)
As part of our waste management program, we transparently track our waste production. In 2021, we added a performance indicator for technology waste to our set of KPIs. As a result, we are now able, for the first time, to differentiate between electronic waste (e-waste), cable waste, and other technology waste. We have not defined Group-wide targets for the reduction of hazardous and non-hazardous waste. The national companies are guided by our International Waste Management Framework adopted in 2013; they use it as a basis for developing or revising their own waste management strategies. They are also setting their own targets, giving top priority to reducing hazardous waste such as lead batteries.

Group-wide waste increased by 5 percent compared with 2022. A major factor in this rise is the 5G mobile network build-out work currently underway, the associated dismantlement of older 3G technology, and the fiber-optic build-out in the fixed network. We provide detailed information on the figures for each individual company in our interactive benchmarking tool.
Waste generation Deutsche Telekom Group

**Reporting against standards**

- Global Reporting Initiative (GRI)
  - GRI 306-3 (Management of material topic)
  - GRI 306-1 (Waste)
  - GRI 306-3 (Waste)

- Sustainability Accounting Standards Board (SASB)
  - Code TC-TL-440a.1 (Product End-of-life Management)

**Principle Adverse Impacts (PAIs)**

- Waste

**Indicators for telecommunications providers from the GSM Association (GSMA)**

- GSMA-ENV-05 (Waste Generated)

**Paper-free and low-paper work**

Running a large company like Deutsche Telekom involves high paper consumption. For several years now, we have gradually been reducing our paper consumption. With our Paperless Office project, we aim to completely eliminate paper use by 2025.

Print on demand has many advantages. For example, quick reference guides can be printed as needed depending on orders and don’t need to be preprinted, transported, and stored. Changes to information sheets for our customers can be made on short notice, eliminating large quantities of outdated documents that need to be destroyed. In 2021, we expanded this project, and print on demand is now available for printing quick reference guides for all the rate plans we offer in Germany (MagentaZuhause, MagentaTV, business-customer and hybrid plans). We also reviewed whether there are other materials suitable for print on demand – such as those containing brochures and SIM cards. The process is not yet suitable for all of the materials we work with. This applies to the SIM cards for our hybrid plans, for example. Since March 2021, print-on-demand instructions have been marked with our #Green-Magenta label.

Data audited by Deloitte. Data is partly based on estimates, assumptions and projections. Data is partly provided by external service providers.
In 2023, we implemented various measures in Germany with a view to minimizing our consumption still further. We have already cut paper consumption by 85 percent in various paperless stores throughout Europe, not least by opting not to offer printed brochures and flyers in our shops.

**Reporting against standards**

Global Reporting Initiative (GRI)

- GRI 306–2 (Waste)

**Germany segment: contribution to waste prevention, recycling, and resource conservation**

**Recovered copper cables**

Copper cables were the main component of telephone lines for decades. They are now being replaced as part of the fiber-optic build-out. In 2023, the Germany segment removed over 1,579 metric tons of copper cable from cable ducts. Certified waste disposal facilities process the cables in accordance with environmental standards, and up to 90 percent of the material is then recycled.

The Germany segment also made a contribution to digitalizing mandatory contractual communications, such as bills and order confirmations, that are otherwise sent in the mail. The volume of dispatched letters was reduced by 14.6 percent compared with the previous year, saving more than 180 metric tons of paper in 2023.

**Sustainable product packaging**

As of mid-2022, all Deutsche-Telekom-branded products launched on the German and European markets have been packaged sustainably. For this conversion, we have developed appropriate sustainability criteria, and enshrined them in a packaging guideline. Wherever possible, we use recyclable and biodegradable materials, recycled paper, and non-toxic labels and printing (e.g., using soy ink). In addition, we use absolutely no single-use plastic in our packaging. This packaging guideline is part of our Standard Design Specifications, which apply throughout the Group (with the exception of T-Mobile US), and which also include sustainability requirements for product components and design. All product manufacturers must meet these criteria when developing Deutsche Telekom devices.

For our product packaging we use materials such as PaperFoam, a biobased and biodegradable alternative to conventional packaging materials. PaperFoam is non-toxic, compostable, and it reduces the carbon footprint by up to 85 percent compared with other materials. As of 2021, the packaging of the Speedport Smart 4 router sold in Germany is made of this material, for instance. In addition, 95 percent of the router’s housing consists of recycled plastic.

**Reducing paper use through digitalization**

The German segment intends to save on resources by continuing to reduce the volume of paper documents, such as bills, flyers, and other types of documents used for customer communication, and is working to digitalize these documents wherever possible.

In 2023, for instance, Telekom Deutschland conducted campaigns in the business and consumer segments to motivate customers to switch from paper to online billing. Through customers transitioning to online billing, the segment eliminated some five million paper bills in the year under review (as of August 2023).

In the business customer segment of Telekom Deutschland, we increased our online-bill percentages for fixed-network services to 73.69 percent and mobile services to 65.28 percent. In the consumer segment of Telekom Deutschland, we were able to maintain our high online-bill percentages: 88.82 percent for fixed-network services and 95.24 percent for mobile services.

The Germany segment is also digitalizing the process of signing our contracts by hand by converting to digital signatures. With the help of DocuSign, the segment offers the option of signing documents digitally and in compliance with the law. 72 percent of Telekom Deutschland’s business partners were already using digital signatures in 2023.

As of mid-2022, all Deutsche-Telekom-branded products launched on the market have been packaged sustainably throughout Europe, in keeping with our Sustainability Packaging Guideline. Packaging for smartphones that we purchase from our suppliers must also meet these criteria. In the 2023 reporting year, we were not aware of any violations of the packaging guidelines by suppliers in this context. We monitor compliance with the criteria by means of regular factory audits.

Since 2021, we have reported Group-wide figures on sustainably packaged devices, differentiating between our own sustainably packaged fixed-network devices and sustainably packaged mobile devices (e.g., mobile routers, smartphones, and tablets). The year-on-year increase is mainly due to the consistent application of the packaging directive for all of our newly launched products and an improvement in the survey methodology.
We also want to make logistics more sustainable. To that end, we plan to optimize parcel packaging, for example. In particular, we plan to discontinue use of plastic in such packaging. Since 2021, we have been saving around 4,700 kilograms of plastic per year by dispensing with wrapping plastic in technical logistics in Germany alone. We are also working to optimize paper and cardboard consumption in our shipping logistics. In 2020, we began using a cardboard shredder. This has enabled us to reduce our use of paper as fill material by 50 metric tons of paper per year. To make even greater use of optimization potential in this area, we are in discussion with the national companies outside of Germany and are working with them to develop relevant innovative concepts.

Energy efficiency
In order to minimize the energy requirements of our buildings in Germany, we are carrying out a range of measures, including the following:

- To identify anomalies in energy consumption, we use specific indicators such as "kilowatt hours per square meter" to compare similar facilities. In addition, we analyze the course of energy consumption (load profile) of individual buildings. On the basis of the findings from such analysis, we initiate measures to prevent peak loads and optimize energy use, with the aim of reducing total energy requirements.
- We use communication measures to raise awareness of energy consumption among our employees and motivate them to be energy-conscious in the workplace.
- We pay attention to energy efficiency during construction and renovation work on a building’s exterior.

The Deutsche Telekom subsidiary Power & Air Solutions (PASM) procures energy for the Deutsche Telekom Group companies in Germany. Its energy management system is certified as per the ISO 50001 international standard. In addition, our office buildings undergo an energy audit pursuant to DIN standard 16247 every four years.

We want to make our buildings in Germany as sustainable as possible. To that end, we are implementing various measures to reduce their CO₂ emissions, improve their energy balance, optimize waste separation, and facilitate longer use of their furniture.

Reducing vacancy is one of the most effective ways to increase sustainability, since lower vacancy levels can lead to significant CO₂-emissions and energy savings. We are currently examining our future office-space requirements, and developing plans that will enable us to use our office space in the best possible way. In the process, we are testing new, more-flexible space/office concepts. The overall aim is to optimize space utilization in our buildings. Also, we are reducing our unused office space – for example, by subletting it. Such efforts are enabling us to prevent vacancies and save energy.

Over 106,592 square meters of building space in Germany were certified to LEED or BREEAM standards in 2023. Additionally, approximately one million square meters of office space meet the criteria of a sustainable building standard, despite not being certified.

**Management & facts**

**Environment**

**Waste prevention, recycling & resource conservation**
- Controlling the room temperature of our network infrastructure more accurately
- Using efficient building services (e.g., high-efficiency pumps, frequency-controlled motors for ventilation systems)
- Optimizing pre-programmed usage profiles (such as through absence profiles)
- Using efficient building automation systems
- We are also adding additional charging stations for electric cars to our parking areas in order to promote electromobility.

**Internet of Things (IoT) and innovations**

In Germany, we are optimizing our facility management with the help of sensor technologies. This includes the following measures:

- Using sensor technology to actively control indoor temperatures in buildings in real time
- Using predictive maintenance in elevator maintenance and repair
- Using predictive weather-dependent building technology controls
- Using thermal and fluidic building simulation to increase the efficiency of buildings and their building services
- Using sensors to collect building usage data. We utilize this data to optimize the energy consumption and cost-effectiveness of our shops across the board.

**Sustainable Deutsche Telekom buildings outside Germany**

Internationally, we are also implementing measures to reduce energy consumption, such as optimizing the energy efficiency of major sites and switching off advertising pylons at night. We carried out simulation tests in 2022 to identify energy-saving potential in technical buildings. The results showed that technical equipment can be designed with lower capacity in these cases, making it possible to improve power distribution readings. As a result, adjustments have been made to the internal planning process and the reading process has been digitalized. We also carry out campaigns to raise awareness among our employees of the need to save energy.

In Greece, three buildings of the OTE Group received LEED Gold (Leadership in Energy and Environmental Design) certification: the Kerameikos office building; the COSMOTE TV Services building; and the Group’s Solonos office building in central Athens, which was renovated in 2020. All three were certified to the Gold level under the U.S. Green Building Council’s (USGBC) international LEED certification scheme for green and sustainable buildings. The Agia Paraskevi building in Greece was also certified under the Building Research Establishment Environmental Assessment Method (BREEAM).

Over 192,219 square meters of our building space outside Germany were certified to LEED or a comparable standard in 2023.

**Reporting against standards**

**Global Reporting Initiative (GRI)**

- GRI 302-3 (Management of material topics)

**Water consumption**

As a service provider, almost all of the water we use is consumed within the scope of our office activities. Similarly, water consumption only plays a minor role along our supply chain. For that reason, water is not a main focal area in our CR management activities. Nevertheless, our environmental guideline does call for reducing our water consumption. We measure our annual consumption by means of our water consumption indicator.

In the year under review, there was a slight, 20 percent decrease in Group-wide water consumption.

We provide detailed information on the figures for each individual company in our interactive benchmarking tool.

**Protecting biodiversity**

The United Nations Convention on Biological Diversity describes biodiversity as the diversity of all living organisms, habitats and ecosystems on land, in freshwater, in the oceans and in the air. This interpretation allows for many topics to be categorized under the heading of biodiversity. Topics such as climate change mitigation, waste, and water that we address at Deutsche Telekom have an indirect influence on biodiversity. In order to review our activities specifically in terms of their direct influence and impact on this topic, we conducted an analysis in 2023 of our impact on biodiversity and our dependence on ecosystem services all the way along our value chain. This analysis was based on the parameters of the ENCORE (Exploring Natural Capital Opportunities, Risks, and Exposure) tool, which is designed to aid understanding and evaluation of natural capital risks. Like our materiality analysis, it confirmed that biodiversity is not directly relevant to us as a topic. Indeed, we did not identify any significant direct impact in our own business operations. Similarly, we did not find ourselves to be heavily reliant on water resources (groundwater, surface water, water quality) in our own operations, and there were no significant issues around our operations in water-stressed regions.
However, our business activities can also impact biodiversity in other areas of our value chain – particularly with our suppliers at the start of the chain. This is why our suppliers must also comply with our environmental principles. We verify this regularly during our on-site social audits. And we have formulated it as a requirement in our Supplier Code of Conduct.

We also drew up a statement in 2022 specifying how we contribute to conserving biodiversity and protecting forests from clearance activities. This statement sets out the measures we are implementing to this end along our value chain. This includes our approach to sustainable purchasing, our climate strategy, and our practice of taking aspects of biodiversity into account in our network build-out work.

Moreover, we have taken on the role of nature sponsor during the period under review and are working as part of the Magenta Blossom project to help conserve and promote biodiversity. Flowering islands, as they are known, have been set up on an area over 40 hectares in size to provide a home for bees, insects, and butterflies. Some 22 million wildflowers and herbs have grown in amongst 3.25 million sugar beets. This co-existence of agriculture and new habitats promotes biodiversity and improves soil quality.

We also cooperate with environmental and nature conservation organizations. Proceeds from our various cell-phone collection campaigns in Germany have so far benefited the following organizations, among others: Pro Wildlife e.V.; Frankfurt Zoological Society (projects for the protection of gorillas); and Hellabrunn Zoo, Munich (species protection projects).

The safety of the electromagnetic fields used in mobile communications is a publicly discussed issue. In 2023, the possible impacts of such fields on animals and plants continued to be debated. The Federal Office for Radiation Protection has determined that there is no scientific evidence that high-frequency fields below the legal limits endanger plant and animal life.

In the fight against climate change, we support international reforestation projects. Trees store CO₂, produce oxygen, regulate the water balance, provide a habitat for countless species, and thereby promote biodiversity. Many of our employees are actively involved in the Trillion Tree Campaign initiative, through efforts such as organizing tree-sponsorship donations or tree-planting campaigns. Thanks to this, the number of planted seedlings shown in our interactive tree counter keeps growing. We have now grouped the various ongoing projects throughout the Group in our Magenta Forest campaign. One and all are welcome to participate in this campaign – by having trees planted, via an online site; making donations; or joining with others to plant trees in their local areas and have them registered, along with their geodata. In addition, we have asked our employees to use the Ecosia search engine for their internet searches wherever possible. Use of Ecosia contributes to global afforestation, and to our Magenta Forest: with the income it generates from search engine advertising, Ecosia plants trees in over 30 countries, in cooperation with local organizations. In 2023, our Ecosia searches financed over 56 839 tree plantings. Our Green Pioneers ambassador program and our HR team took the initiative to set up the Magenta Pocket Forests, which sees our employees plant mini forests using the special Miyawaki method. Three of these small forests were planted at different locations in Germany during the year under review, comprising 1 000 trees in total, with more to follow. Together with the trees we planted ourselves as well as donated trees, our Magenta Forest grew by over 15 115 trees in the year under review.

Information and communications technology (ICT) solutions form part of our portfolio of products and solutions that we use to drive pollution reduction efforts. For example, ICT solutions help to enhance transparency concerning water consumption and water management systems and to track animals as part of endangered species conservation efforts.

**Land use**

The properties used by the Deutsche Telekom Group cover most of our demands for technology, office, common, call center, shop and storage space as well as providing space for other needs. Total take-up decreased slightly year-on-year, with a total of 11 226 389 square meters in use.
Environmental friendly products & services

Ecological product design
How can we make our products more sustainable and minimize their adverse environmental impacts throughout their entire life cycles? For each product, we begin answering this question very early on in the product’s development. Our Sustainability by Design Guidelines give product developers specific information on how to proceed. The guidelines cover such aspects as sustainable packaging, hazardous substances, and sustainability-oriented device development.

This approach is in line with our aim of continually improving and expanding our range of sustainable products. It also answers to the growing consumer demand for more-sustainable products for mobile and fixed-network communications.

Expansion of the Eco Rating
In 2021, working in cooperation with the telecommunications companies Orange, Telefonica, Telia Company, and Vodafone, we launched the Eco Rating initiative, a new sustainability-rating system for cell phones. The calculation methodology for the Eco Rating was developed further in the year under review in response to changes in regulatory requirements and device features. There are now 11 network operators in total participating in the initiative. By the end of 2023, over 500 different cell phones from 23 different manufacturers had been evaluated based on the Eco Rating method. The purpose of the rating system is to provide consumers with consistent, precise information about cell phones’ environmental impacts throughout their entire life cycles, i.e., throughout their manufacture, use, transport, and disposal. In the system, cell phones are evaluated on the basis of information provided by the manufacturers. The aspects taken into account include durability, reparability and recyclability, climate compatibility, and resource efficiency. With the system, we are improving transparency in the cell-phone industry and thereby helping to reduce its entire ecological footprint. In addition, the Eco Rating system is expected to motivate device manufacturers to develop products that are even more sustainable. The label has already been introduced in 36 countries worldwide since the initiative began, with launches currently taking place successively in further countries.

Ecological responsibility in procurement
We work closely with our suppliers in order to be able to offer environmentally-friendly products. In a sustainable procurement strategy that is valid throughout the Group, we have defined guidelines for our procurement processes.

Our principles in this area are also enshrined in various sets of rules and standards, such as our Supplier Code of Conduct and our procurement guide (Leitfaden für den Einkauf). Our Global Procurement Policy sets forth the sustainability criteria that apply to our Procurement unit. These criteria are taken into account throughout the entire procurement process.

In 2022, we refined specific sustainability criteria for IT and network/hardware products, and for passive products, such as fiber-optic cables. Building on this, we have worked closely with the telecommunications firm Orange to develop a harmonized set of product-based criteria. Since 2023, these criteria have been applied to invitations to tender with a budget of over EUR 10 million for IT/NT hardware products and passive products, and, in conjunction with our supplier-based approach, feed into our supplier selection process with a weighting of 20 percent. Particular importance is attached to the carbon footprint of our suppliers and their commitment to achieving ambitious climate goals; after all, the reduction of CO₂ emissions in our supply chain (Scope 3) plays a key role in achieving our goal of being climate-neutral by no later than 2040 along the entire value chain.

A number of instruments are used to monitor compliance with the standards stipulated in our Supplier Code of Conduct. Should we gain knowledge of infringements of standards as a result, then this may lead to sanctions for the suppliers concerned.

Green shop
Using more sustainable materials in our stores is an elementary component of our shop concept. In an initiative entitled Green Point of Sale, we have been bringing together sustainability-oriented measures since 2021 that we are gradually rolling out at our 1,425 shops in Europe. We use our #GreenMagenta sustainability label to make sustainability aspects and sustainable products and services in our stores visible to our customers. Overall, we are aiming to apply sustainability criteria in the design and layout of our shops throughout Europe. In 2021, we established a Europe-wide Green Point of Sale community to drive sustainability issues forward.

Germany segment
Using more sustainable materials in our stores is also a key component of our shop concept in Germany. For instance, we use furniture in our shops that has been manufactured locally. All decorations and printed materials are made out of reboard (recyclable honeycomb cardboard), recycled polyester, or recycled ocean plastic. Paper consumption was also reduced by 85 percent in Germany as a result of measures such as digitalizing flyers.

The #GreenMagenta initiatives and sustainable topics are communicated in print and digital media at all shops in Germany. We also
run sustainability training events for our shop employees to equip them to provide more-specific sustainability-oriented advice to customers. Over 4,000 employees in Germany have already taken part in these events since 2019.

Europe segment
Since 2019, all new or renovated shops in the Europe segment use recyclable LED lamps. We also utilize sustainable, ecologically certified, organically sourced flooring in all our stores. Since 2019, green walls covered with living plants, also known as green walls/green ceiling have been a firm feature of our international shop concept. By the end of 2023, we had installed over 120 green walls in various shops in Europe. We also introduced energy-saving screens and significantly reduced our paper consumption: paperless stores can already be found in Austria, Slovakia, and Greece. We have now cut paper consumption by 85 percent in Poland, Hungary, and Croatia, not least by opting not to offer printed brochures and flyers in our shops. We offer digital invoices and online payment methods across the board at all national companies. In some of our flagship stores in Europe, we offer what we call repair bars, where we repair or replace displays, rechargeable batteries, and back covers of devices from several manufacturers. The #GreenMagenta initiatives and sustainable topics are already communicated in print and digital media at all shops in Austria, Czech Republic, Poland, Slovakia, and Hungary followed suit in summer 2023.

We also attach great importance to sustainability in the design of our company uniforms. Since January 2023, Telekom Shop employees in Germany have been wearing a new company uniform made from organic cotton and recycled polyester that has been certified in accordance with the Global Organic Textile Standard (GOTS). The GOTS defines internationally recognized requirements for organic textiles, from raw-material harvesting to environmentally-friendly and socially-responsible manufacture. Old company uniforms that are no longer required are recycled and turned into new items such as bags and hair bands.

Ecologically sustainable products
We are offering our customers a growing number of products and services that are sustainability oriented. These are based on Deutsche Telekom’s green network, which is powered entirely by renewable energies. We use the #GoodMagenta or #GreenMagenta labels to identify particularly sustainable products and solutions. We also introduced the Eco Rating in 2021, in cooperation with other network operators. With these labeling systems, we provide transparent information as to which smartphones and cell phones make positive contributions to environmental protection. We further expanded our range of sustainable products and services in 2023. In addition to sustainable devices, such as routers, media receivers, and the Fairphone, we also offer more sustainable accessories. Additionally, our sustainable portfolio includes rental models and services for refurbishment and recycling of smartphones and fixed-network devices.

First sustainable 5G smartphone
In 2021, we supported the launch of the first sustainable 5G smartphone in Germany, Austria, and the Netherlands through our partnership with Dutch manufacturer Fairphone. We consolidated this strategic partnership in the year under review, adding the Fairphone 5 to our product portfolio and marketing it from September 2023.

Offers for business customers
We also want to help our business customers meet their sustainability goals and implement regulatory requirements – such as the EU Green Deal. In total, more than 16 customer solutions of T-Systems International and Telekom Deutschland have already received our #GreenMagenta label. More solutions are being added all the time, including the Digital Delivery Service (digital delivery note), which provides a means of making delivery processes more efficient and sustainable. By choosing not to print physical documents, we save on valuable natural resources and reduce CO₂ emissions. Switching from a printed to a digital delivery note will allow us to save 7.7 metric tons of CO₂ and almost 6,000 cubic meters of water a year for each million sheets of paper not used. In the food retail sector alone, 20 million delivery bills and thus over 180 million pages of paper can be saved. Additionally, real-time communication and elimination of delays and document losses help to minimize resource consumption, optimize processes and reduce environmental impact along the supply chain. Another successful service from Telekom Deutschland to be awarded the #GreenMagenta label is the cell-phone purchase portal for business customers. Together with the providers everphone and TKD, we also offer our business customers the Device as a Service model. We manage the entire device life cycle – including rental, active retrieval of devices from employees, replacement, and professional repair of defective devices, as well as certified disposal and subsequent recycling. Numerous other Deutsche Telekom offers, and numerous products of other manufacturers, help our customers reduce their carbon footprints. This is the case, for example, with the many home-office solutions we offer – and especially with our range of video- and web-conferencing systems. Deutsche Telekom customers benefit in this context from our extensive advisory and integration services, using which we aim to significantly increase efficiency in the use of these solutions.

Measuring progress with key performance indicators
We use various performance indicators to measure our progress in expanding our range of sustainable products. For example, we track the numbers of sustainable and refurbished devices in our mobile and fixed-network segments. We also specify the ratio of sustainable products sold and leased to total devices sold and leased. By 2023, more than 67 percent of our fixed-network devices sold and leased across the Group were sustainable.

Sustainable products, Deutsche Telekom Group
In addition, we record KPIs on the collection of devices for recycling purposes and on products with sustainable packaging.

**Reporting against standards**

Global Reporting Initiative (GRI)
- GRI 301-1 (Materials)
- GRI 301-2 (Materials)

**Online billing for mobile and fixed-line customers in Germany**
Almost 244 million online bills were sent out in 2023. This is the equivalent of around 87 percent of all bills and credit notes for fixed-line and mobile customers in Germany. Data has been collected using a more precise calculation method since 2017.
Mobility

Our strategy for climate-friendly mobility in Germany

Our strategy
Along with the use of environmentally friendly drive systems, the transition to climate-friendly mobility calls for expansion and support of the charging-station infrastructure and intelligent linking of new and existing forms of mobility. Our goal is to firmly establish the use of alternative forms of mobility within the Group and raise lasting awareness when it comes to individual decisions about particular means of transport. Beyond the efforts we are making to electrify our vehicle fleet, we are encouraging our employees to travel and commute in more-sustainable ways. All existing job ticket offers were ended on April 30, 2023 after an attractive alternative offer was launched on May 1, 2023 in the form of the Deutschlandticket.

Our mobility strategy rests on three pillars:

- Diversified portfolio: building a more efficient, increasingly sustainable fleet with climate-friendly drive systems and integrating micro-mobility (e.g., bicycles, e-scooters)
- Digital services: pooling and sharing solutions, and Deutsche Telekom car app (digitalization of life cycle services)
- Connected mobility: linking existing and new forms of mobility and mobility services with the help of a digital platform

Our vehicle fleet
From 2017 to 2023, we were able to reduce the CO₂ emissions of our vehicle fleet in Germany – which includes around 17 500 vehicles – by about 35 000 metric tons. The main factors affecting the level of mobility-related CO₂ emissions are the average number of internal combustion vehicles, annual mileage, and the associated fuel consumption.

In January 2023, we introduced an internal requirement within Deutsche Telekom in Germany that we would only order company cars with electric drive systems going forward. This requirement has been applicable internationally for the Systems Solutions segment since 2022. On the basis of this, almost all of the company vehicles we ordered in Germany during the year under review had an electric drive, apart from just two exceptions that were covered by the policy. We have also extended the retention period for company vehicles from three to four years. However, the strained supply chain situation continues to result in unplanned delays to deliveries of the electric vehicles we have ordered.

The process of fully electrifying our service vehicle fleet, which includes vehicles used by field service technicians, requires extensive preparations. The requisite conditions for this have further improved in 2023, with a wider range of vehicles now being offered by car manufacturers in particular. Nonetheless, there is currently still a lack of small and large vans on the market that meet our requirements in terms of range. This is why we are so keen to drive the accompanying rollout of charging infrastructure. The necessary charging stations have already been installed at the first Deutsche Telekom locations with service vehicles. We are also striving to set up charging infrastructure at our technicians’ homes to enable them to set off to jobs straight from their doorstep without any issues.

Our e-scooters
Some 300 e-scooters have been used by our service technicians and engineers since 2022 as part of our micromobility concept. These vehicles are used in a day-to-day work context for traveling short to medium distances, for instance, to set up internet connections for customers in urban conurbations with limited parking space. Other usage scenarios were tested in 2023 for projects requiring on-site visits, including providing assistance with the fiber-optic build-out in large cities such as Frankfurt am Main and with maintenance work on mobile communications antennas. Mobile antennas are installed along ICE high-speed-train lines, at major events, and in other locations where vehicular access is restricted.

Our bicycles
Since 2015, our salary sacrificing scheme has enabled our employees to give up some of their salary for resource-conserving and health-promoting bicycles or e-bikes, which they can lease from their employer for three years. The monthly payments are deducted from the employee’s gross salary, exempting them from tax payments on the purchase. Orders may be placed year-round via our external leasing partner, which, in addition to running its own online store, also has partnerships with local bicycle dealers. Over 10 000 bicycles are currently being leased via this scheme.

Interconnecting transport services
Interconnection between different modes of transport will become increasingly important in future. For this reason, we have been offering our Mobility as a Service (MaaS) platform and “goodride” app since 2023 as an alternative to single-person car use. This option combines various different modes of transport, including public transportation, privately shared vehicles and Deutsche Telekom vehicles (including services such as Shuttle on Demand and carsharing). MaaS will give our employees added convenience and flexibility in their commuting options. The goodride app and MaaS platform were developed by Telekom MobilitySolutions and Hacon, a Siemens subsidiary.
However, goodride is not only available to our employees – the application can also be downloaded from the major app stores by anyone in Germany. It allows users to navigate their way through the entire local public transport network in Germany. The app can also be used to purchase the Deutschlandticket as well as all local public transport tickets for the Cologne-Bonn metropolitan region. We intend to expand goodride on a gradual basis to offer the option of purchasing tickets for other metropolitan regions of Germany. Currently, users throughout Germany can use TIER-scooters and, in many cities, nextbikes and taxis in conjunction with local public transport, booking the required ticket combination through the app. This service is set to be progressively expanded to include more mobility partners, regions, and third-party offerings.

**Reporting against standards**

**Global Reporting Initiative (GRI)**

- GRI 302 3–3 (Management of material topics)

**Expansion of the e-mobility charging infrastructure**

Cities, companies, and households alike are all benefiting from the expansion of the charging infrastructure for electric cars. It is a responsible course of action and facilitates the transformation towards sustainable, green mobility. The places where we live and work are becoming more modern, environmentally friendly and sustainable, increasing their appeal to us as residents and employees.

In order to drive progress on the e-mobility front, it is vital to put in place smart infrastructure. Deutsche Telekom has extensive expertise and experience in the planning, procurement, construction and operation of charging stations, and it plans to use these strengths in the coming years to support the transition to e-mobility. In the process, it will look beyond its own immediate needs and offer complete infrastructure packages for customers.

For example, Deutsche Telekom will offer smart solutions for cities, regions, and companies seeking to install and operate charging infrastructure. As part of its complete-system approach, Deutsche Telekom will offer business customers a full range of services, including planning, construction, installation, and service/operation. In addition to hardware, the services also include software for operating the charging stations and carrying out customer management.

The company’s activities in this area are organized as follows:

**Comfort Charge GmbH**

Comfort Charge GmbH has been constructing and operating charging infrastructure at Deutsche Telekom locations nationwide since 2018.

We increased the number of Comfort Charge rapid charging systems to around 230 by the end of 2023. We narrowly missed our target of operating 250 such stations by the end of 2023 due to a number of factors, the primary ones being local construction delays, late approvals, or missing power connections, which prevented us from setting up the remaining stations in 2023. These stations will be installed successively in 2024. Additionally, some 600 charging systems for electric vehicles (service vehicles, company cars and employees’ cars) were set up and operated at Deutsche Telekom Group locations.

The fast-charging stations at these locations are available to the public. With the charging speed they offer, electric vehicles are able to add about 100 kilometers of range within 10 minutes.

Comfort Charge’s expertise as a charge point operator also benefits the services provided by Deutsche Telekom’s business customer sales in this connection.

Deutsche Telekom’s Technical Service has been planning, installing and servicing charging infrastructure since 2010.

Our partners leverage the benefits of the quality service that Deutsche Telekom’s field service offers nationwide, which includes a range of e-mobility services provided at the customer’s site. More than 50 partners offer a range of e-mobility solutions with the assistance of Deutsche Telekom’s Technical Service. These include site-scouting services, as well as installation, troubleshooting, and maintenance of charging systems. Deutsche Telekom’s field service installed infrastructure for over 1,800 charging points in 2023. The company fulfilled more than 7,000 e-mobility orders in total and is also one of the largest service providers of charging solutions for private households, with over 25,000 service contracts carried out overall throughout Germany. Our partners and customers across the nation include energy suppliers, electronics retailers, hardware and automotive manufacturers, and fleet-solution providers.

With its large technician workforce, and its high quality standards, Deutsche Telekom is well-placed to serve the growing nationwide demand for infrastructure solutions – and thereby make a valuable contribution to the transition to sustainable mobility.

**Deutsche Telekom Geschäftskunden GmbH**

Over the past year, Deutsche Telekom Geschäftskunden GmbH has also been helping to boost sustainability, by supporting its business customers in addressing their various interests, roles, and goals in the area of e-mobility. As part of these efforts, it has installed more than 100 normal-charging stations (AC) and fast-charging stations (DC) at public and non-public customer locations in Germany, in the framework of holistic, end-to-end solutions including planning, construction, installation, service, and the necessary equipment and software.

E-mobility is also being promoted at our national companies: Our company in Croatia, for example, has been offering an app-based digital charging service for electric vehicles since 2020. Via the “espoTs” app, end users can search for and use charging stations. No subscription or contract is required. T-Mobile US is also investing in charging stations for electric cars at its locations. The national company in Hungary launched a pilot project in 2021 to determine availabilities in the area of electric cars and charging stations, with a view to adding more electric cars to its vehicle fleet in the future.
We measure our activities to promote greener mobility at Deutsche Telekom using various KPIs, and have been collecting data for them since 2020.

By operating 230 fast-charging stations in Germany, we were able to save over 326 metric tons of CO₂e. This is equivalent to the CO₂ emissions a car would emit in traveling about 1.93 million kilometers.

**Number of vehicles in the DT Group**
The total number of vehicles at our company decreased with respect to the previous year. While the majority of our vehicles still have diesel engines, their share of our overall fleet decreased in the year under review. To accelerate our transition to greener mobility, we have intensified the expansion of our charging-station infrastructure. This has enabled us to increase the total number of our fleet vehicles with green alternatives to gasoline/diesel-powered engines by 27 percent, with respect to the corresponding figure in 2022.

**Fuel consumption**
Total fuel consumption decreased by around 5 percent. For service vehicles, consumption fell by 7 percent, while for company cars it increased by 2 percent. The interactive benchmarking tool shows the figures for each national company.

**Reporting against standards**
Global Reporting Initiative (GRI)
- GRI 302-1 (Energy)

The performance indicators for each segment and individual company are shown in the interactive performance-indicator tool in our company comparison. More information about our Green Car Policy, alternative engines, and our goals for climate-friendly mobility is available here.
Employee initiatives

Green Pioneers in Germany
Internal sustainability ambassadors around the world are dedicated to promoting a sustainable corporate culture. With their efforts, they support implementation of our CR strategy.

The internal Green Pioneers ambassador program was launched in Germany in 2018. Its aim is to promote and expand responsible management and conduct among the workforce. Group Corporate Responsibility (GCR) creates suitable conditions for the Green Pioneers’ work. Community Management, which is part of GCR, organizes regular meetings to share information and experience, offers internal and external expert talks, and helps plan activities. The Green Pioneers community celebrated its fifth anniversary during the year under review. It used the opportunity to look back on what it had achieved and was congratulated personally by CEO Tim Höttges. As of the end of 2023, the Green Pioneers groups had about 2,167 members and subscribers on YAM UNITED (1,665 in 2022). This shows a growing interest in the initiative and in Deutsche Telekom’s sustainability activities.

Depending on their location, interests and expertise, the Green Pioneers come together to form subject-related or regional hubs. They act as internal multipliers for change by motivating employees to get involved in numerous resource conservation campaigns, such as an exchange for office supplies, clothing exchange campaigns, tree-planting and waste collection campaigns, and an internal company ride-sharing agency. There are now 335 Green Pioneers in Germany. Active at 53 locations and in 19 departments, they seek out improvement potential and initiate appropriate measures. The Magenta Pocket Forests initiative, for example, was set up by HR teams and Green Pioneers. During the year under review, they planted mini forests comprising over 1,000 trees in total at three Deutsche Telekom locations. On the initiative of the Green Pioneers, smart textile containers were installed at our locations in North Rhine-Westphalia to collect old company uniforms, worn-out jeans and cotton hand towels and put them back into circulation in the textile ecosystem. The upcycling containers use Internet of Things (IoT) technology and their contents are collected independently, thanks to fill-level sensors that send a notification to the Deutsche Telekom iCloud when they are ready to be emptied. This saves unnecessary trips and thus reduces carbon emissions and fuel consumption. The cotton textiles collected are sent on to be upcycled. In 2023, we collected 21 metric tons of clothing in our upcycling containers, and we saved 135 million liters of water and 335 metric tons of CO₂ as a result of our textile collection and recycling activities.

With a view to boosting our employees’ motivation and commitment, we seek to offer them additional leeway and options for structuring their working lives, such as flexible work arrangements. In addition to their core activities, our employees can also gain cross-departmental experience and apply their knowledge and skills. For example, the Green Pioneers take advantage of these opportunities to work on sustainability activities. There is similar employee commitment to sustainability activities in the Europe segment: in the Good Cause Initiative, cell phones are collected for a good cause in cooperation with local NGOs and authorities.

Green employee networks in the Systems Solutions segment
There are also numerous employee initiatives aimed at sustainability and environmental protection within the Systems Solutions segment, for example:

Green Magenta Forest – reforestation program (T-Systems Mexico)
The local business unit of T-Systems in Mexico set up a reforestation program in 2023 as part of its climate change mitigation strategy. Together with the Corporate Reforestation Program, three different types of tree were planted in urban neighborhoods. The aim is to do our bit to help preserve biodiversity and raise awareness about maintaining green spaces among the employees at T-Systems Mexico and local residents. As part of this project, they were provided with information on the importance of urban green spaces as well as how and what to plant. About 150 employees got involved in the program in the reporting year and around one metric ton of CO₂ was captured in the first year of the program thanks to the trees planted.

Volunteer work as part of the European Week for Waste Reduction (T-Systems ITC Iberia)
As part of the European Week for Waste Reduction, T-Systems ITC Iberia employees had the opportunity to take part in a voluntary trash-pickup campaign in the Barcelona area. The aim was to show them how vital these kinds of joint sustainability initiatives are for a greener and more livable future. The campaign was carried out in collaboration with the Adecco foundation, which is dedicated to the integration of those with disabilities. In addition to T-Systems ITC Iberia employees and their families, there were also people with disabilities taking part in the initiative.
Our approach to digital participation (access, affordability, ability) and digital values

As a provider of digital infrastructure, we run our operations based on the principle of digital responsibility. As society becomes increasingly digital, we at Deutsche Telekom are making strenuous efforts to ensure everyone can participate in the digital world and lead their lives alongside each other on the basis of democratic principles. That is why we are working to facilitate digital participation and promote democratic values in our digital society. To ensure we can achieve these objectives across our Group, we have anchored them as a key topic of our CR strategy.

Digital technologies have spread through virtually every aspect of our society and are becoming increasingly important in both our professional and private lives. Even our very participation in society is increasingly being conducted through digital media. In a society based firmly on equality of opportunity, everyone has access to the essential technology and digital products and services. When people decide not to participate in the digital world, that should happen solely as the result of free choice – and not due to a lack of financial means or the requisite know-how, for example.

If everyone is to have an equal opportunity to participate in the digital society, then the following conditions must be met – everyone must have access to essential technology, products, and services that they can afford under their financial circumstances. What’s more, everyone should be able to, and be prepared to, get involved in society on the internet and to do so in a responsible manner. Based on this vision, we see digital participation as having three dimensions:

Access

We are continuously building out our network to enable technical access. To this end, we also cooperate with partners – especially in more remote areas. Also, we are pressing ahead with the development of equipment and products for various demographics. The “nora” Notruf App (“nora” emergency-call app), for example, which offers one-tap emergency calling – and is intended especially for people with hearing and speech impairments – is based on a patent of Deutsche Telekom. Making our products and services as accessible as possible is an increasingly important aspect of what we do. We drafted the Design for All guide in the reporting year. This guide is designed to ensure the needs of as many different people as possible are factored into the development of new products and services – in a way that goes beyond the legal obligations related to accessibility.

Affordability

Our range of rate plans includes plans for just about any budget. We also offer subsidized rates (only available in German), affordable smartphones and tablets, and reduced basic charges – for schools, for example. Through this approach, we are attempting to make access to the digital world affordable for all and are trying to drive forward digitalization in education. Further information can be found here.

Ability

We help people to navigate the internet safely, competently, and confidently and offer free, easy-to-understand, and entertaining materials and formats on the many and varied aspects of media literacy.

We promote digital participation based on these three factors by pursuing a wide range of projects and initiatives.

Besides our commitment to digital participation, we also champion democratic values in the digital world. These are more important than ever in uncertain times such as these, dominated as they are by climate change, wars and conflicts in many parts of the world, the aftermath of the COVID-19 pandemic, high inflation even in countries with otherwise stable currencies, and growing and novel cases of cybercrime. Those are just some of the examples of events that create a sense of uncertainty in society. Conspiracy theories, disinformation as a means of manipulating public opinion, and hate speech are all becoming increasingly prevalent. We stand for diversity, tolerance, equal opportunities, social cohesion, and ultimately democratic values in our digital society. We pursue a wide range of projects and initiatives aimed at promoting democratic competence, opinion forming, and media literacy and we take a firm stance against manipulation, marginalization, and hate on the internet.

We measure the impact of our activities throughout the Group with a set of three ESG KPIs. Since 2021, we have anchored our focus topics even more firmly in our KPIs:

- The Community Contribution ESG KPI maps our commitment in terms of financial, human, and material resources.
- The Reach – Focus Topics ESG KPI shows the number of people and media contacts we have reached with our communication on our focus topics of “digital society” (with the subtopics “digital participation” and “digital values”) and “low-carbon and circular society.”
Digital participation through Design for All

We want to promote accessible and non-discriminatory access to our products and services so that people have even better, easier, and faster access to them. In this way, we are contributing to the access dimension of digital participation. We are striving to ensure our product development process is shaped by diversity by factoring in differing physical and mental abilities as well as other types of diversity such as age, gender, ethnic origin, and nationality. In adopting this approach, we are going beyond the legal obligations related to accessibility. We believe that Design for All is an opportunity for every one of us to be able to achieve maximum participation in the digital world.

As early as 2009, Deutsche Telekom MMS GmbH founded a competence center for accessibility and software ergonomics that is now the biggest in Germany and provides professional consultancy services to companies. To ensure our own products and services contribute toward our aims, the Deutsche Telekom Board of Management decided in July 2022 to roll out the Design for All approach. During the reporting year, we then developed the Design for All guide and published it internally. Furthermore, we have started work on a matching training concept that will help our employees better grasp the principles of Design for All and help build awareness. This training concept is to be made available to all employees in the form of web-based training. In the reporting year, the competence center developed a “Design for All” audit that takes other diversity dimensions into account in addition to accessibility requirements. This helps companies to optimize their products for the most diverse target groups possible.

To ensure all activities within the scope of Design for All take account of affected individuals and relevant stakeholders, we also set up a Sounding Board in the reporting year. This panel includes both internal experts and external representatives of organizations that work primarily on aspects of diversity that are relevant to the guide. The Sounding Board met for the first time in September 2023.

Digital participation through media literacy

We view media literacy as the key to safe and competent interactions with digital media and a crucial skill for our work and private lives. It begins with basic skills in using media and extends all the way to safeguarding privacy and dealing with hate and disinformation. Another aspect of media literacy that is important to us is the promotion of more sustainable approaches to technology and efforts to help people utilize digital solutions to protect biodiversity, cut carbon emissions, and economize on resources. In this way, we are contributing to the ability dimension of digital participation.

"Teachtoday"

Our Teachtoday initiative supports children, young people, parents, and grandparents as well as teaching professionals with hands-on tips and materials about safe, proficient media usage. The materials are available at www.teachtoday.de in seven languages (German, English, Croatian, Montenegrin, Polish, Romanian, and Hungarian).

Digital learning plays a particularly important role now that digital schooling and remote learning have become an even bigger part of students’ day-to-day lives. The continually expanding digital toolbox, which was published in 2020 and now comprises over 140 different formats, including product ideas, video tutorials, and fascinating quizzes, is designed for adults who have contact – either in schools, in learning groups, or in their own private lives – with children and young people between the ages of 9 and 16.

The Teachtoday Academy, meanwhile, is a platform for adults who want to expand their knowledge and skills in various areas of digital education. During the reporting year, we carried forward our successful #TAKEPART stories in the Teachtoday Academy. These stories center on a practical approach to socially relevant aspects of digitalization and were made available to all as new interactive learning formats.

We take a holistic view of sustainability and therefore utilize Teachtoday not just to promote social cohesion but also to raise awareness of issues such as the climate, biodiversity, and the circular economy. In 2023, Teachtoday called on children and young people to participate in the Europe-wide “Off to the umbels" challenge and heighten their awareness of biodiversity. The initiative aimed to encourage participants to use their smartphones to engage with the environment around them, discover the crucial role played by insects, and play their part in protecting both.

Teachtoday also has its own YouTube channel (only available in German), on which it presents short, catchy videos about safe, proficient internet use, along with complete workshops on subjects such as how to use the toolbox.

“SCROLLER”

SCROLLER, an online magazine for children aged 9 to 12, teaches media literacy using age-appropriate language. Thanks to its interactive web format, the magazine has a completely up-to-date look and feel, and it is suitable, as a learning and reading tool, both for solitary use and for group exercises. Via the additional SCROLLER EDU+ area, which links directly with the magazine’s features, teachers can access background information and learning resources for classroom and online instruction. The first edition in 2023, “Artificial Intelligence”, focused on a responsible and creative approach to using artificial Intelligence (AI) and provided insights into the opportunities that AI already offers us. This edition also flagged the challenges that AI can bring, such as disinformation, bias in programming, and breaches of privacy and copyright law. The second edition in 2023 “Digital.Nachhaltig.Gestalten.” (“Digital.Sustainable.Design.”) took sustainability as its main theme.
Both the Teachtoday portal and SCROLLER won multiple awards in the reporting year.

“AwareNessi – the fantastic security activity book”

“AwareNessi – the fantastic security activity book” from Deutsche Telekom is a magazine aimed primarily at children aged 8 to 14, but its playful and entertaining approach also explains the dangers of the internet to the adults in their lives. AwareNessi aims to highlight how important it is to protect your data and be respectful to each other online. Issues of this magazine on how to safely handle information and data are available in up to 16 languages, which shows that Deutsche Telekom is sharing these vital insights across a variety of countries.

“DIGITAL@School”

In our Group-wide DIGITAL@School initiative and corporate community, we help children take an active, self-reliant role in shaping the digital age. Some 750 DIGITAL@School volunteers are giving their time to schools, and other educational institutions, in a range of in-person and online assistance formats. With age-appropriate approaches, they are helping to inspire children to take an interest in STEM (science, technology, engineering, mathematics) subjects and in programming languages. In addition, they teach skills that children need in order to use digital media responsibly. DIGITAL@School also supports Germany’s Girls’ Day initiative, which is aimed specifically at girls at secondary school, and stages workshops that are run by employees on this special day.

In 2023, the corporate volunteers of the DIGITAL@School community held a total of 79 events. These ranged from one-off and regular workshops in regional educational establishments to large-scale events such as the DIGITAL@School Campus in Bonn that attracted up to 3,000 visitors over two days in November. The overarching goal of these events was to offer young people a fun opportunity to find out more about robotics, programming, media literacy, and digital technologies. They also gave participants a chance to try out creative ways of using artificial intelligence (AI).

In total, more than 9,000 children, adults, and educators took part in DIGITAL@School events. The efforts of our corporate volunteers in the reporting year were also recognized with the Telekom Team Award in the “Act with respect and integrity” category.

What's more, DIGITAL@School has been given the #GoodMagenta label for its social commitment. The initiative was launched in 2017 as IT@School. It then grew throughout the Group, and was renamed DIGITAL@School at the end of 2021.

Deutsche Telekom Stiftung’s commitment

The educational foundation Deutsche Telekom Stiftung is working, via numerous programs and projects, to help improve education in STEM subjects (science, technology, engineering, and mathematics). It supports children and young people aged 6 to 18 in learning important skills for life both in and out of school. Along with STEM-related skills, the skills in question include critical thinking, good judgment and discernment, creativity, and communication and teamworking skills. The foundation provides such support out of the conviction that a modern education system must give young people the best possible preparation for meeting global challenges such as digital transformation, climate change, electromobility, and biodiversity.

“Digital Crime – Auf digitaler Spurensuche” podcast

We have been publishing our podcast series “Digital Crime – Auf digitaler Spurensuche” (Digital Crime – On the digital trail) on all well-known podcast channels since 2021. While the first two seasons feature people talking about the hate they have encountered in the digital world, the third and fourth seasons explore all aspects of cybersecurity and cybercrime by focusing on real-life cases. Listeners are also given helpful tips and tricks for dealing with cyberattacks of all types.

Collaboration to promote digital competence

In 2023, Deutsche Telekom once again participated in Digitaltag (Digital Day) with a range of campaigns and as a partner. Digitaltag is part of the Digital für alle (Digital for Everyone) initiative, which focuses on the issue of how everyone in Germany can get a better understanding of digital developments and benefit from them. Digitaltag uses a wide range of formats to explain what digitalization is and really bring it to life for people. The event took digital skills as its main theme in the reporting year and was held under the slogan “Digitalisierung: Entdecken. Verstehen.” (Digitalization: Discover. Understand.). We contributed in a number of ways, such as by staging an interactive Teachtoday online workshop on “AI for all” that highlighted the risks and potential of AI and by organizing a live link-up to the workshops of the Deutsche Telekom Seniors’ Academy, where seniors can take a deeper dive into the digital world. Moreover, we joined the Digital für alle initiative on its search for innovative AI projects in 2023 and presented a public award for digital social cohesion in the special category of AI and Democracy. The award recognized projects that contribute to an inclusive and responsible digital future while also strengthening democratic principles.

We also cooperate with various universities, with a view to supporting current research and promoting digital literacy. For example, via Telekom Laboratories (T-Labs), we finance several endowed chairs at TU Berlin which are oriented to the teaching of digital topics. Additional information on research and development is available here.

In addition, we are working, in cooperation with the German National Association of Senior Citizens’ Organisations (BAGSO) and the Deutsche Seniorenliga (German Seniors’ League; only available in German) to promote media literacy among seniors and have lent our support as a partner to the Goldener Internetpreis (Golden Internet Prize; only available in German), which has been presented since 2012. The prize is awarded to committed individuals, initiatives, and municipalities that are working to inspire seniors to go online – and to assist them in doing so. In another effort in this context, we work on the advisory board of Digital-Kompass (only available in German), a joint project of BAGSO and the association Deutschland sicher im Netz e.V. (DsiN – Germany secure online). Digital-Kompass provides resources and digital “round table” meeting formats for internet guides who help seniors navigate the
online world. In addition to our online activities, we also organize offerings locally. Within the framework of the Deutsche Telekom Seniors’ Academy, for example, we hold seminars and workshops on using digital devices. Through these events, we aim to make it easier for interested seniors to start to explore the digital world by showing them empathy, passing on skills, and making the whole process fun.

**Reporting against standards**

**Indicators for telecommunications providers from the GSM Association (GSMA)**
- GSMA-INT-03 (Online Safety Measures)

**Digital values**

As we move toward a digital society, we are making strenuous efforts to ensure everyone can participate in that society and live together on the basis of democratic principles. We run a diverse range of campaigns, initiatives, and projects to promote democratic values such as diversity, tolerance, equal opportunities, and social cohesion. We also speak out loud and clear against the manipulation of public opinion, marginalization, and hate speech on the internet. We work closely with non-governmental organizations in these areas and are constantly aware of the special protection that needs to be afforded to children as we shape a digital society that is based on democratic principles.

**United against hate speech**

Our No Hate Speech initiative, which we launched in Germany in the summer of 2020, continued in 2023. Through this initiative, we aim to raise awareness in society and enable people to put into practice and defend fundamental democratic values online. We are advocating for an internet in which everyone can utilize the opportunities of the digital world – without having to fear marginalization or hate speech.

During the reporting year, this initiative centered on the theme of “No hate speech – we decide!” According to a recent Forsa study, the proportion of users who have encountered hate speech on the internet has stayed at a consistently high level of 76 percent over the last five years. However, only one in four users has ever responded actively and critically to a hateful comment with what is known as counterspeech. In our TV advertisement, which has been broadcast since July 2023, we show what even just one single positive comment against hate speech on the internet can achieve. By making our own contributions and supporting those targeted by hate speech, we can make a clear decision to act against hate speech on the internet. Our TV advertisement was supported by partners including #ichbinhier (I am here), HateAid, Freunde fürs Leben (Friends for life), and Nummer gegen Kummer (a counseling helpline).

We also participated in a joint campaign with FC Bayern München in the reporting year. This included two TV advertisements that depicted realistic hate comments and called for a stronger stance. Also, with our own measures aimed at online civil courage, we call on society to support us in this commitment.

In 2023, as part of the No Hate Speech campaign, we also worked with the esports player foundation to develop the FIFA Fairplay Guide. This compact guide sets out all the key rules regarding fairness and sporting spirit in the FIFA PC and console game. The objectives and rules of the guide were drawn up by the FIFA community in a process that included three public live streams with various big-name players, content creators, and streamers from the industry. In addition to covering how players should conduct themselves in certain game scenarios, the guide also addresses basic principles for dealing with hate speech and abuse on the internet.

Besides calling on society to take a stand, our initiative also assigns a great deal of importance to supporting those who are affected by these issues. Furthermore, we support other initiatives that specifically oppose marginalization and we cooperate with NGOs that work toward our goal of strengthening democracy and coexistence amid diversity. We showcase a number of these initiatives and organizations in our Topic special.

In partnership with the #ichbinhier (I am here; only available in German) association, we run various workshops about online civil courage that are aimed at promoting a more constructive approach to communication on digital platforms. Participation in the workshops is open to everyone. In the reporting year, we placed a special emphasis on civil courage online in the face of hate targeted specifically at people who are perceived to be female and at climate activists. In addition to these workshops, Deutsche Telekom also commissioned #ichbinhier to provide training during the reporting year to full-time and voluntary communities such as cultural institutions, conservation initiatives, charities, and sports associations.

In 2023, our No Hate Speech initiative generated approximately 865 million media contacts and reached 5.7 million people either directly or through opinion leaders such as parents and educators (for instance, through workshops). The total number of people reached in 2022 was four million. We also once again received multiple awards for No Hate Speech in the reporting year.

Furthermore, it is important to us that No Hate Speech has a high profile both outside and inside our company. That is why we worked with the Business Council for Democracy (BC4D) in the reporting year to run a training course for 25 opinion leaders from various parts of the Group. Among others, representatives from the Customer Service, Training, and Communications departments, from the Works Council, and from corporate communities such as DIGITAL@School and Green Pioneers took part. Eight training units were staged that dealt with the topics of hate speech, disinformation, and conspiracy theories on the internet. The aim of the training was to enable participants to take an active role themselves and disseminate what they had learned about the issues throughout the company.
ShareWithCare
In 2023, when it ran its ShareWithCare campaign, Deutsche Telekom joined an international debate about sharing photographs of children online. The campaign generated more than 250 million media contacts with its fictitious story about Ella, which portrayed a very real problem known as “sharenting.” This term (a mix of “sharing” and “parenting”) refers to the posting of photos and videos of children in social networks. Internet users who do this could unintentionally expose children to the risk of profiling by data brokers, hacking, facial recognition, pedophile crimes, and other privacy and security threats. However, only very few people are aware of these dangers. This was illustrated in a recent survey with parents of children aged between 0 and 14 carried out on behalf of Deutsche Telekom. Through ShareWithCare, we aim to raise awareness of the need to protect photographs of children and their personal data on the internet and to provide assistance in doing just that. We support parents by providing further information through TeachToday and with the aid of our partner DsIN (Germany secure online). In the reporting year, we published a guide entitled “Kinder sicher im Netz” (“Keeping children safe on the internet”) in collaboration with DsIN to provide information about digital rights for children, risks, and how to stay safe online. Find out more about digital youth protection here.

#equalesports
During the reporting year, we also continued our commitment to promoting civil courage and constructive dialog on gaming platforms. Together with the esports organization SK Gaming and the esports player foundation, we launched the initiative #equalesports in 2021 to promote greater diversity in esports and gaming. The initiative aims to support the participation of women and non-binary people, who are particularly frequent targets of hostility, in professional and amateur sports. In September 2023, we also worked with both partners to stage the third Equal eSports Festival, once again as part of the DIGITAL X trade fair in Cologne. Held over two days, the festival addressed diversity, esports, and digital education in workshops, panel discussions, and other event formats. The highlight of our #equalesports activities in the reporting year was the Equal eSports Cup. This tournament took place over a number of months, with the final being staged at the festival. It was aimed at all female and non-binary players.

Reporting against standards
Indicators for telecommunications providers from the GSM Association (GSMA)
- GSMA-INT-03 (Online Safety Measures)

United States segment: digital equity
T-Mobile US fundamentally believes that access to connectivity and the digital skills to navigate our world have become two of the most important differentiators of societal equity today. That’s why the segment is empowering people with the essential connections, tools, and skills needed to succeed in today’s digital world. Digital empowerment is also a key focus area of the ESG approach at T-Mobile US.

Access and affordability
T-Mobile US built its network to deliver the best 5G experience while providing affordable options to families in order to support a more connected, equitable future. In today’s digital world, being disconnected presents unfair hurdles and roadblocks to everyday life. T-Mobile US has addressed this critical issue by making significant investments in programs and initiatives that make connectivity more accessible and affordable. It also invests in essential digital equity and literacy programs with various communities and organizations.

Project 10Million
Project 10Million is a USD 10.7 billion commitment by T-Mobile US to help end the digital divide in education. This program was launched in 2020 and provides free Internet service and free mobile hotspots to under-connected households with school-aged children. The aim is to offer up to 10 million eligible households. In 2023, T-Mobile US once again worked with school districts, extracurricular programs, and local communities to offer free and affordable Internet access to connect schools and students nationwide. As a result of its education initiatives, T-Mobile US had connected over 5.8 million students through the end of 2023.

T-Mobile US works to leverage local and national partnerships with organizations such as Big Brothers Big Sisters of America, to promote awareness of the program and to simplify registration.

5G access for all
Developed in partnership with Google, the T-Mobile US REVVL line provides customers with affordable and feature-packed 5G smartphones. In 2023, the company also introduced a tablet to its REVVL lineup for the first time. The devices provide a budget option to help make 5G accessible on a broad scale.

Connecting our Heroes
The 10-year commitment by T-Mobile US provides free service and 5G access to first responder agencies – all public and non-profit state and local fire, 911, police and EMS departments – creating huge savings for participating agencies.

Extending a welcome to refugees with Welcome.US
In early 2022, T-Mobile US’ Mike Sievert joined 35 other CEOs to form the Welcome.US CEO Council. This public/private partnership provides refugees being resettled in the US with products, services, job training, and employment opportunities. As a part of this partnership, T-Mobile US pledged to contribute up to 200,000 lines of free, unlimited talk, text, and data for one year to incoming refugees, from a growing number of countries, including Afghanistan and Ukraine.

Europe segment: initiatives for digital participation and digital values
The Europe segment comprises a variety of national companies, only some of which are mentioned here as examples. Together, they reach a number of different target groups with a diverse range of initiatives aimed at contributing to a digital society that everyone can participate in based on democratic principles.
As part of the Netrevalok (be now generation) program, our Hungarian company Magyar Telekom organizes digital education courses at a total of 24 libraries. At these sessions, middle-grade students help people from older generations come to grips with digital tools.

In Austria, the Magenta Telekom project ConnectedKids has been bringing the topic of the digital future into the classroom for 10 years. Over a period of six weeks, participating schools are given free tablets, educational apps, mobile internet, and support staff. Since early 2013, a total of 290 schools have registered for the scheme and 30,000 students from 1,500 classes have taken part.

Children and young people are also being trained in the use of digital tools in Croatia, thanks to the Generation NOW program. The aim of this program is to introduce young people to new types of education so they can develop their creativity and innovation with state-of-the-art technology. As part of the Generation NOW project, Hrvatski Telekom and IRIM, an institute for youth development and innovation, have established the country’s biggest educational project for the Internet of Things. So far, more than 500 mentors have been trained who will share their know-how with new generations of school-age children year after year.

Our Montenegrin company is providing free 1 Gbit/s internet access to the University of Montenegro. This means that staff and students from all faculties, institutes, and university departments can share data and information effortlessly as part of a larger academic network.

As part of the ENTER digital education program, Slovak Telekom has launched a support program called “Ready for the digital age” that focuses on developing digital literacy among senior citizens. It covers subjects like using smartphones and computers, digital communications, and teaching of programming skills.

A similar initiative in the Czech Republic is also aimed at seniors. In collaboration with partner NGOs, digital education is being brought to people at roadshows staged all across the country in businesses, public buildings, and community centers. Telekom Shop assistants from our national company are helping out as coaches. A website designed especially for seniors has also been created.

In Greece, the non-profit organization for educational robotics and science, WRO Hellas, entered a strategic collaboration with COSMOTE to stage the National STEM & Educational Robotics 2023 competition in the first half of 2023. At the final, more than 1,200 elementary and secondary-school students showcased automation and technology solutions for an environmentally friendly and people-friendly smart city. It was the ninth time in a row that the national competition had been staged, and it was held under the patronage of the Greek President.

Various national companies in the Europe segment implemented their own activities as part of the Group-wide No Hate Speech initiative.

For example, the foundation Telekom for Macedonia joined with UNICEF to run the “Together for a hate-free internet” (No hate speech youth) campaign. Its aim is to encourage young people to be respectful and friendly to each other in online communities by staging workshops that teach participants how to deal with problems. The young people also created a campaign to raise awareness among their peers and the general public. Events were led by specialists in media literacy and technology experts among others.

Online hate is also becoming an ever-greater problem in Poland, and is having a negative impact on mental health, particularly among Generation Z. Our national company therefore launched an education campaign with the foundation Sexed.pl. The aim is to give Generation Z the tools and knowledge they need to counteract hate, and to show that it pays to share positive feedback, both in life in general and online.

T-Mobile Czech Republic is providing financial support for schemes designed to support those affected by hate speech. In 2023, it started working with In IUSTITIA, a non-profit organization that provides legal and social aid to those affected by hate crimes. T-Mobile CZ has provided financial support for the victim advice unit run by In IUSTITIA, and both partners are promoting a campaign entitled “Flaw in the law” that is highlighting the lack of legal protection for people who have been the target of hate crimes. In November 2023, T-Mobile CZ also announced a funding procedure to provide access to funds worth a total of 1.5 million Czech koruna to organizations that support groups threatened by violence due to prejudice. Applications for funding can be submitted by non-profit and aid organizations, but informal groups and universities are also welcome to apply.

**ESG KPIs: Community Contribution, Reach - Focus Topics, and Beneficiaries – Focus topics**

And to measure the effectiveness of our commitment in relation to the focus topics of “digital society” and “low-carbon and circular society” we report a set of three ESG KPIs: Community Contribution, Reach – Focus Topics, and Beneficiaries – Focus Topics. In using these KPIs, we rely on methods employed by the organization Business for Societal Impact (BASI), which incorporate the aspects “input,” “output,” and “impact.” In 2021, we anchored our focus topics even more firmly in our KPIs. Initiatives from the “voluntary and financial commitment” category also come under the ESG Social KPIs.

**Community Contribution**

The Community Contribution ESG KPI encompasses activities in which Deutsche Telekom was involved in the community either financially, through its employees, or through the donation of materials. Between 2017 and 2020, this input was termed “Community Investment.” In 2021, the KPI was modified and its focus tightened.
Our ambition in this connection: Increase the KPI

In 2023, we dedicated around 98 percent of our commitment to the focus topic of “digital society.” Around 2 percent was put toward other issues such as our focus topics “low-carbon and circular society” and “disaster management.”

Besides the longer-term commitment to our focus topics of “digital society” and “low-carbon and circular society” (social investments), we also contribute through donations to charity and social sponsorships (e.g., for cultural events).

To calculate our commitment in terms of our staff, we look at the volunteering hours that our employees have contributed during their working hours as part of our Corporate Volunteering scheme. In 2021, we adjusted the basis for calculation and now include both volunteering hours contributed during working hours and volunteering hours that we support in other ways (e.g., by providing venues, insurance policies, or donations). For example, during the reporting year, our employees volunteered at the Special Olympics World Games 2023 in Berlin. Throughout the Group, our employees contributed 179,463 volunteering hours in 2023.

Also, efforts we make in the context of the Community Contribution ESG KPI contribute significantly toward achievement of the Sustainable Development Goals. In 2023, approximately 1,470 million euros of our Group-wide Community Contributions went toward promoting the digital society and therefore helped deliver SDG 4 (Quality Education) (2022: 2,331 million euros). A particular effect in 2022 was our support for Ukrainian refugees in the form of free or heavily discounted telecommunications services (550 million euros in Germany). We continued to offer telecommunications services at lower-cost rates in 2023, albeit to a lesser extent (24 million euros in Germany).

Reach – Focus topics
The Reach – Focus Topics ESG KPI indicates the number of people reached and media contacts generated through our messaging on our focus topics of “digital society” and “low-carbon and circular society.” It therefore shows how many people have been made aware of the topics and our activities. At the end of 2023, we recorded a total of approximately 1,734 million people and media contacts, which represents a reduction compared to the previous year (2022: 2,070 million). This was primarily due to the fact that fewer initiatives contributed to the ESG KPI Reach – Focus Topics in the reporting year and therefore projects with a particularly large reach in the previous year were not included in 2023.

Our ambition in this connection: Increase the KPI
Beneficiaries – Focus topics
The Beneficiaries – Focus Topics ESG KPI shows the number of people who have benefited from our commitment to promoting a digital society and low-carbon and circular society (e.g. media-literacy training, broadband access for schools, and supporting counseling hotlines). In 2023, approximately 51 million people benefited from our activities (2022: 41 million). In contrast to the period from 2017 to 2020, only beneficiaries of the “digital society” and “low-carbon and circular society” focus topics have been taken into account since 2021. In addition to recording direct beneficiaries, we also take into account indirect beneficiaries in line with a set key, such as when an opinion-leader concept is being applied or when a discounted connection is being used by several people.

Our ambition in this connection: Increase the KPI

Reporting against standards
Indicators for telecommunications providers from the GSM Association (GSMA)
- GSMA-INC-03 (Digital Skills Programmes)

Activities to promote the digital society
This text presents an overview of the most important initiatives at the project level. Please note that the listed values and amounts are not being given as sums, since the figures overlap in some areas. General descriptions are provided in the sections on the ESG Social KPIs.

Our investments in network expansion are making an important contribution to facilitating broadband access for large sections of the public. Further information on our approach to infrastructure expansion can be found here.
## Children and young people

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<th>Activity and Segment</th>
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<th>Description</th>
<th>Activity Segment</th>
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<th>Beneficiaries (in persons)</th>
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<tr>
<td>Teachtoday and SCROLLER</td>
<td>Group</td>
<td>Teachtoday is a practically oriented online learning and teaching resource, with something to offer for just about anyone, including children, young people, parents, grandparents – and teachers. Available in a total of seven languages, Teachtoday is internationally oriented, and it covers best-practice projects in many different countries. In a Toolbox section, Teachtoday offers all kinds of interesting project ideas, video tutorials, exciting quizzes and tasty learning “tidbits” and “morsels.” *SCROLLER is a digital magazine for children between the ages of 9 and 12. It promotes safe, competent use of digital media via a range of features, including fascinating and inspiring stories; a diverse range of audio and video pieces; puzzles; and interactive content.</td>
<td>Community</td>
<td>520.4 thousand</td>
<td>11.1 million</td>
<td>8.3 million</td>
</tr>
<tr>
<td>MINT Zukunft schaffen (STEM – Creating the future)</td>
<td>Group</td>
<td>A lack of young people entering STEM (science, technology, engineering, mathematics) fields is presenting risks for Germany’s economic future. If the numbers of qualified applicants for vocational training careers and study programs in STEM fields are to be significantly increased – with a view to safeguarding our future prosperity – we need to be looking at all potential sources of talent, and working to eliminate barriers to learning and education. The MINT Zukunft schaffen (STEM – Creating the future) initiative is working to quantitatively and qualitatively improve teaching and learning in STEM subjects at schools and universities. In addition, it is promoting digitalization in education, and honoring schools that emphasize STEM education.</td>
<td>Community</td>
<td>142.2 thousand</td>
<td>506.8 thousand</td>
<td>1.4 million</td>
</tr>
<tr>
<td>DIGITAL@School</td>
<td>Group</td>
<td>DIGITAL@School is a corporate community of Deutsche Telekom. Its aim is to prepare children to help shape our digital age, by promoting competence, activity, and self-determination. With age-appropriate language and resources, DIGITAL@School introduces children to STEM subjects, and to programming languages. Its offerings include programming workshops led by Deutsche Telekom staff. In addition, its highly committed and motivated staff teach skills that children need in order to use digital media responsibly. In the process, it draws on materials available in the Teachtoday tool box.</td>
<td>Community</td>
<td>763.2 thousand</td>
<td>65.2 thousand</td>
<td>91 thousand</td>
</tr>
<tr>
<td>T-Labs</td>
<td>Group</td>
<td>Through T-Labs, we cooperate with universities with the aim of facilitating access to scientific innovation. We also actively support endowed chairs, thereby contributing to students’ education. In addition, we carry out numerous local campaigns and events as part of the initiative that help advance the development of young scientists and researchers in STEM subjects.</td>
<td>Community</td>
<td>2.6 million</td>
<td>-</td>
<td>2.7 thousand</td>
</tr>
<tr>
<td>Telekom@School Germany</td>
<td>Germany</td>
<td>Since 2000, the Germany segment’s Telekom@School project has been providing general and vocational schools nationwide with internet accesses for teaching purposes. Participating schools receive the accesses either free of charge or at a considerably reduced price, depending on the access bandwidth.</td>
<td>Community</td>
<td>11 million</td>
<td>-</td>
<td>6.8 million</td>
</tr>
<tr>
<td>Flat rate for education Germany</td>
<td>Germany</td>
<td>With the flat rate for education, students can access digital learning content on mobile devices, submit their homework, and take part in video chats (for example, in home-schooling settings). In addition, the service can provide schools with temporary internet accesses that can serve as viable substitutes until permanent fiber-optic accesses/in-house coverage is available. Such accesses are provided free of charge, and they offer unlimited data.</td>
<td>Community</td>
<td>9.4 million</td>
<td>-</td>
<td>500 thousand</td>
</tr>
<tr>
<td>Smart School and erlebe IT (experience IT) Germany</td>
<td>Germany</td>
<td>Smart School and erlebe IT (experience IT) are initiatives of the German digital association Bitkom e.V. (Federal Association for Information Technology, Telecommunications and New Media) that are supported by Deutsche Telekom. With Smart School, Bitkom is working to promote modern education, and to advance the digital transformation at Germany’s schools. Each year, the initiative honors “smart schools” that are leading the way in digital education and showing what schools might look like in the future. Since 2009, the association’s erlebe IT (experience IT) initiative has been working to strengthen digital competence at schools. The initiative provides interactive instruction materials designed to help students use digital technologies competently and to support teachers in teaching with digital tools.</td>
<td>Community</td>
<td>53.4 thousand</td>
<td>78.8 thousand</td>
<td>-</td>
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</table>
### Children and young people

<table>
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<tr>
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<tr>
<td>AwareNessi – the Fantastic Security Activity Book</td>
<td>Germany</td>
<td>AwareNessi – the Fantastic Security Activity Book is an interactive educational tool designed to raise awareness about online risks. AwareNessi, which is produced by Deutsche Telekom Security GmbH, uses a playful, fun-and-games approach that is suitable for people of all ages (both children and adults). Issues of AwareNessi appear regularly in up to 16 different languages, and cover current topics in the area of data privacy and cyberspace safety. AwareNessi, the series' central figure, is a vigilant, friendly dragon who wards off threats and provides easy-to-understand explanations, with a playful wink to their audience as they do so. In addition, AwareNessi is always full of ideas for fun games, crafts and recipes that children and their parents can enjoy together. AwareNessi, a likeable figure who uses clear and simple language, and invites their audience to interact with them in play, helping both children and adults grasp the often-complex issues of online security and safety. The cyberspace-risk awareness that AwareNessi promotes applies to personal, school-related, and professional environments, and is of lasting relevance for people of all ages.</td>
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<tr>
<td>T-Mobile's Project 10 Million program and education initiatives</td>
<td>United States</td>
<td>T-Mobile's social impact connectivity programs (existing since 2020) committed to helping bridge the digital divide by providing free and low-cost service and devices to eligible K-12 students.</td>
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<tr>
<td>Crnogorski Telekom is providing the University of Montenegro with a free 1 Gbit/s internet access. The free broadband access, which is available to staff and students in all of the university's institutes and departments, is promoting academic/scientific networking and full participation in the EU's Gigabit Society vision.</td>
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<tr>
<td>Generation NOW</td>
<td>Europe</td>
<td>In 2023 in Croatia, the “Generation NOW trained” program continued teaching children and adolescents about new digital tools. The aim of this program is to introduce young people to new forms of learning in which they can develop their creativity and innovation with state-of-the-art technology. In the Generation NOW framework, Hrvatski Telekom and the non-governmental organization Institute for youth development and innovation have launched the country's biggest educational project to date for the Internet of Things (IoT). To date, this effort has trained several hundred mentors to coach new generations of students, year after year.</td>
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</tr>
<tr>
<td>Tools for Modern Times</td>
<td>Europe</td>
<td>Tools for Modern Times is a program designed to promote safe online habits among children. It was developed by Hrvatski Telekom in cooperation with the University of Zagreb's Faculty of Education and Rehabilitation Sciences.</td>
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<tr>
<td>EDUINO School Platform Support</td>
<td>Europe</td>
<td>Tools for Modern Times is a program designed to promote safe online habits among children. It was developed by Hrvatski Telekom in cooperation with the University of Zagreb's Faculty of Education and Rehabilitation Sciences.</td>
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<td></td>
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<tr>
<td>No hate speech youth</td>
<td>Europe</td>
<td>The Telekom Foundation for Macedonia and UNICEF have launched the “Together for a hate-free internet” (No hate speech youth) campaign, with the aims of promoting respectful interaction on the part of children and youth in online communities and of taking a stand against online hate speech. In 2023, participating children and young people learned about ways of dealing with online problems and developed a campaign to raise awareness within their own age group and in the public at large. Many of the campaign events were led by media-literacy specialists and technology experts.</td>
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</tr>
<tr>
<td>Keys to media</td>
<td>Europe</td>
<td>“Keys to media” (Klíče k médiím), a project developed by T-Mobile Czech Republic in cooperation with journalists and media experts, aims to promote media literacy among secondary-level students and teachers.</td>
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<td></td>
</tr>
<tr>
<td>HejOut Generation Z</td>
<td>Europe</td>
<td>Poland is yet another country in which online hate speech is becoming a growing problem, with negative impacts on mental health – especially for people of Generation Z. To address this issue, T-Mobile Polska, in cooperation with the Sexed.pl foundation, has launched an awareness campaign aimed at equipping Gen Zers with tools and knowledge that can help them counter hate speech. The campaign also emphasizes the benefits of sharing positive feedback – both online and offline.</td>
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<td>ConnectedKids Europe</td>
<td>Europe</td>
<td>In Austria, Magenta Telekom is helping to promote digital expertise in classrooms. Its ConnectedKids program, which has been in operation since 2013, provides free digital workshops, equipment (such as tablets), mobile internet access, and educational expertise.</td>
<td>86.6 thousand</td>
<td>100 thousand</td>
<td>3.4 thousand</td>
</tr>
<tr>
<td>Robotics in teaching and in STEM subjects</td>
<td>Europe</td>
<td>In Greece, WRO Hellas, a non-governmental organization focusing on robotics and science in schools, held the National STEM &amp; Educational Robotics competition in the first half of 2023, in strategic cooperation with the Greek mobile service provider COSMOTE. In the final round of the competition, which focuses on STEM (science, technology, engineering, mathematics) subjects and educational robotics, elementary and secondary school pupils presented automation and technology solutions for livable, environmentally friendly smart cities. In 2023, the national competition was staged for the ninth year in a row – and held under the auspices of the President of Greece.</td>
<td>195 thousand</td>
<td>-</td>
<td>48.5 thousand</td>
</tr>
<tr>
<td>Magenta Life – Schools of tomorrow Systems</td>
<td>Solutions</td>
<td>“Magenta Life – Schools of tomorrow” (Deutsche Telekom IT Solutions Slovakia) is a school-funding program that supports elementary education in the area of ICT. It has been in existence since 2014. Using IT technologies, LEGO robotics, basic courses on computer programming, and interactive whiteboards, it promotes innovative solutions for challenges facing schools today. The basic aims of Magenta Life are to promote responsible use of ICT, to help prevent cyberbullying, and to combat disinformation online.</td>
<td>24.1 thousand</td>
<td>10 thousand</td>
<td>302 thousand</td>
</tr>
</tbody>
</table>

1) Does not include the management overhead.

2) The value is not published at the project level.

### Civil society and non-governmental organizations (NGOs)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Segment</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Network Stories</td>
<td>Group</td>
<td>Each week in our Netzgeschichten (Network Stories), through short clips, podcasts, and discussions, we present news from the areas of telecommunications and technology, as well as interesting information about people and things involved with or otherwise connected to the online world.</td>
<td>454.1 thousand</td>
<td>1.3 million</td>
<td>1.3 million</td>
</tr>
<tr>
<td>No hate speech and media literacy workshops, including Teachtoday, SCROLLER, &quot;#TAKEPART stories,&quot; &quot;Heute retten wir die Welt! Ein bisschen.&quot; (&quot;Today we save the world! A little bit.&quot;) FIFA Fairplay Guide</td>
<td>Group</td>
<td>With its No hate speech initiative, and in cooperation with many partners, Deutsche Telekom is working to bring about an online world in which all users treat each other with respect. Through the measures in this initiative, we aim to raise awareness in society – and help people live by and defend fundamental democratic values online. In addition, on the Teachtoday platform, we provide multipliers with teaching resources.</td>
<td>708.8 thousand</td>
<td>864 million</td>
<td>5.7 million</td>
</tr>
<tr>
<td>#TAKEPART stories</td>
<td>Group</td>
<td>Deutsche Telekom’s #DABEI-Geschichten (#TAKEPART stories) initiative is designed to help people learn about the digital world. It is aimed at multipliers who wish – as non-experts – to inform groups of young people or adults about digital phenomena. In 2023, we carried forward our successful #TAKEPART stories in the Teachtoday Academy.</td>
<td>-</td>
<td>22.2 thousand</td>
<td>244.3 thousand</td>
</tr>
</tbody>
</table>
### Civil society and non-governmental organizations (NGOs)

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<tr>
<td>Making Germany safe on the Net</td>
<td>Group</td>
<td>The association Deutschland Sicher im Netz e.V. (DsiN) was established in 2006, at the first National IT summit (now: Digital Summit). DsiN is a non-profit alliance that helps consumers and small companies to use digital solutions with confidence and skill. In cooperation with its members and partners, DsiN offers concrete assistance, and interactive learning resources, for people in private settings and in the workplace. Right from the beginning, Deutsche Telekom has supported DsiN in implementing and designing projects and it has served on the organization's executive board.</td>
<td>100.8 thousand</td>
<td>5.5 thousand</td>
<td>8 thousand</td>
</tr>
<tr>
<td>ShareWithCare</td>
<td>Group</td>
<td>With our ShareWithCare campaign, we are working to raise awareness about the need for caution and care in any sharing of children's photos and data online. The starting point for the campaign is an AI-generated deepfake video entitled “A Message from Ella,” in which Ella, a fictitious character, confronts her parents with the potential consequences of sharing pictures of their children online. With this initiative, we want to highlight the importance of media literacy, and to support parents in protecting their children's privacy and in minimizing online risks.</td>
<td>27.7 thousand</td>
<td>256.1 million</td>
<td>4.7 million</td>
</tr>
<tr>
<td>Subsidized rates</td>
<td>Germany</td>
<td>The company's Germany segment offers customers with low incomes and people with disabilities subsidized rates on certain connections within the Deutsche Telekom fixed network.</td>
<td>3.3 million</td>
<td>-</td>
<td>74.9 thousand</td>
</tr>
<tr>
<td>Firefighters' rates</td>
<td>Germany</td>
<td>Firefighters' rates (Feuerwehrtarif) is a discount-rate program offered by the Germany segment, on the basis of a framework agreement for all fire-department personnel nationwide (about 1.3 million). It is available for all the different kinds of fire departments that operate in the country, including professional fire departments, works fire brigades, volunteer fire departments, and youth fire brigades. The discount rates available under the program include discounts on the company's current Business Mobil rates, and a specific rate stipulated in the framework agreement.</td>
<td>1.8 million</td>
<td>-</td>
<td>19 thousand</td>
</tr>
<tr>
<td>Nummer gegen Kummer youth counseling line and TelefonSeelsorge crisis line</td>
<td>Germany</td>
<td>The association Nummer gegen Kummer e.V. is a competent point of contact that children, young people, and parents can turn to with their problems, concerns, and fears – whether large or small. All calls to its helplines are free of charge. Deutsche Telekom covers the connection charges. We have been a cooperating partner of Nummer gegen Kummer since 1991. The TelefonSeelsorge crisis line is available to people of all ages, occupations, and religions (including persons with no church affiliation). Each year, working around the clock, and free of charge, it handles about a million calls. Deutsche Telekom assumes all the charges for calls made via the crisis line's two 0800 numbers.</td>
<td>-</td>
<td>-</td>
<td>1.6 million</td>
</tr>
<tr>
<td>Deutsche Telekom Stiftung</td>
<td>Germany</td>
<td>Deutsche Telekom Stiftung is one of the largest educational foundations in Germany. For nearly 20 years now, it has supported projects focusing on topics in STEM (science, technology, engineering, mathematics) fields. It does so because it is convinced that a modern education system must give children and young people the best possible preparation for meeting global challenges such as digital transformation, climate change, electromobility, and biodiversity. In its projects, it initiates and promotes cooperation between different learning sites, with the aim of creating an optimal education ecosystem for young people.</td>
<td>5 million</td>
<td>-</td>
<td>-</td>
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### Civil society and non-governmental organizations (NGOs)

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<tr>
<td>Framework agreements for German Red Cross</td>
<td>Germany</td>
<td>The framework agreements with Telekom Deutschland are aimed at members and volunteers of the German Red Cross (DRK). The special rates they provide are available for DRK associations, full-time employees, and volunteer members. All in all, they are available to about 300 000 active members. The special rates available under the program include discounts on the company’s current Business Mobil rates and a specific rate stipulated in each framework agreement.</td>
<td>67.2 thousand</td>
<td>-</td>
<td>39 thousand</td>
</tr>
<tr>
<td>Netrevalók (Be Now Generation)</td>
<td>Europe</td>
<td>In Hungary, Magyar Telekom is promoting inter-generational exchanges on the topic of media literacy. Secondary-level school students meet with older people and coach them in using digital tools.</td>
<td>44.3 thousand</td>
<td>2.2 million</td>
<td>19.7 thousand</td>
</tr>
<tr>
<td>Magenta Experience Center</td>
<td>Europe</td>
<td>The Magenta Experience Center (T-Mobile Czech Republic) is a facility for various types of educational programs, training courses, and events focused on media literacy.</td>
<td>800 thousand</td>
<td>-</td>
<td>85 thousand</td>
</tr>
<tr>
<td>Digital Academy for NGOs</td>
<td>Europe</td>
<td>The Digital Academy of T-Mobile Czech Republic offers employees of non-governmental organizations free training courses on subjects such as new technologies, social media, and digital marketing as part of the promotion of media skills.</td>
<td>1.8 thousand</td>
<td>300</td>
<td>3.3 thousand</td>
</tr>
<tr>
<td>Nohatespeech Campaign</td>
<td>Europe</td>
<td>In 2023, T-Mobile Czech Republic, working in cooperation with the non-profit organization in IUSTITIA, provided legal and social assistance to victims of hate crimes. In addition, the two partners publicized the campaign “Flaw in the Law,” which calls attention to the inadequate legal protection available for hate-crime victims. In November 2023, T-Mobile Czech Republic also announced a procedure that will provide 1.5 million Czech koruna of funding for organizations that support groups threatened by violence due to prejudice. Along with non-profit and donor organizations, universities and informal groups are eligible to apply for funding under this program.</td>
<td>26.8 thousand</td>
<td>2.2 million</td>
<td>582</td>
</tr>
<tr>
<td>Safe on the Net</td>
<td>Europe</td>
<td>Through its Safe on the Net initiative, T-Mobile Polska provides expertly compiled information about online safety and security.</td>
<td>86.9 thousand</td>
<td>71.6 million</td>
<td>752.4 thousand</td>
</tr>
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# People with disabilities

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<tr>
<td>Deaf Hotline</td>
<td>Group</td>
<td>Since 2023, our Deaf Hotline has provided deaf and hearing-impaired persons with advice and information about our products and services. On the Hotline’s video-based live chat application, customers and customer-service agents can see each other and communicate in sign language. Customers can also use the hotline if they have questions regarding bills or contracts. Calls are taken by three hearing-impaired Deutsche Telekom employees.</td>
<td>273 thousand</td>
<td>-</td>
<td>9.1 thousand</td>
</tr>
<tr>
<td>Design for All</td>
<td>Group</td>
<td>With our Design for All initiative, we are working to make our products and services even more accessible, convenient and easy to use. This involves ensuring that our product-development process takes full account of human diversity, including aspects such as physical and mental abilities, age, gender, ethnic origin, and nationality.</td>
<td>206.2 thousand</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Reduced rates for deaf persons</td>
<td>Germany</td>
<td>Since 2007, the Germany segment has offered reduced rates for deaf persons.</td>
<td>90.7 thousand</td>
<td>-</td>
<td>5 thousand</td>
</tr>
<tr>
<td>Special rates for persons with disabilities</td>
<td>Europe</td>
<td>Crnojorski Telecom believes that all persons should have equal access to online resources and opportunities. Consequently, it takes pride in working on behalf of disadvantaged members of society in Montenegro. For example, we help persons with disabilities, and non-profit organizations that serve them, by granting them free internet access and considerably reduced rates.</td>
<td>93 thousand</td>
<td>-</td>
<td>3.7 thousand</td>
</tr>
<tr>
<td>Program for inclusion of hearing-impaired persons</td>
<td>Europe</td>
<td>Online speech transcription can greatly improve the quality of life of hearing-impaired persons who are unable to use sign language, and who constantly face communication barriers as a result. To address this issue, staff in all of T-Mobile Czech Republic’s shops are equipped with a mobile-phone app for online speech transcription. In addition, T-Mobile Czech Republic’s Infoline is now fully accessible thanks to speech transcription. With the help of financial support from T-Mobile Czech Republic, these services are being provided by a socially oriented company that employs visually impaired typists.</td>
<td>17 thousand</td>
<td>-</td>
<td>400</td>
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<tr>
<td>Telekom Seniors’ Academy</td>
<td>Group</td>
<td>The Telekom Seniors’ Academy works to assist older people in going online and in using digital devices such as tablets. Since March 2022, we have offered seminars and workshops, run by competent, empathetic and lively staff, that help seniors navigate the online world and have fun in the process. This effort is based in large measure on the efforts of the German National Association of Senior Citizens’ Organisations (BAGSO), including pertinent cooperation and a newsletter, as well as on support provided by the association Wege aus der Einsamkeit e.V. (“Getting in touch with other people”).</td>
<td>-2)</td>
<td>9.7 thousand</td>
<td>2 thousand</td>
</tr>
<tr>
<td>Generations Together</td>
<td>Europe</td>
<td>Generations Together is a digital education program launched in cooperation with Zagreb’s Center for Volunteer Work. It is aimed at helping senior citizens acquire useful digital skills. It was developed in response to the coronavirus pandemic, which hit senior citizens hardest – especially those living in retirement and nursing homes, since they were unable to receive visits from family members during the pandemic. As part of its efforts for seniors over the past few years, Hrvatski Telekom has donated tablets, provided free internet access, and organized computer courses to help seniors learn to use digital tools such as WhatsApp for video calls. In addition to teaching seniors about basic, widely used tools, the courses presented a range of other useful and interesting apps, as well as related skills such as updating of devices.</td>
<td>16.7 thousand</td>
<td>1.8 million</td>
<td>5.2 thousand</td>
</tr>
<tr>
<td>Network of Generations</td>
<td>Europe</td>
<td>Most of Poland’s seniors still do not use the internet. Over half of the country’s people between the ages of 65 and 74 (54.4 percent) have never even used a computer, while a full 71.2 percent of Poland’s seniors do not use the internet at all. Only about one fifth of the country’s people aged 60 and older (21.4 percent) use the internet regularly. In addition, institutions such as retirement and nursing homes face considerable problems in getting up to speed with online resources. T-Mobile Polska considers this situation to be unacceptable and has developed the Network of Generations initiative in order to address it. Within the space of two years, T-Mobile Polska has already equipped over 30 seniors’ institutions with laptops and provided free, specially designed video courses that show seniors, step-by-step, how to use modern digital devices and online resources. The company has also designed a special website (<a href="http://www.siecpokolen.pl">www.siecpokolen.pl</a>) that provides training materials. In addition, the entire campaign is being supported by an outreach in media used by seniors.</td>
<td>23 thousand</td>
<td>2.1 million</td>
<td>76.7 thousand</td>
</tr>
<tr>
<td>Digital Senior/ Computer courses for seniors’ centers</td>
<td>Europe</td>
<td>In 2023, as part of its volunteer efforts, T-Mobile Czech Republic again offered computer courses in seniors’ centers and residences – covering topics such as smartphones, apps, and cybersecurity. The patient, motivated, and committed volunteers staffing the courses helped seniors learn about the new technologies and begin using them confidently. Similar courses were also offered in the Magenta Experience Center.</td>
<td>7.6 thousand</td>
<td>-</td>
<td>1.5 thousand</td>
</tr>
<tr>
<td>Click for Peace</td>
<td>Europe</td>
<td>Click for Peace (Klik pro klid), a joint project of T-Mobile Czech Republic, the Czech Police, and the Czech Ministry of the Interior, is aimed at teaching seniors about the internet and protecting them against online fraud.</td>
<td>3.6 thousand</td>
<td>120 thousand</td>
<td>120 thousand</td>
</tr>
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### Start-ups

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<tr>
<td>TechBoost</td>
<td>Germany</td>
<td>TechBoost is a Deutsche Telekom startup program that supports startup founders through scouting, people-matching, and (digital) innovation workshops, plus the support of a major network. TechBoost also provides assistance in the areas of sales and marketing, offers access to its own customer network and supports startups with up to EUR 100 000 of credit for the Open Telekom Cloud.</td>
<td>1 million&lt;sup&gt;1&lt;/sup&gt;</td>
<td>504.8 thousand</td>
<td>1.1 thousand</td>
</tr>
<tr>
<td>Hello Biznisz</td>
<td>Europe</td>
<td>Hello Biznisz supports Hungarian small and medium-sized companies (SMEs) in addressing the many challenges they face in areas such as business administration, human resources management, marketing, sales, and finance. The website for this Magyar Telekom program provides companies with relevant current news and practical information, in both text and video formats.</td>
<td>221 thousand</td>
<td>21.3 million</td>
<td>640.9 thousand</td>
</tr>
<tr>
<td>CODIGOS</td>
<td>Systems Solutions</td>
<td>The CODIGOS initiative (digital solutions with a focus on social issues) was launched by T-Systems Mexico, in cooperation with other telecommunications companies. It supports companies that focus primarily on social concerns. The companies in question use information technologies to support efforts toward one of the UN's Sustainable Development Goals (SDG). This initiative of T-Systems Mexico is being supported by leading companies in the IT and digital-technology sector. The project is designed to identify and support socially motivated, technologically competent companies, for the purpose of developing solutions oriented to a new, inclusive, accessible, and increasingly digital reality. The digital solutions involved are expected to advance equality in participation in society and help to close social and economic gaps. The digitally oriented companies being funded in the CODIGOS framework are helping to address some of the country’s most-urgent social challenges. CODIGOS is working to identify and support entrepreneurs and startups that are applying their energies, expertise, and creativity to socially motivated digital projects in the areas of health, education, employment, sustainability, renewable energies, industry, innovation, infrastructure, equal-opportunity participation, and finance, all with the aim of helping the weakest members of society.</td>
<td>-&lt;sup&gt;2&lt;/sup&gt;</td>
<td>3.6 thousand</td>
<td>20.8 thousand</td>
</tr>
</tbody>
</table>

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<sup>2</sup> The value is not published at the project level.
# Women and girls

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<tbody>
<tr>
<td>#equalesports</td>
<td>Group</td>
<td>The #equalesports initiative is a joint project of Deutsche Telekom, SK Gaming, and the esports player foundation. It was launched in 2021. The initiative works to promote equity and equal opportunities for female and non-binary players in esports and gaming. The main aim of #equalesports is to create positive role models – and thereby bring about positive changes in society as a whole. The initiative's mission states, “we drive equality by creating role models in esports that enable a movement in society.”</td>
<td>223.1 million</td>
<td>176.2 thousand</td>
<td></td>
</tr>
<tr>
<td>Girls’Day</td>
<td>Group</td>
<td>Girls’Day is a nationwide project for vocational and educational orientation. It is aimed especially at girls at secondary schools. Each year, like other participating companies, institutions, and organizations, we conduct workshops and other events aimed at introducing girls between the ages of 11 and 16 to scientific, technical, and commercial professions.</td>
<td>88.5 thousand</td>
<td>1.7 million</td>
<td>702</td>
</tr>
<tr>
<td>Femtec</td>
<td>Group</td>
<td>Femtec is an initiative that supports female IT talents through various funding measures. To participants, it offers special training courses, and access to the initiative’s large contact network. We are a cooperating partner, and we are working to promote the Femtec vision.</td>
<td>106.7 thousand</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td>ENTER Europe</td>
<td>Europe</td>
<td>Slovak Telekom is working to improve curricular content in IT instruction. It strongly believes in the potential of IT to improve educational and career opportunities. The company additionally organizes workshops and clubs for girls in elementary and secondary schools, focusing especially on the micro:bit microcontroller as a teaching tool. In sum, the effort is designed to interest and inspire girls to learn about IT.</td>
<td>92 thousand</td>
<td>5.3 thousand</td>
<td>2.3 thousand</td>
</tr>
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## Disaster relief

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<tr>
<td>Earthquake relief in Turkey and Syria</td>
<td>Germany</td>
<td>In February 2023, a catastrophic earthquake struck the region along the border between Turkey and Syria. In addition to expressing its sincere condolences, Telekom Deutschland responded by providing free communications – including roaming, calls, and text messaging – for families and friends of earthquake victims. The charges waivers applied to communications made in Deutsche Telekom’s mobile and fixed networks within Turkey and Syria, and to and from those countries, for the entire month of February. The Group also donated to the charitable organization Aktion Deutschland.</td>
<td>1.3 million</td>
<td>-</td>
<td>40 thousand</td>
</tr>
<tr>
<td>Earthquake relief for Morocco</td>
<td>Germany</td>
<td>Morocco was struck by a catastrophic earthquake in September 2023. In addition to expressing its sincere condolences, Telekom Deutschland responded by providing free communications for families and friends of earthquake victims – including calls and text messaging (SMS). Charges for calls and roaming for data, SMS, and voice services were waived for communications made via Deutsche Telekom within Morocco, and to and from the country, for the entire month of September.</td>
<td>227 thousand</td>
<td>-</td>
<td>2.5 thousand</td>
</tr>
<tr>
<td>Help for Ukraine</td>
<td>Germany</td>
<td>In 2023, Deutsche Telekom continued to provide support for Ukrainian people suffering under Russia’s war of aggression against their country. In this connection, the Germany segment offered a special low-cost prepaid rate for Ukrainian refugees.</td>
<td>24 million</td>
<td>-</td>
<td>368 million</td>
</tr>
</tbody>
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Voluntary & financial commitment

Our approach to voluntary and financial commitment
Further to our strategic focus topics, we also support additional educational, cultural, sporting, and health initiatives. Besides implementing our own projects and initiatives, another aspect of our social commitment involves encouraging our employees to pursue voluntary commitments. For example, we provide financial support for associations in which our employees are active. We also give our staff time off for volunteering.

In addition, we provide financial support – for example, via donations to, and collaborative efforts with, non-profit organizations that work to promote more harmonious coexistence and combat marginalization.

We collaborate closely with our business segments across national borders, sharing experience and best practices. In many cases, we invite our national companies to regionally implement, under their own responsibility, initiatives that we launch centrally.

Our close collaboration with key figures in society such as non-governmental organizations, associations, and initiatives also plays an important role. The reasons why we place priority on such interaction, across organizational and national boundaries, include the opportunities that it provides for mutual impetus and for the development of new ideas.

Sponsorships and corporate giving
In Germany, we are involved in the fields of sport, culture, and social issues. In addition to providing funding, we help artists, athletes, event organizers, and associations with their communication and marketing activities. Our Sponsorship Policy provides the framework for sponsoring activities. Being involved in the regions where we are based is another important aspect.

In the reporting year, Deutsche Telekom supported the Special Olympics World Games 2023 in Berlin as a premium partner. It is the biggest inclusive sport event in the world for athletes with intellectual and multiple disabilities. This partnership was a clear choice for us, as we share the organization’s values. After all, it is only when we all take part that social participation can truly work. For this reason, besides providing telecommunications services, we also contributed to the broadcast of the event. To raise the profile of the World Games in the public eye, we joined forces with 10 other major sports media companies to form an unprecedented media alliance. We provided entirely barrier-free access to content. As part of the German media alliance for the Special Olympics World Games 2023 in Berlin, we won the HORIZONT SPORT-BUSINESS AWARD as “Medium of the Year.”

We also published our first press release in simple language (only available in German) in January 2023 and aim to further promote linguistic participation, using our reach to raise awareness of this important issue.

Other examples of our financial commitment include:

- Music sponsorship
- Competitive sport sponsorship with partners such as the DFB (German Football Association), FC Bayern München, Telekom Baskets Bonn, and Deutsche Sporthilfe, DFB's Sepp Herberger Foundation, and the German National Paralympic Committee
- Technology partnerships with other soccer clubs in the German first and second leagues (Bundesliga 1 and 2)
- Partnerships in the esports sector
- Support for recreational and youth sport
- Sponsorship of social activities within partnerships
- Regional activities in the areas of classical music and culture

Additional information on the sponsorship activities of Deutsche Telekom AG is available here.

Corporate giving
Through our corporate giving program, we support the work of aid organizations – preferably in the form of long-standing partnerships – and provide rapid assistance in disaster situations. Our Group Donation Policy lays out the guidelines for these activities.

Support for employee commitment
Our corporate volunteering activities help our employees to contribute to society by enabling them to donate their time and/or expertise to non-profit projects or social causes that extend beyond the company’s regular activities. Through their commitment, our employees play a major role in strengthening social cohesion, while also broadening their own horizons, and boosting their skills. This in turn has a positive impact on teamwork at the company.

For example, we offer our employees the option to participate in “social days,” when they can actively contribute to society and come together as a team to support non-profit organizations. Moreover, if they are volunteering in a non-profit organization
based in Germany, they can also apply for a donation of 200 euros to that organization once per year.

Civil servants who are 55 or older also have the option to take early retirement if they commit to some form of active contribution to society during the first three years of their retirement. For example, they might spend 12 months working with the Bundesfreiwilligen-dienst (German Federal Volunteers Service) or 1,000 hours with church, charity, or non-profit organizations.

Furthermore, in the reporting year, our employees were able to support the Special Olympics World Games 2023 in Berlin which were held under the motto #UnbeatableTogether. We gave our employees the opportunity to volunteer at the event, freeing them from their regular activities and providing accommodations in Berlin. The placements we offered were taken up in a very short space of time, with a total of 110 Deutsche Telekom employees taking part as helpers. We value this as a strong sign of our employees’ readiness to contribute to society. In recognition of their commitment, the 110 “Magenta volunteers” were presented with the internal Inclusion Award by the Group Representatives for Persons with Disabilities.

Our employees also had the opportunity, once again, to volunteer for the yearly “Ein Herz für Kinder” children’s charity gala in the reporting year. In a drive to champion the focus topics of our CR strategy, many of our employees organized themselves in numerous employee networks known as Employee Resource Groups (ERGs) and Corporate Communities.

During the reporting year, we were a premium partner to the Special Olympics, the world’s biggest sport event for athletes with intellectual and multiple disabilities. The World Games were held in Berlin in summer 2023 under the motto #UnbeatableTogether.

**Corporate Communities**

To achieve shared goals and actively contribute to socially relevant issues, our employees can join Corporate Communities, or even set up one of their own. Numerous programs are being run by our employees under the focus topics of our CR strategy, including “digital society” (with the subtopics “digital participation” and “digital values”) and “low-carbon and circular society.”

Projects that promote media literacy are one focal point. With such projects, our employees help people better understand digital phenomena, thus laying the groundwork for participation in the digital world. One example is the Group-wide DIGITAL@School initiative. Using age-appropriate strategies and language, the committed employees in that initiative help children in schools and other educational institutions become acquainted with STEM (science, technology, engineering, mathematics) subjects and help teachers and parents gain and expand their knowledge. In addition, they teach skills that children need in order to use digital media responsibly.

Our employees also work hard in Corporate Communities that aim to promote diversity and tackle prejudice. One example of these networks, which are known as Employee Resource Groups (ERGs), is MagentaPride. The LGBTQIA+ employee network at Deutsche Telekom looks out for the interests of staff who identify as queer. Similarly, BIPOC@Telekom is dedicated to supporting anyone who is affected by various discriminatory structures in society and aims to promote collective growth and create a safe space for black, indigenous, and other people of color. MerhabaMagenta, the network for staff who share a connection through the Turkish language, is actively involved in private fundraising campaigns for disasters such as the earthquake that hit Türkiye and Syria. Additional information on our approach to diversity, equity, and inclusion is available here.

The environment is also a critical issue. As part of our commitment in this area, employees active in our Green Pioneers movement in Germany have initiated efforts to help reduce our carbon footprint. These efforts contribute to our Group efforts in the area of sustainability.

There is also a steadily growing number of employees participating in the Human-centered Technology Community to help ensure the digital transformation is geared toward the values and needs of people. In the reporting year, this initiative won second place in the “CDR and Employees” category of the Corporate Digital Responsibility (CDR) Award.

In 2023, our employees contributed almost 180,000 volunteer hours. Further information on measuring the impact of our personnel commitment can be found here.

**Emergency assistance in crisis situations**

Our concept of responsibility also includes responding immediately in times of crisis, which is why we take action straight away when crises strike, particularly in regions where Deutsche Telekom has a presence.

For maximum effect, we help on the ground, through our core business activities and strategic partnerships. Our employees also contribute their time and skills on a voluntary basis where they are needed – and are released to do so after consultation. This underscores our commitment to social responsibility and our willingness to actively help during difficult times.

**Germany segment**

**Free phone calls and text messages in earthquake regions (Türkiye, Syria, Morocco)**

It is especially important in disaster situations that people who are affected and their relatives can make contact with each other. After the devastating earthquake in the border region between Türkiye and Syria in February 2023, Telekom Deutschland made all phone calls and text messages from Germany to Türkiye and Syria free for Telekom and congstar customers when using Deutsche Telekom’s mobile and fixed networks. This took effect retroactively from February 6, 2023 through February 15, 2023. What’s more, the Deutsche Telekom Group enabled free roaming for data, text message, and voice services for Deutsche Telekom and congstar customers who are affected and their relatives can make contact with each other.
customers in Türkiye and Syria up to February 15, 2023. Prepaid customers have already been recredited accordingly for the credit they had already used. This initiative was extended to February 24, 2023. In total, this move enabled more than five million minutes of talktime in the disaster zone. Telekom Deutschland also supported the benefit concert Drei Akkorde für deine Spende (Three chords for your donation) in February 2023 in Düsseldorf, which saw numerous musicians take to the stage for free to raise money for the earthquake victims in Türkiye and Syria. All proceeds from the ticket sales went to the Red Cross, Doctors Without Borders, and Medico International. The Group also donated one million euros to Germany’s Relief Coalition for earthquake support.

After the devastating earthquake in Morocco, Telekom Deutschland once again made phone calls and text messages via the mobile and fixed networks of Deutsche Telekom free, to, from, and within the country. This applied to all consumers and business customers of Telekom and congstar from September 8 through September 30, 2023. What’s more, the Group enabled free roaming for data, text message, and voice services for Telekom and congstar customers in Morocco up to September 30, 2023.

Free phone calls and text messages to Israel
As a sign of solidarity with Israel, Telekom Deutschland made all phone calls and text messages to, from, and within the country via mobile and fixed networks free between October 12 and October 31, 2023. This applied to all consumers and business customers of Telekom and congstar. Roaming was also free for Telekom and congstar customers in Israel for data, text messages, and voice services during this period.

Ukraine aid
After Russia’s attack on Ukraine in February 2022, Telekom Deutschland responded quickly and introduced extensive emergency aid services for refugees from Ukraine. In Germany, free prepaid SIM cards were given to refugees in the spring of 2022 in coordination with the Federal Office for Migration and Refugees (BAMF). The SIM cards, which included free phone calls and data volume, were distributed through Telekom Shops and official aid organizations to those affected. Over the course of 2022, the free SIM cards were replaced with a new, low-cost rate plan, MagentaMobil Prepaid Ukraine. This offer was extended in 2023. Since June 2022, Nummer gegen Kummer e. V. has been offering refugees in Germany a free telephone counseling line through its Helpline Ukraine. Telekom Deutschland is providing the technical infrastructure free of charge and is covering the connection fees.

United States segment
Hawaii wildfires
In August 2023, a series of wildfires broke out in the US state of Hawaii, predominantly on the island of Maui. Homes and businesses were destroyed and many people, including employees of T-Mobile US, were displaced. To support first responders, agencies, officials, customers and communities, T-Mobile US rapidly worked to restore connectivity in areas where the fire damaged local fiber connections and where commercial power outages were impacting permanent cell sites. The company also provided concessions to all Maui customers who were not already on unlimited plans. All T-Mobile US customers with Maui addresses received unlimited talk, text and data through September 7, 2023. In addition, evacuees and emergency personnel were provided with supplies like phones and charging cables.

Hurricane Idalia
Hurricane Idalia was a powerful hurricane that caused significant damage across parts of the southeastern United States in late August 2023. Over the last several years, Emergency Management teams have extensively hardened the T-Mobile US network. Ahead of every hurricane season, our teams work to ensure readiness and resiliency in areas projected to be impacted by hurricanes like Idalia. When Hurricane Idalia intensified to Category 3 and continued its path toward landfall, the emergency plan was activated so teams could quickly begin recovery efforts to keep communities, first responders and customers along the Gulf Coast and Atlantic seaboard connected. Customer concessions for unlimited talk, text and data from 30 August through 5 September were positioned in impacted counties in Florida, Georgia and South Carolina.

Earthquake in Morocco
In response to the destructive earthquake in Morocco in September 2023, T-Mobile US offered assistance to affected customers to stay connected to friends and family during this critical time. T-Mobile US decided to waive international roaming and international long-distance charges to and from Morocco and the US for its customers from 9 to 15 September 2023. This included calls made from within Morocco to local numbers.

Europe segment
In 2023, Greece was hit by two severe wildfires. COSMOTE took emergency measures to help ensure citizens could stay in touch with each other. In particular, COSMOTE provided continuous assistance to its customers who were affected by the fires by covering their increased communications needs. For example, for a period of 15 days, 1 500 free minutes of call time in all national networks were offered, as well as 15 GB of free mobile internet access for all mobile network users. Furthermore, up until September 5, 2023, COSMOTE suspended all procedures for permanently or temporarily blocking all fixed and mobile network and pay-TV connections in the affected regions. In addition, COSMOTE organized a Call2Action initiative to collect essential supplies for the people on the island of Rhodes who had been affected by the wildfires.

In May 2023, the regions of Gračac, Čačinci, Obrovac, and Kostajnica in Croatia suffered severe flooding. The national company there took action to help its customers. If their fixed-network service was interrupted or adversely affected, customers were not billed for the services nor were they sent reminders. With regard to mobile-network services, Hrvatski Telekom activated seven days of unlimited internet use for contract customers in the flood-hit regions.
Systems Solutions segment

KatHelfer PRO (Coordination of Spontaneous Volunteers in Disaster Response & Crisis Management)

T-Systems has been working with partner organizations from the fields of civil protection, science, and industry since 2023 to develop a joint solution for coordinating first responders during crises and disasters. Among other things, the KatHelfer PRO project is looking into how associations, organizations, and committed citizens can be integrated into the response to crises and disasters. The project is being funded by the German Federal Ministry of Education and Research (BMBF) under the auspices of its funding announcement for “Innovationen im Einsatz – Praxisleuchttürme der zivilen Sicherheit” (innovations in action – practical lighthouse projects for civil security, only available in German).
Our corporate culture

A company’s culture is its DNA. As such, it influences not only its ways of working, but also its very success. Its culture is primarily shaped by the people who work for the company. Our goal is to promote a culture of belonging in which everyone gets what they need to capture their full potential. We are firmly convinced that this will contribute to our success as a global telecommunications provider and employer. That’s why we continually provide impetus for establishing and maintaining this kind of culture on our way to becoming the “leading digital telco”: for instance, by providing an environment where employees feel at ease and can perform their duties well in a working style that suits them. Our culture is characterized by mutual trust and respect, entrepreneurial thinking, and collaborative working. We give our employees room to grow personally and professionally and to make a positive contribution to our company and society through their work.

Our corporate culture is based on our values, which we have formulated in six Guiding Principles. The Guiding Principles are the basis for our cooperation with each other – and with our customers, shareholders, and the general public. Our Code of Conduct, which is founded on the Guiding Principles, makes our Guiding Principles come alive in tangible ways. It defines the rules for our daily work, including both internal and external work. As such, it acts as a bridge between the Guiding Principles and the many different policies and legal regulations within the Group. Another cornerstone of our corporate culture is our Diversity, Equity and Inclusion Group Policy, which is intended to help us consider and promote these factors at all levels of our company.

In September of each year, we celebrate our Living Culture Day, which provides an opportunity to reflect on our corporate culture and to make it perceptible for all of our employees around the world. In the reporting year, our celebration had the motto “The Power of We: Connections”. This year’s hybrid live stream event was held at Deutsche Telekom IT Solutions Slovakia in Košice and focused on the importance of social relationships for corporate culture and business success. This year’s Living Culture Day was held as a full Living Culture Week for the first time, making it possible for the various departments to present their culture-related topics to a larger audience. Our diversity networks, for example, had the opportunity to present the results of their work and projects – some of which have been underway for years – and increase the visibility of ERGs (employee resource groups) at the company. The event succeeded in recruiting new members for a variety of ERGs. Our corporate culture thrives on the commitment of our employees. This is particularly true of our ongoing culture dialog, which we invited our employees to participate in once again in 2023. The objective of this exchange is to integrate our Guiding Principles even more tightly in our everyday work. In the reporting year, it once again produced specific measures intended to make our culture tangible, such as the creation of several new ERGs. These new employee networks, together with the existing ones, serve employees as points of contact for all questions involving diversity in practice.

In addition, we once again recognized outstanding teams that exemplify our Guiding Principles through their actions and made an outsized contribution to our corporate culture in the reporting year with the Telekom Team Awards.

A new world of work

The workplace is changing rapidly, and the pace of the changes is constantly increasing. Chatbots support our customer service, videoconferences can take the place of business travel, and artificial intelligence helps out with data analysis. Not surprisingly, employees’ job profiles are changing as well. The half-life of knowledge keeps shortening, and core competencies for employees now include a readiness to change, and to learn.

At the same time, employees’ expectations with regard to their employers are also changing, in corresponding ways. Employees expect employers to offer them more personal freedom, greater flexibility, and less limitation to specific workplace locations. From such changes, a new balance between trust and responsibility is emerging. Strict controls and rigid office-time schedules will become things of the past. Today’s competent, committed, and entrepreneurially oriented employees are taking greater responsibility for their work than past employees did. They are also assuming greater responsibility for themselves overall.

As we become the Leading Digital Telco, the ways in which we collaborate are changing. We call it “New Work”. This is about more than simply whether employees work in the office or from their homes. It’s also about the essence of our work – about whether it is meaningful, and of use to society, and about how it helps take us, as a company, toward our common success.

Our journey toward a new, more flexible, more intelligent, more individual workplace began over a decade ago. Rather than focusing on structures, this journey emphasizes attitudes and relationships – including relationships among ourselves and with our customers – and is directed at a changed understanding of what leadership should be. Such topics are also at the heart of our corporate culture, which we are developing jointly, as a Living Culture. This culture supports a transformation process that calls on
employees to be willing to change and acquire new skills. This, in turn, presents challenges – challenges that we are addressing with comprehensive skills management and precisely tailored training options. Our Guiding Principle "Act with respect and integrity," for example, entails that everyone should feel like they belong and be given the opportunity to capture their full potential. To achieve this goal, we support our managers and employees, for example, with training courses on all aspects of diversity.

We examine the transformation of the workplace in detail with our “NewWork@Telekom” magazine, which we publish several times per year. One subject we addressed in 2023 was how we can succeed in creating and maintaining trusted personal relationships despite distance in this age of virtual and hybrid collaboration. We also pursued the question of how our job and our work environment can contribute to our well-being.

Our New Work podcast “Frohes Schaffen. Neues Schaffen" ("Pleasant work. New work.") continued to examine changes in the world of work during the year under review. In it, we talked about what it means to work in a digital world, what new opportunities are arising in the labor market, and how competencies and job profiles are changing.

The virtual sessions of the talk series “Kopfsalat und Bauchgefühl“ ("Brain turbulence and gut feeling") give our employees in Germany regular positive impulses and practical assistance for strengthening their own resilience in a constantly changing world of work. The one-hour sessions are hosted by a neuroscientist and also give our employees a space where they can interact and share with one another. More information about our activities for promoting the mental health of our employees is available here.

Currently, the framework for our collaboration is defined by five pillars. We invite and expect our employees, in the context of their teams, to help flesh out the specific details of how this framework is applied. With this approach, we can combine the best of both worlds: the physical and the virtual worlds and the analog and digital worlds.

To this end, and working in cooperation with the Group Works Council, we have produced the New Work manifesto. It serves as the basis for interaction characterized by trust and respect.

Our “Digital@Work” program facilitates our employees’ collaboration – with suitable tools and technologies. In addition, we are still working on making the new world of work visible by redesigning and optimizing our office spaces. We want our offices to invite and inspire employees to collaborate, interact, and carry out hybrid meetings and workshops. Throughout our locations in Germany and abroad, we are setting up spaces for digital collaboration and creativity in which employees can work together on projects and across units.

**Digital collaboration**

For effective collaboration in the new world of work, simple, fast and virtual communication is a fundamental requirement. Particularly for collaboration between different locations and to support flexible working models, digital exchange plays a pivotal role.

In 2023, our employees spent around 1.7 billion minutes in virtual conferences. Compared to the previous year, conference minutes decreased by 8.7 percent. The return to the office after the COVID-19 pandemic is probably one of the main factors behind this trend. As we resume normal interaction without social distancing, many employees can increasingly take the opportunity to attend meetings in person on-site. This has reduced the demand for virtual meetings.

For global exchange, we also use our YAM UNITED intranet portal. In the reporting year, 134,396 users were registered here.

Further information about this is available in the HR Factbook

**Systems Solutions segment: corporate culture, collaboration, and leadership**

**Cultural transformation and T-mindset**

T-Systems launched its “#peoplemakeithappen” cultural initiative back in 2018. Since then, the segment has continued to evolve its corporate culture and formulate it as the "T-mindset" – the foundation for the culture at T-Systems, which defines what it means to practice this culture. To achieve this, the segment identified five attitudes as the keys to growth at the company and the personal development of its employees: accountability, care, and a focus on the team, customers, and performance. In the year under review, this practical approach was communicated within T-Systems as a simplification of the T-mindset and the “I own it” campaign. The objective was to permanently embed the T-mindset cultural program in the organization.

“My own it” is a campaign that enables employees to show how they take responsibility for their conduct at the company. To enshrine the T-mindset, management teams held 140 workshops in twelve countries and published 36 blog posts focused on internal communication. In addition, managers reported on how they embody the T-mindset every day in 23 top leadership stories on “I own it”. Activities were derived globally and continued at the local level by multipliers. Overall, T-Systems counted some 26,000 personal interactions with employees globally – at workshops, events, and the campaigns centered on the themes of the cultural initiative. The segment has also taken the first steps in integrating the T-mindset in the entire employee life cycle. The cultural program has become a fixture at global onboarding events for new T-Systems employees, for example.
To give the individual business units even better support for their cultural and transformation work, T-Systems has appointed “dual citizens” to assist them: colleagues who can spend up to 50 percent of their working time contributing to the cultural program on-site, in close collaboration with the management teams.

To better balance the culture with the success of the company in the long term, the management team at T-Systems developed measures in 2022 that continued to be pursued in 2023. Accordingly, managers are expected to:

- Provide time to make the purpose of their individual tasks transparent to employees
- Organize regular “Let’s talk” sessions within the teams, ensuring that there is enough room and time for an open exchange regarding employees’ concerns
- Set priorities and thus gain time for effective, customer-centric work

Culture and leadership have also become fixtures of all top leadership events. The culture team held four of these leadership events in 2023 to promote a management culture in line with the T-mindset.

According to the results of the most recent pulse survey, T-Systems continued to advance the cultural transformation in the year under review. Around 72 percent of those surveyed reported that the T-mindset is reflected in their daily conduct. This KPI was established in 2021 and has increased by 14 percentage points since its inception.

Agile collaboration

T-Systems continue to pursue its agile transformation in 2023, increasingly relying on agile structures for collaboration. This enabled the segment to keep pace with rapid technological developments and growing customer demands. In the year under review, more than 300 agile coaches, or multipliers for the digital transformation, were active at T-Systems.

A cross-functional, 16-person team is responsible for scaling agility effectively – ensuring a transformation of the culture of collaboration in the organization as well. They focus on an extensive range of training: By the end of the year under review, T-Systems employees earned or renewed more than 5,000 certifications for agile work – for example, as scrum masters, product owners, safe experts, agile coaches, and coaches for the OKR (Objectives and Key Results) method. In addition, around 30 additional training formats were offered in 2023 to embed agility in the organization, such as workshops on business agility and agile coaching and consulting.

Flexible working models for a wide range of needs at Deutsche Telekom in Germany

In order to help our employees achieve a good work-life balance, and avoid burn-out, we explicitly promote flexible work models. We have set out this orientation in our Diversity, Equity and Inclusion Group Policy. The options we offer our employees in Germany range from flexitime and part-time to lifetime work accounts.

These work models are based on the laws and regulations applicable in the individual countries. Working hours at Deutsche Telekom in Germany are governed by collective agreements and works agreements. We document the daily working hours of our employees covered by collective agreements by means of electronic time recording in MyPortal or via the EmployeeApp. This guarantees compliance with legal and company regulations; for example, it ensures that the weekly working hours for a specific flexitime balancing period are complied with. At a large corporation like Deutsche Telekom, regulations are diverse and cannot be fully specified for all the Group companies. The options we offer our employees in Germany range from flexitime and part-time to lifetime work accounts.

Promoting part-time work

We support the establishment of part-time jobs and guarantee employees in Germany the possibility to return to their original weekly working hours. Subject to operational requirements, employees are permitted to reduce their working hours as they wish. In addition, they may terminate their part-time work at any time, even earlier than originally planned. About 13.2 percent of employees covered by collective agreements, and 16.4 percent of civil servants, are making use of part-time arrangements (as of Dec. 31, 2023). In addition, a total of 44 executives are working part-time (as of Dec. 31, 2022).

Mobile working

Thanks to modern communications technology, in many different fields we can work when and where we wish. Mobile working has been firmly established at Deutsche Telekom. Our employees can organize their work locations flexibly, a right we enshrined in our collective agreement on mobile working concluded with the ver.di union back in 2016. Needless to say, they do not have to be available to the company at all times, meaning they do not have to stay reachable after working hours, during vacation, or on weekends. In November 2023, we also began offering our employees in Germany the option of working up to 20 days at a time from a different EU country.

Lifetime work accounts and leave of absence

The majority of employees in Germany can set up a lifetime work account in order to implement their personal life plan. Such accounts can be used to accumulate credit by means of gross deferred compensation or by conversion of up to 80 overtime hours per year. Around 16,000 employees currently take advantage of this offering (as of December 31, 2023). The credit can be used for a sabbatical, earlier retirement, or a top-up for a part-time salary. Employees also have the option of taking unpaid leave – for example, in order to care for their children, or to accept paid work with a different employer.
Leave of absence for personal reasons
Employees have the option of requesting leave of absence at short notice for special reasons, after consulting with, and obtaining the approval of, their manager. This option is available, for example, for employees who need to serve as caregivers for family members or to take care of sick children. During the individually agreed period, employees are exempted from the performance of their duties. Pay is suspended after five days at the latest. All other aspects of the employment relationship remain unaffected.

Time off for education
Time off for education is based on the current offer of unpaid leave and makes it possible for employees in Germany to take up to four years off for a degree course or a doctorate. The employment contract is put on hold during this time and the employee does not receive any pay. Civil servants employed at the company can also take advantage of this offer in the form of a “leave of absence without pay for reasons of private interest.” This time does not apply to their pension and no remuneration is paid.

The 80:20 model
Since 2017, we have been using the 80:20 model to give our employees the opportunity to spend part of their working time on projects outside of their usual remit. This allows them to work with teams from other departments. Use of the model is voluntary and is tied to a specific Group project.

Phased retirement
We offer a phased retirement model to our employees in Germany who are 55 or older. Separate regulations apply to employees and to civil servants. There are two options for phased retirement: the block model or the part-time model. During the reporting year, a total of 1,872 phased retirement contracts were concluded with employees both covered and not covered by collective agreements. Among civil servants there were 431 such contracts (as of December 31, 2023).

Better quality of life through flexible working hours
Our The “FreiRaum” (leeway) working time model at T-Systems was continued to the end of 2023, but was not extended beyond that date. This model, offered since 2021, made it possible for all T-Systems employees who worked five-day weeks to take up to twelve additional days off per year. Employees who took advantage of this option had their salaries reduced proportionately, while T-Systems provided partial compensation for the reduction. Some 540 employees made use of the model in the year under review.

Starting in January 2024, all employees Group-wide have been offered a new, voluntary working time model: “Urlaub kaufen” (Buy vacation) is an employee-financed model that enables employees to take additional days off and that is characterized above all by its flexibility. There are no application deadlines or savings periods, for example, in contrast to the lifetime work account, which has both. In addition, the number of days off that can be purchased is not limited.

Reporting against standards
Global Reporting Initiative (GRI)
- GRI 2–7 (General Disclosures)

Achieving a good work-life balance at Deutsche Telekom
We offer our employees attractive solutions to help them achieve a better work-life balance. Our efforts in this area include providing flexible working time models, carrying out effective health promotion, and establishing work-life balance as a permanent part of our corporate culture. To customize their work environments and working conditions, employees can take advantage of offers such as:

- Childcare: Employees throughout Germany can use parent-and-child offices at many Deutsche Telekom locations, for example, if their regular childcare is unavailable. We also support employees all year long in their search for childcare options, so they can rest assured that their children will be well cared for even during school holidays. In this context, Deutsche Telekom also offers activity days and a holiday camp during summer vacation.

- Part-time training: Under certain circumstances, apprentices at Deutsche Telekom can take their training on a part-time basis. Dual students, including students who are single parents, have the option of completing their degree programs on a part-time basis.

- Employee networks: Our employees in Germany can join and participate in a variety of networks. Expectant parents, for instance, can join the “Stay in contact” network, enabling them to keep in contact with the company during their parental leave. This network also offers support for re-entering working life after parental leave. Our “fathers network” encourages the discussion and open exchange of experiences between fathers and provides information and tips for becoming more family-friendly. We also offer our Parental Leave App to employees, an innovative solution that gives digital support to expectant mothers and fathers on their journey to parenthood. This app also enables interaction with other employees through the “Stay in contact” network.

- Learning and networking opportunities: We want to support the cultural transformation with regard to work-life balance through training and workshops, to improve chances for equal participation of women in the labor market. Examples include the “Working Dad” keynote and the mentoring program “Child and Career,” for managers, junior managers, and expert staff at Deutsche Telekom. You can find out more about our commitment to employing a higher proportion of women here.

- Free advisory and referral services: To support our employees in dealing with personal changes, we offer free, anonymous advisory services in some countries. Through our cooperating partner “awo lifebalance GmbH” and an online service, we also support our employees in Germany in the areas of childcare (including emergency care), caregiving for family members, and household services.
- Family Fund: In Germany, we fund employee projects aimed at improving their work-life balance.

- Social fund: We provide fast financial aid to employees in Germany who find themselves in financial difficulties through no fault of their own. We also offer subsidies for recreational activities for children with disabilities.

- Welfare service: Through this foundation, we support employees in Germany in emergency situations, such as deaths in the family, serious illness, social crises, and natural disasters. We offer courses for women with cancer, for instance. We also provide assistance for employees’ children who are studying at a university.

- Recreation Service: Working through this service, we offer our employees access to reasonably priced vacations at attractive destinations in Germany and Europe – for example, at one of 18 company-owned resorts.
Our approach to shaping employee relations
We pursue dialog-oriented employee relations throughout the Group and engage in trust-based, constructive collaboration with employee representatives and unions. Our works councils, central works councils, and Group Works Council represent the interests of our employees at our Group in Germany.

Our partner representing the employees' interests on a European level is the European Works Council (EWC). We also have executive staff representation committees and representatives for employees with disabilities at the unit, company, and Group levels. Even in non-European nations like the United States, all of our employees enjoy the right to form and join labor unions. As the underlying laws and contracts vary from country to country, co-determination matters are managed locally, and always together with trade unions and employees' representatives. Group management is generally involved in all major issues.

We have set Group-wide uniform standards for managing employee relations, as defined in our Guiding Principles, in our Diversity, Equity and Inclusion Group Policy, and in our Code of Human Rights. Our previous policy statement “Code of Human Rights & Social Principles” was revised extensively in the year under review. This Code includes our global voluntary commitment to safeguarding the freedom of association and the right to collective bargaining (in compliance with national law in each case). The new structure of the Code of Human Rights is based on the requirements of the Supply Chain Due Diligence Act (Lieferkettensorgfaltspflichtengesetz – LkSG). The Employee Relations Policy was also discontinued as an independent document and integrated in the policy statement. Comprehensive information about compliance with human rights at our Group is provided in the chapter on “Human rights”.

Not all employees in our upstream value chain have the option of collective bargaining. This is also the case in our downstream value chain, for example, at recycling companies for electronic scrap. The impact assessment of our materiality analysis showed that in the upstream value chain stages of the global electronics industry, there are only limited opportunities for union representation. We have implemented a comprehensive supplier management system to address risks to human rights in our upstream value chain.

Dialog and cooperation with employee representatives
During the reporting year, the company concluded 45 collective agreements with the ver.di union in Germany. As part of harmonizing the remuneration systems within the Group, we also concluded collective agreements on a global, uniform job architecture.

Responsible collective bargaining plays an important role and has a long tradition at our company. The percentage of employees covered by collective agreements is published in the non-financial statement in our Annual Report.

Constructive dialog
In 2023, we continued the constructive dialog with our works councils. As the underlying laws and contracts vary from country to country, co-determination matters are managed locally with trade unions and employees' representatives. Group management is generally involved in all major issues. Further information can be found in our Annual Report.

Fair pay and benefits
We offer our employees competitive, performance-based remuneration oriented to the relevant national labor market. Our remuneration policies are structured to guarantee equal pay for all employees; they do not discriminate.

With our Global Compensation Guideline for executives, collective agreements and works agreements, we ensure a transparent and gender-neutral payment structure and remuneration for our employees at the Group. Under this guideline, pay is based on the degree of difficulty and complexity of the specific task, and not on the individual person. We thereby ensure that remuneration at the Deutsche Telekom Group is based on the type and scope of the work performed and the requirements of the relevant position, irrespective of diversity aspects such as gender, age, nationality, sexual orientation, or ethnicity. In addition, we offer our employees additional benefits, such as contributions to the company pension scheme, and subsidized share purchasing in the framework of our Shares2you program.

As part of our Group-wide employee survey, we regularly ascertain how satisfied our employees are with their pay. We also conduct other surveys on specific topics and in specific units.

In 2018, we compiled a report on equal pay and equality for the first time in order to comply with the new legal requirements of the Transparency in Wage Structures Act. It is published every five years. The current report for the year 2021 is available here.

Reporting against standards
Global Reporting Initiative (GRI)
- GRI 407 3–3 (Management of material topics)
In addition, in 2021 – after our first participation in 2013 – we once again took part in the equal pay check of the Federal Anti-Discrimination Agency and were awarded the “eg-check” certificate. This certificate documents that the same or equivalent work by men and women is paid in the same amount: salaries at the company are based solely on the type of work being performed.

**Reporting against standards**

**Global Reporting Initiative (GRI)**
- GRI 405-2 (Diversity and Equal Opportunity)

**Salary development at Deutsche Telekom in Germany**

In the collective bargaining round in May 2022, a salary increase in two steps for around 55,000 Telekom employees, apprentices, and dual students in Germany was agreed. The first step was implemented on August 1, 2022. The second followed on June 1, 2023. Salaries increased by 5.2 percent in pay groups one to five, by 5 percent in pay group six, and by 4.8 percent in pay groups seven to ten. The collective wage agreements have a term of 24 months. They may be terminated for the first time as of March 31, 2024.

For apprentices and dual students, the negotiating parties agreed on a salary increase in two steps: by 3.1 percent as of August 1, 2022 and by 35 euros as of June 1, 2023. Subsistence allowance for apprentices not living with their parents increased by 30 euros to 300 euros as of August 1, 2022.

To soften the impacts of inflation, additional one-time payments of 1,000 euros were granted to employees in the lower and middle pay groups. Additional one-time payments totaling 200 euros were agreed for apprentices and dual students. The first installment of these payments was paid out in July 2022, with the second following in February 2023.

**Salary development and remuneration systems at the Systems Solutions segment in Germany**

In late 2022, the ver.di union and T-Systems held talks on a collective agreement in Germany. In December 2022, before the expiration of the collective agreements that were in force at the time, T-Systems presented a contract that the union accepted in early 2023. In this collective agreement, the parties agreed on salary increases in two steps: up to 3.1 percent, depending on the salary group, as of January 1, 2023, and a further 2.1 percent for all salary groups effective March 2024. This is supplemented by two one-time payments totaling 1,000 euros for lower salary groups. The collective agreement applies directly to the relevant employees at T-Systems International GmbH and T-Systems Road User Services GmbH. In addition to the salary adjustments and tax-free one-time payments contained in the collective agreement, employees in Germany whose full-time annual salaries do not exceed 75,000 euros received an energy bonus of 1,000 euros, exempt from taxes and social insurance contributions, in March 2023. The qualifying T-Systems employees in Germany also benefited from this payment.
Employee satisfaction

Our employee survey
Our employee survey, which of late has been carried out every two years, is a key indicator of the relationship between our Company and its workforce. The results of the employee survey help us to identify weaknesses and eliminate them. We use the responses to calculate the engagement score, a gauge for employee satisfaction. On top of this, we conduct pulse surveys (carried out twice a year, or once a year in years when the employee survey is carried out), which give us a sentiment snapshot across the Group.

During the 2021 employee survey, the questionnaire and the measurement model were revised and updated based on feedback and the latest scientific findings: New questions were added and some of the existing questions were adapted. In addition, the scale used for the engagement score (formerly, the “commitment index”) was changed from “1 to 5” to “1 to 100.” The engagement score is calculated based on questions on the following aspects: mood, employer attractiveness, brand identity, and inspiration.

A total of 80 percent of all employees throughout the Group took part in the most recent employee survey in 2021. The engagement score amounted to 77 points.

The employee survey was not carried out in the reporting year on account of a change in service provider, and has instead been rescheduled for 2024.

Regular pulse survey
In addition to the employee survey, which of late has been carried out every two years, we also conduct regular pulse surveys to measure employee satisfaction – usually twice a year. If the employee survey and pulse survey both occur in the same year, the pulse survey is only carried out once. The most recent pulse survey in November 2023 saw a 77 percent response rate among employees. The engagement score reached a high value of 76 points. The values reflect the survey findings excluding the USA segment, since T-Mobile US conducts its own employee survey.

High ratings = very good, good/agree fully, agree. Low ratings = poor, very poor/do not agree, do not agree at all. “Neither agree nor disagree” ratings are not shown.

Explanations of questions asked:
- Mood = How do I feel at Deutsche Telekom.
- Employer attractiveness = I would recommend our company as a great place to work.
- Brand identity = I am proud of the Telekom brand.
- Inspiration = Our company inspires me to do my best every day.
- Strengths = My job is a good fit for my abilities, knowledge, and experience.
- Goals = I know what is expected of me at work.
- Purpose = I perceive my work as meaningful.
- Involvement = I have influence on decisions regarding my work.
- Autonomy = I have the freedom I need to do my job.
- Information = I can get the information I need to do my job.
- Team feedback = We give each other feedback in order to improve as a team.
- Manager feedback = I receive feedback from my line manager that helps me to improve my performance and grow.
- Failure culture = In my team, mistakes are used as a chance to improve and learn.
- Workload/quality = In my team, the workload and quality requirements are compatible with one another.
- Work-life balance = My current working hours allow a good balance between private and (family, hobby) job-related interests.
- Team attractiveness = I would recommend my team as a great community to work.
- Collaboration = We collaborate effectively with others across our company.
- Guiding Principles = I experience the Guiding Principles being lived in my day-to-day work.
- Learning = Our company offers sufficient learning opportunities to enhance my professional skills.
- Career development = I see motivating development opportunities for my career in our company.
- Recognition = Considering all my efforts and achievements, I feel that I have received the appropriate amount of recognition at work.
- Eco-social engagement = I can identify with the environmental and social engagement of our company.
- Corporate responsibility = Our company acts responsibly towards the environment and society.
- Digital collaboration = Digital collaboration tools facilitate our day-to-day work.
- Risk management = In my team, we consistently manage potential risks affecting our business.
- Strategy = I know and understand the strategy of our company.
- Culture of trust = In our company, I experience a culture of trust across all hierarchies.
- Equal opportunities = In our company, we give everyone the same opportunities for hiring and career development – regardless of age, gender and gender identity, sexual orientation, physical and mental abilities, nationality, social and ethnic background, political opinion, religion, and beliefs.
- No discrimination and safe space = Our company provides a safe and supportive work environment for all – we do not tolerate inappropriate behavior or comments related to: age, gender and gender identity, sexual orientation, physical and mental abilities, nationality, social and ethnic origin, political opinion, religion and belief.
- Open question on engagement = What would make your engagement at work even stronger?
- Open question on career development = What else would you like to share on the topic of career development?
- Open question on the culture of trust = What else would you like to share on the topic of culture of trust?
- Open question on team attractiveness = What else would you like to share on the topic of team attractiveness?

Employee identification with CR commitment ESG KPI
We use the “Employee identification with CR commitment” ESG KPI to determine the degree to which our staff identify with, or how satisfied they are, with our CR commitment. This is based on the Group employee survey (excluding T-Mobile US), which of late has been carried out every two years. The last survey was carried out in 2021: The vast majority of our employees agreed that Deutsche Telekom lives up to its responsibility for society and the environment. And a full 84 percent identified with our commitment. The next Group-wide employee survey will take place in the second quarter of 2024.

Our ambition in this context: Increase the KPI
Satisfaction and commitment score

We calculate the satisfaction rate and the commitment score as gauges for employee satisfaction. The displayed values are taken from the last pulse and employee surveys. The last pulse survey was conducted in November 2023, the last employee survey in November 2021.

The Group-wide satisfaction among our employees dropped to 78 percent in the reporting year. The commitment score from 2023 was 76 at the Group level, on a scale from 0 to 100. Compared to the previous year, the commitment score decreased by two points, marking a halt in the upward trend of the preceding two years. This was true at all levels.

<table>
<thead>
<tr>
<th>Satisfaction rate</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>90%</td>
<td>91%</td>
<td>81%</td>
<td>76%</td>
</tr>
<tr>
<td>International</td>
<td>87%</td>
<td>89%</td>
<td>81%</td>
<td>82%</td>
</tr>
<tr>
<td>Group (total)</td>
<td>89%</td>
<td>90%</td>
<td>81%</td>
<td>78%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All employees</td>
<td>77</td>
<td>78</td>
<td>79</td>
<td>76</td>
</tr>
<tr>
<td>All managers</td>
<td>76</td>
<td>77</td>
<td>77</td>
<td>75</td>
</tr>
<tr>
<td>Employees incl. managers</td>
<td>76</td>
<td>77</td>
<td>77</td>
<td>75</td>
</tr>
</tbody>
</table>

The displayed values are taken from the last pulse and employee surveys. The last pulse was conducted in November 2023, the last employee survey (ES) in November 2021. The engagement score is the mean value calculated from all answers to the questions of the four topics of Mind, Employee Attractiveness, Brand Identity, and Inspiration.

[1] Based on weleve’s current and prior year.
[2] Score changed through 2020 scale from 1 to 5; from 2021 on, scale from 0-100.
[3] The values of 2020 are taken from the ES of the previous year.
Our approach to diversity, equity, and inclusion
More than 200,000 people work at Deutsche Telekom – and every one of them is unique. This diversity is our strength. For us, diversity means offering our employees numerous opportunities to grow professionally and to develop personally – regardless of their age, gender identity and gender features, physical and mental abilities, nationality, social and ethnic background, religion and beliefs, and sexual orientation. We promote equal opportunities for everyone and are clearly committed to the different dimensions of diversity. We have a Group-wide approach for upholding this commitment: It is based on our Diversity, Equity and Inclusion Group Policy (formerly “Diversity Policy”), our six Guiding Principles, and our Code of Human Rights.

Living diversity, equity, and inclusion
We are proud to employ people who are committed to the different aspects of diversity and actively help us shape our corporate culture. Our employees have joined together in numerous global and local networks, which we call employee resource groups (ERGs) and corporate communities. In these employee initiatives, they devise a variety of measures and implement them together, actively helping to strengthen awareness for diversity and equity among the workforce. The ERGs meet once a month in Group-wide community calls, in which they receive relevant updates for their groups from Group headquarters and have the opportunity to share best practices and current challenges with one another. In Germany, for example, our employees in the “BIPoC@DT” ERG support the Black, Indigenous and People of Color community. New groups founded in the reporting year include the “Social Movers”, an ERG that focuses on social background, the “Better-Together” community for intergenerational collaboration, and a network for neurodiversity. T-Mobile US has six internal ERGs for Diversity, Equity, and Inclusion (DEI).

Our diversity strategy is aligned with efforts such as those described above and pursues initiatives aimed at promoting participation among all these dimensions. We signed the UN Standards of Conduct for Business Tackling Discrimination against LGBTQIA+ people in 2017. This abbreviation refers to people who identify as lesbian, gay, bisexual, transgender, queer, intersex, or asexual. In addition, the MagentaPride ERG was founded back in 2002. Since then, it has worked unceasingly to support our LGBTQIA+ employees and help them through difficult life situations. To draw attention to discrimination of queer people and support them in their fight for more rights and greater visibility, we celebrated with them once again in 2023 at pride marches and Christopher Street parades in a variety of countries.

As another important step toward creating an inclusive corporate culture, we published the first version of our Transgender Guide in 2022, to support a trans-inclusive workplace and show how to create a trans-inclusive work environment. The Guide is intended for all employees and provides assistance with questions like “What support is available for transition, outing, and fundamental changes at work?” and “What can I do when I experience or witness discrimination?” At the same time, the Guide also serves as a source of information for all employees who want to learn more about this topic and lend their support. Further steps toward becoming inclusive for employees who identify as trans or non-binary include ongoing updates to our IT systems with regard to gender-sensitive forms of address and the possibility to self-identify, as well as the creation of all-gender restrooms at several sites in Germany.

The establishment of multifaith prayer and meditation rooms at selected sites in Germany, a project initiated in late 2022, is another step intended to reflect the real lives of our employees in the designs of our buildings.

To express our appreciation and respect of all people, we generally use a neutral, inclusive form of address and are committed to gender-sensitive communication. As such, gender-neutral language is an integral part of our editorial guide for corporate communications.

To ensure that our employees can contribute their abilities as best as possible in all walks of life, we also support the work-life balance in the context of equal opportunity – for example, through flexible working hours, hybrid working models, and part-time work.

Our commitment to diversity also includes our efforts to promote digital participation. We take a number of approaches to make our networks, products, and services as accessible and non-discriminatory as possible.

We are a founding member of the “Diversity Charter” business initiative as well as a cooperation partner in a number of other national and international initiatives for diversity, equity, and participation – because we want to promote these topics both within and outside the company. Unfortunately, diversity efforts are unevenly distributed. The impact assessment of our materiality analysis identified a significant risk of discrimination incidents due to origin, sexual orientation, and gender identity in countries in our upstream and downstream value chains. Violations of our Guiding Principles and corporate values can be reported at any time through our anonymous whistleblower portal Tell me! and to our...
Diversity in figures
People from more than 120 countries work successfully together at Deutsche Telekom. The average age of our employees was 41.4 years in the reporting year.

All in all in the reporting year, 35.7 percent of our total workforce were women. We have a particularly strong commitment to gender equality, and we have made it a priority for more than two decades. One of our central goals is to increase the share of women in expert and managerial positions; by 2025, we want to have women in at least 30 percent of our leadership positions (excluding T-Mobile US). We have enacted various measures in order to achieve our goal of 30 percent.

7.6 percent (as of Dec. 31, 2023) of our employees in Germany have disabilities, putting us well over the statutory quota of five percent. Nearly 2 percent of our apprentices and dual students in Germany are young people with disabilities — that figure, in comparison to the total share of young people with disabilities in our society, shows that we train above-average numbers of young people in this segment as well. The Group Representatives for Employees with Disabilities present annual Inclusion Awards to recognize projects that advocate for the support and retention of employees with disabilities at the company.

We received multiple awards in the reporting year for our commitment to diversity.

Reporting against standards
Global Reporting Initiative (GRI)
- GRI 2–10 (General Disclosures)
- GRI 405 3–3 (Management of material topics)
- GRI 405–1 (Diversity and Equal Opportunity)
- GRI 406 3–3 (Management of material topics)

Diversity Charter
The Diversity Charter is an independent economic initiative that is supported by around 4,500 companies and institutions in Germany. Its aim is to create a work environment in which diversity among employees, and their many different abilities and talents, is valued. Such an environment opens up opportunities for innovative and creative solutions. Deutsche Telekom is a founding member of the Diversity Charter association. In addition, a number of our national companies are also members of this initiative — including T-Systems ITC Iberia and Magyar Telekom in Hungary.

The initiative declared the eleventh German Diversity Day in May 2023 under the motto #FlaggeFürVielFalt (#FlagForDiversity). As part of the Rhine-Ruhr Diversity Network, we participated with an online event on the topic of “Psychological security and belonging.” The Network is a union of global companies and advocates for a corporate culture that promotes diversity in the region. Collaboration and the exchange of ideas in the Network are intended to inspire new ideas and action areas as impetus for companies’ own diversity strategies. The Rhine-Ruhr Diversity Network also celebrated the 10th anniversary of its founding in 2023.

The diversity audit, established in the higher education sector in 2013 under the name “Create Diversity”, evolved into the “Diversity Compass” (only available in German) in 2022 through our efforts and those of the Diversity Charter, the Donors’ Association for the Promotion of Humanities and Sciences in Germany (Stifterverband für die Deutsche Wissenschaft), and representatives of other companies. The aim of this effort was to adapt the audit to the specific requirements and interests of companies. This will enable companies — including Deutsche Telekom — to use the audit in future to review and refine their own measures in the area of diversity. The “Diversity Compass” was launched as a pilot project with a variety of companies in January 2023. The field service department of the German segment took part in the pilot phase for Deutsche Telekom and developed custom-tailored targets for its workforce. In the long term, we hope the Compass will help to audit and continue develop measures aimed at promoting diversity.

Together with coaches experienced in anti-racism work, the Diversity Charter developed an online toolbox in recent years on the topic of “Anti-racist awareness-raising – building expertise for diversity at the workplace.” In 2022, Deutsche Telekom tested this toolbox in a pilot phase in a number of workshops with members from the ERGs in Germany. The toolbox was published externally in March 2023 and can now be used by anyone who wants to serve as a multiplier for anti-racism topics in their own organization.

United States segment: diversity, equity, and inclusion (DE&I)
DE&I has always been a part of the Un-carrier culture, and the segment is committed to having DE&I touch every aspect of its future. Providing equitable opportunities for all is also a key focus of the ESG framework at T-Mobile US.

Equity In Action (EIA) plan
In 2020, T-Mobile US launched its five-year EIA plan spanning the values the segment lives by including how investments are made, how opportunities are provided to employees, how suppliers are selected, and how the company advocates for communities. T-Mobile US made 54 DE&I Promises as part of its EIA plan.

EIA was built by listening to employees at T-Mobile US. Their feedback identified areas where the segment could further evolve, shift, and align as an organization. This plan is anchored to what matters most:

- TALENT – T-Mobile US recognizes that the company is stronger and more innovative as a result of diversity. That’s why the segment’s hiring and development programs are enhanced by equitably expanding opportunities for talent.
- CULTURE – T-Mobile US lives its value One Team Together by creating a culture of respect and belonging. That’s why the segment engages employees, listens, solves pain points, educates, and takes action.
BRAND – We all win when our communities thrive. That’s why T-Mobile US drives equity by investing in communities through its Foundation, partners, Employee Resource Groups (ERGs), and DE&I Chapters.

DIGITAL EQUITY – T-Mobile US increases digital equity by expanding access to connectivity, skills development, and internships.

As a part of the Equity In Action plan, T-Mobile US established an External Diversity and Inclusion Council, which includes members from civil rights and social justice organizations. The External Council helps guide and support the EIA plan and delivery of the S4 DE&I promises. We have achieved the majority of our EIA Promises.

Employee-led diversity
Beginning as an employee-led grassroots movement, employee resource groups (ERGs) at T-Mobile US are an important part of the company culture. The six ERGs and four sub-affinity groups of T-Mobile drive actions to solve business and employee pain points while celebrating the rich diversity of employees’ culture, heritage, and experience. The DE&I network includes a group for people with disabilities (Accessibility Community), a multicultural group (Multicultural Alliance), an intergenerational network (Multigenerational Network), an LGBTQI+ community (Pride), a network for veterans and active military personnel (Veterans & Allies Network), and a women’s network (Women & Allies Network). They foster a sense of belonging by sparking conversations and providing opportunities to develop leadership skills.

Joining forces on a military hiring mission
T-Mobile US is dedicated to building lasting careers for veterans and military spouses and the company is proud to have met its goal of hiring 10,000 military veterans and their spouses at the end of 2023. Military families are reached through job fairs and Veterans Affairs offices and through partnerships with groups like FourBlock, Hiring our Heroes, and Warriors4Wireless. T-Mobile US also expanded recruiting efforts with American Vets Group, Blue-Star Families, Tech for Troops, Warriors & Quiet Waters, in addition to others.

T-Mobile US continued to support its Military Fellowship Program, a 12-week internship program with T-Mobile US, and the Military Spouse Fellowship Program to provide enhanced opportunities to transitioning service members. In that same spirit, the company is evaluating how the existing benefits support military families to make employment with T-Mobile US more feasible.

Europe segment: diversity
Deutsche Telekom’s corporate culture forms the foundation for our everyday work. “Act with respect and integrity” is one of our Guiding Principles, which we always follow – even under extremely heterogeneous societal and political frameworks like those in the Europe segment. Accordingly, diversity is an important topic for the segment and is actively practiced at our national companies.

Our national company in Croatia stands for a “world of equal opportunity”. We consider individuality and diversity in our teams to be strengths, and advocate for equal opportunity for promotion and growth for everyone.

The efforts of our Polish national company are being noticed and are reflected, for example, in acknowledgment received in the framework of the annual Diversity IN Check survey, which is organized by the Polish NGO Responsible Business Forum. This distinction was awarded once again in the reporting year. Based on a survey, companies are rated on their ability to manage diversity and build integrative organizations.

Commitment to a larger share of women
As a signatory to the “Women Empowerment Principles” of the United Nations, we have made it our goal to increase the proportion of women on the Supervisory Board, the Board of Management, and upper and upper management; we want to achieve a 30-percent share of women worldwide by 2025. We are implementing numerous measures to this end:

- Our opportunities to achieve a good work-life balance through parental leave arrangements, flexible working hours, and childcare services
- Specifically addressing female talent through cooperative activities and at events
- Promoting the generation shift between male executives due to leave the company in the near future and female junior staff (mentoring)
- Increasingly filling management positions with female talent, including a target quota of 40 percent in the Global Talent Hub
- Access to external programs such as the IWIL (International Women in Leadership) community through our Global Talent Hub, where we enable participation in the “Leadership Next Academy” and a program for female mentors
- Maintaining or increasing the diversity targets, including in transformation processes, especially when filling management positions
- Intersectional offerings to improve the visibility of BIPOC women at Deutsche Telekom (in cooperation with the publishers of the book “People of Deutschland”, with whom we developed a special Deutsche Telekom issue in the reporting year that profiled Deutsche Telekom employees with a migration background)
- A systematic review of the “employee life cycle”, to identify and eliminate systematic obstacles – for example, by asking questions about participation in exit interviews
Signing the “Joint declaration against sexism and sexual harassment” issued by the “Gemeinsam gegen Sexismus” (“Fighting sexism together”) alliance in the reporting year. This effort is sponsored by the German Federal Ministry for Family Affairs, Senior Citizens, Women and Youth (BMFSFJ) and pursued together with EAF Berlin. It aims to recognize sexism and sexual harassment, name it as such, and establish effective countermeasures.

Together with the heads of our segments, we reached agreement on implementation plans for increasing our women’s quota. Our diverse range of measures has allowed us to continuously increase the share of women in management positions in recent years. The proportion of women in middle and upper management was 27.9 percent in the reporting year. At 45 percent, we have already exceeded our 30 percent target for the Group Supervisory Board (2022: 50 percent). We have also been successful with regard to the statutory gender quota for supervisory boards in Germany since January 1, 2016; in this area, at 47.3 percent, we are within the overall average for all legal entities in Germany. With a share of women of 37.5 percent (as of December 31, 2023), the Deutsche Telekom Board of Management also exceeds our own and the legally mandated requirements. However, further efforts are needed to meet the target mentioned above for the remaining management positions on the two levels beneath the Board of Management, in the management of the national companies, and the internal supervisory boards in Germany.

We are also working to increase the number of women participating in dual study programs in technical fields in Germany. By the end of the reporting year, the proportion of women studying technical subjects stood at 14 percent.

Our commitment to gender equality was recognized for the sixth year in a row in 2023 with our inclusion in the Bloomberg Gender-Equality Index (GEI). Further information can be found here.

Networking for success
Our locally organized women’s networks help women reach management positions by providing support, advice, and exchange with other women. All of Deutsche Telekom’s women’s networks met for the first time at an international event in the summer of 2023, with a total of 220 women participating on site or in the provided live stream.

Promoting female STEM specialists
With carefully targeted messaging, we are seeking to attract talented women to our company. In particular, we support women in STEM (science, technology, engineering, mathematics) subjects and careers: As part of our partnership with Femtec, we once again organized an innovation workshop in 2022/2023. Femtec, a cooperative effort being undertaken by major companies, the Fraunhofer-Gesellschaft, leading German technical universities, and ETH Zürich, is aimed at finding young female talent for STEM professions and developing it. During the five-month innovation workshop, 20 international women fellows developed technically innovative and green solutions for intelligent, energy-independent cell sites in Germany and the EU. We also invited current and former Femtec women fellows to a variety of events, including Digital X and our Magenta Campus Tour, to help them stay in contact and advise them on hiring and career opportunities. Through our cooperation with “ITgirls”, we want to reach out to female school and university students and encourage them to pursue a promising career in the IT sector.

Reporting against standards
Global Reporting Initiative (GRI)
- GRI 405-1 (Diversity and Equal Opportunity)

Percentage of women in total workforce
In recent years, we have succeeded in maintaining the proportion of women in the total workforce at over one-third and expect this number to increase slightly over time.

Reporting against standards
Global Reporting Initiative (GRI)
- GRI 2-7 (General Disclosures)
- GRI 405-1 (Diversity and Equal Opportunity)

Percentage of women in middle and upper management
We continued to pursue our goal of having a 30-percent share of women in management positions in 2023.

In Germany, the percentage of women in middle and upper management rose from 23.4 percent to 24.1 percent in 2023. The international figure decreased slightly and stood at 31.5 percent at the end of the reporting year (2022: 32.1 percent). Group-wide, the proportion of women in middle and upper management fell from 28.1 to 27.9 percent in 2023.

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Reporting against standards
Global Reporting Initiative (GRI)
- GRI 405-1 (Diversity and Equal Opportunity)
Reporting against standards
Global Reporting Initiative (GRI)
- GRI 405-1 (Diversity and Equal Opportunity)

Principle Adverse Impacts (PAIs)
- Socials and employee matters

Percentage of women on the management board
We already achieved our target of having a 30-percent share of women in management positions in 2020. A third woman was appointed to the Board of Management in November 2020. With a share of women of 37.5 percent, we were among the top five DAX companies in this category. Deutsche Telekom is one of only a handful of DAX corporations with an established track record of women on its Board of Management. The number of women working in the international management team reporting to the Group Board of Management has also risen.

In addition, we aim to make the membership of the Board of Management more diverse with regard to other dimensions, such as nationality and age, to bring different experiences and background together and increase the range of opinions and skills for good company management.

Employees with disabilities
Deutsche Telekom has already exceeded the prescribed minimum rate of 5 percent of employees with disabilities for a good many years, so that it heads the list of DAX 30 companies on this count. In 2023, the share of people with disabilities at Deutsche Telekom was 7.6 percent and has therefore fallen slightly.

Through the Group inclusion agreement and Inclusion 2.0 action plan, the Group has created a framework for complying with the requirements of Art. 3 (3) sentence 2 of the German Basic Law and the UN Convention on the Rights of Persons with Disabilities, to create and guarantee a professional livelihood for persons with disabilities, and to promote their professional advancement. The ongoing measures and initiatives in this context aim to identify and eliminate barriers that stand in the way of full participation by people with disabilities.
Reporting against standards

Global Reporting Initiative (GRI)

- GRI 405-1 (Diversity and Equal Opportunity)

Promoting the diversity of our young talent in Germany

Right during the process for hiring new colleagues, we emphasize diversity and consider options other than just traditional educational and life paths. We make targeted efforts to promote diversity among our junior staff. To this end, we analyze and promote the diverse potential of young people. Under certain circumstances, apprentices at Deutsche Telekom can take their training on a part-time basis. Dual students also have the option of completing their cooperative study program on a part-time basis under certain circumstances – if they are single parents, for example. In addition, we offered DiscoverMINT@telekom, a one-year orientation program, for the second year running in 2023. This program targets young people with university entrance qualifications who are still unsure what to do with respect to their further training. In close cooperation with their instructors, participants are supported and coached for twelve months during the program at Deutsche Telekom, experience professional practice, and attend courses and events at the university. The program is intended to help participants to get acquainted with the dual-study STEM environment and make a sound decision for the next step in their development. We also continue to offer young refugees opportunities to start their careers through the DiscoverMINT program – an apprenticeship, or a dual study program. We generally ensure that all applicants who wish to start a career at Deutsche Telekom can enjoy a non-discriminatory application process. As of December 31, 2023, around 6 percent of the apprentices and dual students we employed were of non-German nationality; in total, 63 nations were represented.
Age structure in the DT Group
The average age within the Group decreased by 0.3, to 41.4 years within the reporting period. The reported figures substantiate this trend. The applicable percentage shares for the various age groups have shifted slightly.

About one half of the company’s workforce falls into the age groups 36–45 and 46–55. In a trend apparent since 2018, the percentage of persons in the age group 46–55 has been decreasing continuously, from 29.0 percent to 23.6 percent in the reporting year. At the same time, the percentage of persons in the age group 36–45 has grown continuously throughout the same period, except in 2021. Overall, this percentage has increased from 23.5 percent to 25.5 percent.

Although the age group 56–65 grew by 0.2 percentage points, the overall number of persons in the age group 46–65 has decreased. In 2023, the two oldest age groups accounted for a share of 38.5 percent. This figure was down from 39.8 percent in 2022. We are making good progress in our efforts to make our workforce younger – and thereby to counter the demographic changes in society as a whole.

Demography & company pension scheme

Reporting against standards
Global Reporting Initiative (GRI)
- GRI 405–1 (Diversity and Equal Opportunity)
Company pension scheme at Deutsche Telekom in Germany

Deutsche Telekom offers its employees in Germany a company pension scheme based on voluntary commitments. It comprises two main components: a capital accounts plan and the Deutsche Telekom Pension Fund.

The capital accounts plan is a system for provision of employer-financed pension entitlements. In addition, and as provided for by law, eligible Deutsche Telekom employees can arrange to have part of their salary converted into pension benefits – in this case, via the Deutsche Telekom Pension Fund. This system amounts to a state-subsidized option for an employee-financed pension scheme.
Our approach to training and development
We offer our employees a wide range of specific training and development programs. Important principles for this are defined in our Code of Human Rights and in our Guiding Principles. For many units at Deutsche Telekom, specific agreements were also reached with the employees’ representatives on the subject of training. The training we offer our employees pays off. In 2023, for example, we were able to fill 51 percent of our open positions with internal candidates (2022: 33 percent; 2021: 51 percent; 2020: 66 percent).\(^1\)

Training the experts of tomorrow
We offer many young people the opportunity to enter the workplace. For example, we have a comprehensive range of technical and commercial apprenticeship programs that train our skilled workers of tomorrow. In 2023, the Group offered around 2,000 training positions, including more than 1,220 positions for apprenticeships and about 750 positions for persons in dual study bachelor’s degree programs. In addition, up to 25 young people took part in our 12-month DiscoverMINT program, which offers career orientation and a chance to explore opportunities in the digital workplace. The programs we offer make us one of the largest training providers in Germany. Our training programs provide a foundation for digital competence and thereby enable our apprentices to make a seamless transition into the digital workplace.

Promoting lifelong learning
We promote lifelong learning and support our employees on their individual learning paths. We start by reviewing the skills our employees have now and those they will need in the future. On this basis, we offer our employees tailored training and development programs. These can also include stays abroad or studies parallel to their jobs. For example, Bologna@Telekom gives employees access to part-time bachelor’s and master’s degree programs. Since its introduction more than ten years ago, a total of 2,310 employees in Germany have taken advantage of this opportunity.

In order to prepare our employees for the future requirements of the job market and ensure that they can participate successfully in the workplace, we offer them various development programs to expand their digital capabilities. With the “Explorer Journeys,” our employees can acquire basic skills in the areas of data analytics, software development, digital marketing, user experience design (UX design), artificial intelligence (AI) and cloud and DevOps technologies. These learning journeys are open to both beginners and experts. For example, our global upskilling programs in the areas of...
data science, data engineering, and data visualization help experts deepen their specialist knowledge. In 2023, a total of 8 200 employees took part in our Explorer Journeys. Our multi–week programs on “Generative AI” registered a total of 2 468 participants. Thanks to retraining programs such as the Junior Software Development Academy, our employees also have the opportunity to develop themselves in an entirely new area – customer advisors can retrain as software developers, for example. As a result, the programs also help us expand our own pool of candidates.

Learning independently, and digitally
From 2019 to 2022, our “youlearn” initiative supported our overall aim of developing Deutsche Telekom as a learning organization. In the process, we offered our employees worldwide (excluding those of T-Mobile US) the opportunity to manage much of their own training, with online courses, and to make learning an integral part of their everyday working life. In the reporting year, we have continued these efforts, while also highlighting the sense of community fostered by the initiative: Since the summer of 2023, “WeLearn” has been the motto for all of our learning programs.

Over the past few years, and via the Percipio learning platform, which we introduced in 2019, we have continued to expand our online education and training programs at the global level (excluding T-Mobile US). In addition to a desktop solution, the Percipio app lets users access content anytime and anywhere. It offers a wide range of courses, videos, books, and audio books on topics such as leadership, technology and development, and digital transformation, and it conveys the learning content in an entertaining way. Content is offered in 18 languages – with the help of dubbing and subtitling. In 2023, some 164 000 Deutsche Telekom employees were registered on this platform. Via Percipio, our employees can access training materials offered by Coursera, the world’s largest provider of online courses at university level. The courses, on issues such as big data, cybersecurity, cloud, and artificial intelligence, are provided by a network of around 200 universities.

The employees’ initiative Learning from Experts (LEX), which was launched in 2018 and is now successfully established at Deutsche Telekom, provides another example of the opportunities we offer for self-managed, self-guided learning. In LEX, experts from the Group share knowledge with their colleagues via a range of different channels. LEX is one of our fastest-growing communities. Its LEX sessions, lasting 30 to 60 minutes, are especially popular. More than 20 000 LEX sessions had been held by the end of 2023.

Throughout the Group (not including T-Mobile US), our employees completed some 3.8 million hours of learning in 2023, as investments in their own personal and professional development. Slightly over half of these hours were devoted to acquiring technical and digital skills. Overall, LEX users completed a total of almost 2.8 million hours of online learning in 2023. The comparable figure for 2019 was only 1.8 million. In 2023, fully 88 percent of the training courses available for registration throughout the Group were available online.

Training and skills management
We are aiming to develop Deutsche Telekom into a skills-focused company that orients its learning and development programs, and its pertinent processes, completely to its employees’ skills requirements.

We are continually building and upgrading our skills management program. With the help of a special, smart tool, skills management supports us in identifying skills gaps, throughout the Group. It thus enables us to offer targeted, focused continuing training and education programs for our employees. We tailor our learning programs to the skills gaps we identify. Also, we show our employees skills profiles that they can aim for, and achieve, by developing their skills. Since 2023, following a successful pilot program that began in 2017 and reached several units, we have been running our skills management program interdepartmentally, throughout the Group. To date, some 46 000 employees have successfully completed the skills management program.

Strengthening leadership skills in the digital age
In our management and leadership development programs, we are also increasingly relying on virtual solutions. The aim of such programs is to strengthen virtual leadership skills.

In 2021, we introduced WeGrow, a new approach to performance development, for employees at Deutsche Telekom in Germany and at T-Systems’ Local Business Units (LBUs), and subsequently rolled it out in other companies as well. By building on regular feedback, this process will help us enhance our employees’ development and commitment, create clarity about tasks and expected results, and strengthen trust-based relationships between managers and employees.

In addition, it will dovetail closely with other HR processes, such as skills management, talent management, and succession planning – and thereby help us tackle the challenges we face as a company. Since 2023, we have also been using WeGrow in our career development meetings with employees covered by collective agreements and with civil servants.

Talent management at Deutsche Telekom
Deutsche Telekom completely overhauled its approach to talent management in 2022. The aim was to garner a holistic, Group-wide view of talents at Deutsche Telekom. This is enabling us to a) develop centralized talent initiatives for all employees, and b) supplement those initiatives with local initiatives tailored to the specific requirements of the particular business unit involved in each case. For us, all employee groups harbor talents, including employees covered or not covered by collective agreements, and executives. WeGrow, our Group-wide performance development approach, serves as our basis for identifying talents. WeGrow, providing for ongoing dialog between managers and employees, is designed to further our employees’ development and help us identify talents. To this end, we have developed common, clearly defined, and comparable talent criteria – summarized by “4 As,” standing for Achievement, Ambition, Attitude, and Ability. As the 4 As suggest, in addition to reviewing previous achievements and
Due to a system and methodology adjustment in 2023, the figure development was honored with a number of awards. Also in the reporting year, our work in the area of training and Global Talent Hub.

In the reporting year, 22 percent of the company's executive positions (excluding positions at T-Mobile US) were filled with talents from the Global Talent Hub. Since 2022, the Hub also includes up to 100 talents who, early on in their careers, have already shown that they have the necessary potential to reach the executive level. This group receives extra support throughout a series of several career steps. In the reporting year, 22 percent of the company's executive positions (excluding positions at T-Mobile US) were filled with talents from the Global Talent Hub.

Also in the reporting year, our work in the area of training and development was honored with a number of awards.

The “Executives and Prospective Executives” target group is promoted via the Global Talent Hub, a globally operated talent initiative that includes up to 200 talented people who are directly suited for, and aiming for, an executive position in the company. Since 2022, the Hub also includes up to 100 talents who, early on in their careers, have already shown that they have the necessary potential to reach the executive level. This group receives extra support throughout a series of several career steps. In the reporting year, 22 percent of the company's executive positions (excluding positions at T-Mobile US) were filled with talents from the Global Talent Hub.

Also in the reporting year, our work in the area of training and development was honored with a number of awards.

1 Due to a system and methodology adjustment in 2023, the figure is only comparable with the figures from previous years to a limited extent.

Careers at Deutsche Telekom
With more than 200,000 employees in 34 countries, Deutsche Telekom is one of the leading telecommunication companies worldwide. Our employees are shaping the digital world of tomorrow, often performing pioneering work.

We constantly monitor the increasing demand for skilled workers, particularly IT and tech experts, and compete for the best talents. With our targeted recruitment programs, we give school and university students, graduates, and experienced hires a variety of options for immersing themselves in the Magenta world, including apprenticeships, dual study programs, internships, trainee programs, and expert entry.

In 2023, in Germany, we launched Magenta Campus Team, an effort aimed at coordinating our many different cooperative relationships with universities and at intensifying our dialog with students and graduates outside of the company's sphere. In this framework, we began inviting junior staff to excursions and expert presentations that offer an opportunity to become better acquainted with the company. Also, we continued our annual campus tours, under a new concept. We offered students and graduates the opportunity to meet with our IT and tech experts, in relaxed settings with snacks and games. In the reporting year, and in this context, we visited a total of eight universities in Germany – and got to meet many of the country’s up-and-coming skilled staff. In addition, the “Community of University Experts” was founded in 2023 as a platform for the exchange of information and the scaling of measures within the framework of university cooperation within the European Telekom subsidiaries.

With state-of-the-art workplace concepts, comprehensive code-termination options, and a broad range of training and development, we are moving toward our aim of becoming the “Leading Digital Telco.”

We offer our employees a broad, flexible benefits package that lets them shape their careers and personal lives individually, in keeping with their specific needs and objectives. Examples include flexible working hours, hybrid working models, and part-time employment, as well as lifetime work accounts, risk cover, and support with caregiving for family members. Our mission as a responsible employer also includes fair, competitive remuneration, with options for performance-based variable components, as well as a generous pension scheme. In addition, our Share2you program gives employees the option to purchase employee shares at special conditions: when they buy two employee shares, they receive a third one free of charge. Other benefits, such as sustainable mobility solutions and extensive health promotion, round out our offerings. More information about this is available on our careers website.

We have special offers for career starters, such as our “Start up!” trainee program. Our Start up! trainees spend a total of 18 months getting to know the different units at Deutsche Telekom. In the process, they gain extensive insights into our multinational corporation. In each case, the program has a focus topic, but can be oriented to a trainee’s specific needs.

Also, our Software Academy’s re-skilling program, which launched in 2022, offers participants – including even those without any prior IT experience – the opportunity to train as software developers. Our 12-month DiscoverMINT orientation program offers young people in Germany career orientation and an opportunity to familiarize themselves with the digital workplace, and its promise.

 Systems Solutions segment: training and development
T-Systems supports the personal and professional development of its employees with a broad range of customizable training and development programs. Also, it provides its junior staff with special support while they are still new to the workplace.

Training and development programs, for acquisition of key tech skills
In the reporting year, T-Systems continued running “youlearn,” a Group-wide initiative launched in 2020. Also, it emphasized “Digitize!,” a company-wide skills-development campaign. The company’s management is giving the initiative top strategic priority for the next few years. Digitize! comprises several programs that help employees develop key technology skills needed in managing cus-
tions were earned in key cloud services such as Amazon Web Services (AWS) – and T-Systems won the Digital Revolution Award for its outstanding efforts on behalf of the digital transformation.

In its HR work, T-Systems keeps track of the changing market, and it invests efficiently in development of key skills needed to meet future requirements. Throughout the year, to support employees and management staff in their personal development, in the context of the digital age, the company highlighted the different career paths available within the organization, and gave them a sharper defining profile. This effort is now proving especially useful for T-Systems employees in the areas of consulting, software engineering, IT architecture, and project management.

Training program for cybersecurity professionals
IT security experts are still in short supply on the German labor market, which is why, in 2014, we developed a 2.5-year, part-time training program leading to certification as a cybersecurity professional (certified by the Chamber of Commerce and Industry). The program is integrated into regular work processes and supplemented by subject-related and general modules in a variety of formats (classroom courses, e-learning, blended learning). After successfully passing the examination at the relevant Chamber of Industry and Commerce (IHK), participants receive an IHK certificate as a cybersecurity professional. For the skills they have acquired as part of the training, they can obtain credits that can be used in bachelor’s or master’s programs. During the reporting year, 19 participants passed the exams to become certified cybersecurity professionals at the Cologne Chamber of Industry and Commerce (IHK Köln).

We are continuously developing our training programs, taking into account current and future IT security requirements. For example, in the reporting year, we updated and expanded all program content in keeping with the latest developments in the area of artificial intelligence (AI).

In 2018, in response to demand that emerged at other companies and at government agencies, we opened up the program to employees of other organizations. In 2023, the program entered its tenth year, with a total of 14 participants. They include staff of...
Deutsche Telekom Security GmbH (ten persons), Deutsche Telekom IT GmbH (two persons) and Deutsche Telekom Geschäftskunden GmbH (two persons).

Graduates of the program are increasingly taking on the role of expert coaches for the new participants, documenting the positive rating of the program and supporting its development. In the reporting year, the expert coaches from the program's seventh class (year) were certified. They were able to expand their skills through a course entitled "Fit for expert coaching" and even put them to the test in the practical implementation of the program.

During the same year, and on the occasion of the program's tenth anniversary, over 120 program graduates and expert coaches gathered for an in-person alumni meeting. In addition to featuring presentations on current IT-security issues, the gathering offered plenty of opportunity for discussion and sharing of experience. The overall aim of the event was to promote the further development of the company’s professional cybersecurity community and to strengthen its network.

After ten years of the program, we can report that our experience with it has been very positive. As of March 2023, seven classes had completed the training in full and received the pertinent certification. The average age of the graduates was approximately 24. At 5.7 percent, the dropout rate among participants was low. The course was described as challenging, but manageable in the context of the growing requirements of everyday working life. In total, we have had 152 program participants, in ten classes, 96.4 percent of the graduates from the classes of 2014 through 2020 remained in the Deutsche Telekom workforce.

Skills development at Telekom Training
Deutsche Telekom offers its employees a range of training designed to help them to develop and brush up their skills.

In 2023, we offered a total of 47,005 learning programs via our global Learning Management System (LMS). 88 percent of these programs were available online. On average, our employees in Germany and at our European Local Business Units (LBUs) invested 4.6 working days in their professional education, 3.4 of which were digital. During the reporting year, the percentage of learning carried out online decreased to 73 percent (2022: 79 percent).

International development and leadership programs
Our international development and leadership programs are designed to help high potentials and top performers establish themselves within the Group, to foster their loyalty to the company, and to position them in suitable jobs. These programs focus on developing the upcoming leader generation and supporting it in addressing current and future challenges. At the same time, the programs have the purposes of enhancing leaders’ identification with the company, promoting their knowledge-focused exchanges and interactions and cultivating their sense of personal responsibility.

The Start up! trainee program runs four times a year, offering ambitious and outstanding graduates from various disciplines a chance to become the pioneering experts and leaders of the digital future. Trainees who are driven by an entrepreneurial spirit, a game-changer mentality, and a digital mindset can tailor their 18-month learning journey to their specific needs and interests. By immersing them in a fascinating exploration of the different business areas in Germany and abroad, the program offers an opportunity to gain practical experience from a series of challenging projects and customer-centric tasks supported by experienced leaders.

In addition, the Global Talent Hub serves as a pipeline for high potentials at Deutsche Telekom, which helps them develop into a leadership role or toward the next level – directly or with a step in between. It is an incubator and launchpad that gives talents visibility on a Group level, connects them with relevant business leaders across segments, and helps accelerate their careers to become key players in the future.
The levelUP! environment offers a host of leadership development options. Centralized, segment-specific, and country-specific content is combined into a harmonized learning experience for all leaders. In the reporting year, levelUP! successfully acquired 4,000 new users from all segments and is now providing information to more than 8,500 leaders in total.

Apprentices and training programs in the DT Group in Germany

In 2023, a total of some 5,350 junior staff underwent training, or took part in a dual study program, at the company. Of these, 22 percent were women.

Employee recruitment in the DT Group in Germany

In 2023, Deutsche Telekom hired around 2,500 new employees from the external labor market in Germany. In addition, we gave around 1,300 internal junior staff permanent jobs on completion of their vocational training or dual study courses.

Proportion of digital experts

Our workforce’s in-depth expertise and future-centric skills are a vital company resource and pivotal to our business success. Deutsche Telekom prioritizes the promotion of future-proof digital skills. In 2023, we reiterated our commitment to improving employability by offering our Explorer Journeys – intensive programs focusing on up-and-coming innovation areas. More than 8,200 employees attended these digital training events lasting several weeks, covering topics such as generative AI, data analytics and data visualization, machine learning, and software development.
Our approach to health and occupational safety

We take our obligation to ensure the health and safety of our employees very seriously. The Board of Management assumes overall responsibility for occupational health and safety, as well as for environmental protection. We bundle and manage our occupational health and safety programs at Group level; health and safety managers (H&S managers) are responsible for implementing these programs locally. The general responsibilities, duties and programs for health and safety management are outlined in the Management System Manual for Quality, Health, Safety and Environmental Protection. The manual serves to harmonize and align our management systems with common targets across the Group. Our Conditions for Purchasing also include agreements on occupational health and safety, which our suppliers must fulfill.

Occupational health and safety in the Group is firmly anchored in our structures, through certified management systems and suitable policies and guidelines. We conform to the ISO 45001 standard in this connection. In 2018, we were one of the first DAX-listed companies to have our H&S management system certified according to the standard. Before that, we had been certified to OHSAS 18001 from 2011. In 2023, our H&S management system, which is certified pursuant to ISO 45001, ISO 14001 and ISO 9001, underwent a successful review. Deutsche Telekom’s umbrella certificates for occupational health and safety, environmental protection, and quality are slated for review and recertification in 2024. At the end of the 2023 financial year, 18 sites were certified pursuant to ISO 9001, 89 sites pursuant to ISO 14001, and 83 sites pursuant to ISO 45001. The certificates certify that we have systematic procedures and processes in place to ensure and continually improve occupational health and safety as well as environmental protection.

We promote health awareness and health literacy among our employees, with targeted measures and comprehensive programs. At the same time, safety in the workplace is our highest priority. We view legally mandated occupational health and safety standards as minimum requirements. Awareness-raising, prevention, and personal responsibility are of particular importance to us. For this reason, we offer training courses on all relevant topics, such as first-aid, fire safety, and driver safety.

We regularly determine risks to health and safety. We produce risk assessments for all activities and use them to derive appropriate measures – such as mandatory fire safety instructions for all employees. When we collaborate with external service providers, it is important that our safety standards be met.

Our portfolio of occupational health and safety measures also includes many voluntary measures to promote health within the company. These include, for example:

- An annual, comprehensive health check by company doctors
- Vaccinations and hygiene measures
- Colon cancer screening
- Exercise/fitness activities
- Programs for recovery and resilience, mindfulness, health-oriented leadership
- Increasingly, digital training

In the reporting year, we received a number of awards for our efforts on behalf of in-company health promotion. For example, for our “One Minute to Arrive” mindfulness initiative, we were honored as an “Employee Wellbeing Champion” (award: Special Mention). With “One Minute to Arrive,” we encourage our employees to take a minute to pause and reflect at the beginning of every meeting. In that minute, participants are encouraged to concentrate on the moment – while also taking note of their breathing, if they wish – and thereby become better able to open the meeting in a collected and focused manner. The initiative, which is being offered in the context of New Work, is an organizational development measure aimed at enhancing everyday working life. In the EU segment, the OTE Group received several awards for its “Health & Safety” initiatives. The group was honored for its efforts to promote a workplace culture of health and safety, for example, and for its development of individualized programs for promoting employees’ physical and mental health and their overall well-being. Also, in the area of occupational safety, a first aid app introduced in the Germany segment received the German Stevie Award. More information on the application is available here.

The impact assessment of our materiality analysis identified potential risks to health and safety in the work and process steps of Deutsche Telekom’s upstream and downstream value chains. Insufficient hygienic measures, deficient safeguards, and a lack of preventive measures can result in accidents or damage to employee health. Our measures to improve occupational health and safety are aimed at reducing these risks. They also have a positive effect on the environment. A structured occupational safety process for handling hazardous materials, for example, ensures that hazardous materials cannot leak out or pose a risk to the environment.
We also work together with certified waste disposal companies, to ensure that the disposal of our electronics products does not harm the environment or the health of the local population.

**Reporting against standards**

**Global Reporting Initiative (GRI)**
- GRI 403–3 (Management of material topics)
- GRI 403–1 (Occupational Health and Safety)
- GRI 403–4 (Occupational Health and Safety)
- GRI 403–5 (Occupational Health and Safety)
- GRI 403–6 (Occupational Health and Safety)
- GRI 403–7 (Occupational Health and Safety)
- GRI 403–8 (Occupational Health and Safety)

**Effectiveness of our occupational health and safety measures**

In line with the PDCA cycle (plan, do, check, act), we systematically investigate and measure the effectiveness of our measures. We endeavor to continuously develop and enhance our management system. To this end, we regularly investigate how occupational health and safety are integrated in management and leadership activities and derive improvement strategies as needed. This includes reviewing the results of our employee survey, evaluating stress prevention measures under collective agreements, competitor analyses, and other indicators. We analyze this information on an ongoing basis and use it to develop suitable measures to promote the health and well-being of our employees. In addition, all employees can actively help shape our measures for occupational health and safety, in line with the requirements of ISO 45001.

Different indicators reflect the effectiveness of our corporate health management activities:

- At Deutsche Telekom in Germany, the health rate (including long-term illnesses) in the reporting year was 94.3 percent (prior year: 93.8 percent). Excluding long-term illnesses, the health rate over the same period was 95.8 percent (prior year: 95.2 percent). The health rate is reported to the Board of Management at the end of each quarter.

- The total number of accidents at work remained at a low level in the reporting year. In 2023, the accident rate in Germany was 5.2 accidents (accidents resulting in more than three days of absence) per thousand employees (prior year: 5.5).

- The Group-wide health index — which was most recently determined in connection with the 2021 employee survey, in nearly all countries with Deutsche Telekom employees — was 69 (on a scale of 0 to 100). This represents a slight increase of four points with respect to the previous survey in 2019. Preparations for determining the next health index began in 2023.

In the fall of 2023, the company’s annual flu-shot campaign again took place. Between October and December 2023, some 6,800 of our employees in Germany received their flu shots via the campaign.

While we did not offer COVID-19 vaccinations in 2023, we did monitor and assess the coronavirus situation on an ongoing basis. As a result, we would be in a position to resume our COVID-19 vaccination program as necessary, on short notice.

**Reporting against standards**

**Global Reporting Initiative (GRI)**
- GRI 403–2 (Occupational Health and Safety)
- GRI 403–3 (Occupational Health and Safety)
- GRI 403–6 (Occupational Health and Safety)
- GRI 403–9 (Occupational Health and Safety)
- GRI 403–10 (Occupational Health and Safety)

**Psychosocial support in connection with personal and professional changes**

We attach great importance to the psychosocial support that the Employee and Executive Advisory Service (MFB) provides for various transformation processes across the Group. The goal is to help affected employees, managers, and teams deal with professional and private changes, and to prevent psychosocial crises. In the event of an acute crisis, our crisis intervention takes action: The party concerned, along with family members when needed, can make use of professional counseling from an experienced team of experts.

In Germany, we also offer free and anonymous personal counseling and consultation hours. Via the service, company employees can consult healthcare professionals (employed by healthcare providers) — in person, either at the professionals’ own locations or at Deutsche Telekom facilities. And consultations can also be initiated and conducted via telephone calls, video chats, messaging, and email. Employees can also contact health professionals via the “Talk Time” telephone helpline, which as of 2023 is available on a 24/7 basis to deal with both urgent and non-urgent situations. If necessary, employees seeking help are referred directly to local experts or specialist agencies. The counselors have a duty to maintain confidentiality and are familiar with the specifics of the company.

As of 2023, the Talk Time helpline is also available to employees outside of Germany, including employees in Greece, the UK, the Czech Republic, and Türkiye. In 2024, the service will be extended to additional countries.

Since 2022, we have offered special psychosocial counseling to our international employees and helpers who have been exposed to stresses and disturbing events tied to Russia’s war of aggression on Ukraine. In the reporting year, we also provided this free service to employees who have experienced other catastrophic events — such as the earthquakes that struck Türkiye and Syria in February 2023, and the war in the Middle East. In addition, the free, individual counseling offered by the service is not limited to our own employees; it is also open to employees’ family members and friends on location. Our counselors, working across international boundaries, offer victims, persons in mourning and persons seeking advice in dealing with anxiety, fear, and other mental stresses. Also, the service is available in several different languages, including Turkish, Arabic, and Hebrew.
Via our Employee and Executive Advisory Service (MFB), we have long provided special additional support to managers, in the form of presentations and workshops on healthy leadership, conflict management, mindfulness, and self-leadership, as well as on strategies for dealing with changes and mental stress.

Courses on virtual leadership are also part of these offerings. Working in hybrid or distributed teams has long been part of everyday life for some parts of Deutsche Telekom. During the pandemic, however, as more and more people worked from home, managers, who need to stay in touch with the teams and individuals under them and be aware of any relevant changes, faced the additional challenge of finding enough time and opportunity for personal interaction. In many cases, this meant relying on regular video conferences. As of the end of 2023, our office staff are increasingly leaving their home offices and again working at company facilities. Teamwork at our various locations has been benefiting from the intensified personal interaction that in-office work makes possible.

**Reporting against standards**

**Global Reporting Initiative (GRI)**

- GRI 403–3 (Occupational Health and Safety)
- GRI 403–6 (Occupational Health and Safety)
- GRI 403–10 (Occupational Health and Safety)

**Digitalization and health**

For many years now, we have offered our employees a comprehensive range of programs to help them stay healthy and fit, and sharp and motivated, as they face the challenges of the increasingly digital and agile modern workplace.

The “My Health Journey” health program

In the reporting year, we continued our My Health Journey company health program for mental resilience, which is available to all employees in Germany. In addition to a series of workshops on developing mental resilience, mindfulness and good self-care habits, it provides science-based mindfulness training for managers and executives. The program also now includes modules covering all fields of prevention. In addition to the focus topic “Mental resilience,” we now also offer courses on good nutrition, regular exercise, and restful sleep. And the program also includes open lectures, and on-demand individual counseling on topics such as sleep and nutrition.

In the reporting year, an online “#mymoment” area once again offered our employees in Germany live workshops, video clips and handouts, all oriented to the topic of cultivating mindfulness in the workplace.

Since 2021, a training course entitled “Healthy, mindful leadership” has been available to managers and executives in nearly all of our German companies. This is a multimodal course designed to improve the digital health literacy of employees. In the reporting year, the course curriculum focused especially on dealing with the challenges of “New Work”. For example, it covered topics such as hybrid leadership, meaningfulness, and empathy. The “Healthy, mindful leadership” training course began in 2019 as a pilot project.

In addition, since 2020 our employees in Germany have access to the FITMIT5 (fitwith5) app which is also integrated in the annual My Health Journey program. The training app includes an algorithm that puts together five-minute workout programs tailored to users’ needs. In addition, it provides further exercise and meditation resources, as well as a nutritional tips. In light of the positive feedback received, this offer was continued in the reporting year and is now available to all company employees free of charge. We also launched a collaboration with SHENTISPORTS in 2022 that enables our business customers to offer the FITMIT5 app to their own employees.

**Other offerings and action days**

In 2023, we again held “action days,” or campaigns devoted to specific topics, for our employees. These included a Mindfulness Day, a Mental Health Day, a Sleep Day and a Nutrition Day. In some cases, the campaigns were conducted in several different languages.

Our Mindfulness Day, which took place in September 2023, featured a diverse supporting program entitled “The Power in Small Habits.” Action day activities for our employees included online meditation and yoga; presentations on the challenges of the modern workplace; and presentations on strategies for dealing with digital technologies. In connection with our “Mental Health Day,” which took place in October 2023, we offered our employees a full week of webinars and expert presentations on topics such as resilience, self-care, and self-empathy. In addition, they had the opportunity to take part in a range of practical exercises, such as breath-training and short-meditation exercises. We view our efforts to promote mental health among our employees also as efforts to promote a positive corporate culture.

Our “Sleep Day,” which was held in June 2023, presented a wealth of information about sleep, including both restful nighttime sleep and sleep disorders. The presentation formats included numerous webinars and a virtual tour through a 3D sleep-obstacle course. The Day presented both general information, about the topics of sleep and rest, and tips and strategies on ways of improving one’s individual sleep.

The latter included information based on the latest findings from sleep research. To that end, in Germany we drew on the “Healthy Sleep” campaign, which developed from T-Systems’ “#ausruhezeichen,” a sleep and rest campaign launched in 2020. At the end of the reporting year, the three-year pilot phase of “#ausruhezeichen” also ended, with positive results. For example, employees who had taken part in the sleep coaching offered via the campaign reported that their sleeping habits had improved as a result. As of 2024, as a result of the campaign’s great success, we are offering a diverse range of similar measures to all Deutsche Telekom employees in Germany. In 2022, one Deutsche Telekom location in Bonn set aside a room in which employees could spend a result. As of 2024, as a result of the campaign’s great success, we are offering a diverse range of similar measures to all Deutsche Telekom employees in Germany. In 2022, one Deutsche Telekom location in Bonn set aside a room in which employees could spend
About nutrition, another health topic: Since 2021, we have been working with BARMER, a health-insurance provider, to provide online presentations by nutrition consultants and top athletes, as well as team workshops and added offerings such as Weight Watchers Online throughout the Group.

Reporting against standards
Global Reporting Initiative (GRI)
- GRI 403–6 (Occupational Health and Safety)

Digital solutions for occupational safety
To be effective, occupational safety management has to stay up to date. Even though our employees and managers work at many different locations, and often work remotely, they should still have easy access to our occupational safety programs. For this reason, Deutsche Telekom is working to digitalize and simplify the relevant core processes. For example, assessments of physical and technical hazards have been managed digitally in Germany since 2023. Also, since 2015 the Group has been preparing assessments of risks to mental health in digital form. Also, the company has set up an online portal for reporting of accidents and near-accidents.

In 2023, we introduced interactive, web-based training courses on such subjects, to ensure we are reaching all of our highly mobile workforce. As of August 2023, employees throughout the Group have online access to information about a range of key topics in this area, such as fire safety; safe traffic routes; proper use of tablets by field-service staff; and healthy, safe use of computer displays. Participants automatically receive certification of their participation in a course that complies with legal requirements. For executives and managers, we have also introduced a mandatory training course entitled “Management skills in occupational health and safety.” The digital content in this area is barrier-free – meaning it can also be easily accessed by persons with disabilities – and it is available in both English and German. We plan to gradually expand our range of online instruction in this area.

Also in 2023, we launched, on a Group-wide basis, a dedicated first aid app. All Deutsche Telekom employees are invited to install it on their work devices. In any emergency situations at Deutsche Telekom locations, they can use it to quickly alert nearby first responders, which the app automatically locates via GPS tracking. Significantly, this location feature can be especially valuable in hybrid work environments.

Reporting against standards
Global Reporting Initiative (GRI)
- GRI 403–9 (Occupational Health and Safety)
- GRI 403–10 (Occupational Health and Safety)

Work-related accidents in Germany
In the reporting year, the number of workplace and commuting accidents remained at a low level. The accident rate in Germany for 2023 was 5.2 accidents (resulting in over three days of absence) per thousand employees, which continues to be below the industry average.

Deutsche Telekom has an occupational health and safety management system pursuant to ISO 45001 in place to reduce the number of work-related accidents. This certified system makes it possible to map the entire health and safety process and to develop sets of measures to further improve employee safety.

Health rate
In Germany, the health rate for the Deutsche Telekom Group in 2023 showed a slight improvement of 0.5 percentage points year-on-year, and stood at an average of 94.3 percent (including the long-term sick). Musculoskeletal disorders, respiratory diseases, and mental health problems account for the bulk of illness-related absenteeism at Deutsche Telekom.

Not including the long-term sick, the company’s 2023 health rate amounted to 95.8 percent, which is slightly higher — by 0.4 percentage points — than the value for the previous year. The health rate is reported to the Board of Management at the end of each quarter. The company aims to increase its health rate.

Targeted health protection programs were implemented in the individual companies. Across all segments, management training courses on the topic of “healthy leadership” were either introduced or continued. The aim is to raise managers’ awareness of this issue and train them accordingly. Additionally, a structured absence management system will be put in place to ensure that employees and managers regularly communicate about illness-related absences so that appropriate action can be taken early on.

Reporting against standards
Global Reporting Initiative (GRI)
- GRI 403–9 (Occupational Health and Safety)
- GRI 403–10 (Occupational Health and Safety)
Workforce development worldwide
As per year-end, the Group’s headcount had decreased by 3.4 percent year-on-year. In our Germany segment, the number of employees increased by 1.2 percent against year-end 2022, mainly due to the transfer of employees of Multimedia Solutions (MMS) from the Systems Solutions segment. The total number of full-time equivalent employees in the United States segment decreased by 6.6 percent compared to the end of 2022, primarily due to the workforce reduction program implemented in the third quarter of 2023. In the Europe segment, the headcount was down by 3.4 percent compared to the end of the prior year, in particular in Slovakia, Poland, and Greece. The headcount at our Systems Solutions segment was down 5.0 percent against year-end 2022, mainly due to the transfer of MMS to the Germany segment. In the Group Development segment, the headcount decreased sharply by 87.0 percent year-on-year, mainly due to the sale of GD Towers as of February 1, 2023. The headcount in the Group Headquarters & Group Services segment was down 0.9 percent compared to the end of 2022, mainly due to the ongoing staff restructuring measures at Vivento. This decrease was offset by the increase in the number of employees in the Technology and Innovation department.

Deutsche Telekom workforce from 2003 to 2023
Our strategy to become the leading telecommunications provider in Europe is reflected in the trend in our international employee headcount. Since 2003, our workforce in Germany has been decreasing continuously. As of the end of 2023, it accounted for 39.4 percent of the total workforce. There was hardly any change with respect to the previous year, however, since our international workforce also continued to decrease.

Number of employees by country

Reporting against standards
Global Reporting Initiative (GRI)
- GRI 2–7 (General Disclosures)

Part-time employees in the DT Group
We believe it is important to offer our staff flexible working conditions that fit their needs, no matter what stage of life they happen to be in. This includes the opportunity to work part-time, but also the guaranteed option of returning to work when an employee no longer wants to work part-time. Trainees at Deutsche Telekom can also take their training on a part-time basis. Also, students, including students who are single parents, have the option of completing their cooperative study program on a part-time basis.
Part-time employees DT Group in Germany

The percentage of part-time employees came to around 13 percent in 2023, and thereby remained stable with respect to the previous year.
Socially responsible staff restructuring

With a view to remaining strong and competitive in our dynamic and global market environment, in the long term, we support and assist our employees in growing with the evolving digitalized working world.

These inevitable changes are also accompanied by complex personnel restructuring. We are creating new jobs in growth areas and finding qualified personnel to fill these positions. In other areas, we are restructuring, and reducing our workforce in the process. We make sure that all staff restructuring measures are implemented in a socially responsible way for our employees.

HR service provider Vivento has provided us with support and placement services for employees in Germany since 2013. In 2023, and in close collaboration with the new *next JOB* unit founded at the start of 2022, 276 employees (civil servants and non-civil servants) at Deutsche Telekom in Germany decided to transfer to permanent positions in the public service. The majority of them moved to the Federal Employment Agency, but also to the armed forces (Bundeswehr), and other federal authorities. In addition, employees were placed in individual positions in other public administrations. This was also facilitated by the increasing need for staff at the authorities. The *next JOB* unit in Vivento offers public service prospects to employees in Germany who are looking for a new professional challenge outside the company. Since Vivento’s founding, it has helped more than 53,600 employees (full-time equivalents – FTEs; as of December 31, 2023) find viable new options.

For some years now, various segments, including Group Headquarters and Telekom Deutschland, have offered assistance to surplus personnel, including individual counseling for professional reorientation. Employees in the change process are given prompt and comprehensive support, with the goal of finding permanent new employment for them.

Holistic staff restructuring and transfer management at Telekom Deutschland

Telekom Deutschland implemented a holistic staff restructuring and transfer management system in mid-2017. Its aim is to win employees over to the idea of a career change early on. In cases where tasks are being eliminated in the near or medium term, or different skills are required, the affected employees will be given advice proactively regarding opportunities for a professional reorientation. Managers are also actively involved in the change process. Together with them, internal and external employment options are considered and personal labor market profiles developed. In addition, assistance is provided for individualized application processes and – where necessary – training offered. Since 2018, around 2,600 employees nationwide in the Germany segment have received counseling via this system. Approximately 70 percent of them were able to find new options through these measures.

Instruments for socially responsible staff restructuring in the DT Group in Germany

Deutsche Telekom continues to ensure that its personnel cutbacks are carried out in a socially responsible manner, using the tried-and-trusted tools of early retirement, severance payments, and partial retirement again in 2023.

Employee turnover rate

In the reporting year, the employee turnover rate in Germany remained constant at 2.5 percent. At the international level, the turnover rate decreased significantly and was 7.4 percent in 2023. At the Group level, it has also reduced as a result of this decrease in Germany and was 4.6 percent in 2023.

Reporting against standards

Global Reporting Initiative (GRI)
- GRI 2–7 (General Disclosures)
Proportion of civil servants in Group workforce

The number of civil servants employed in the company fell once again in 2023. The reason for this is that Deutsche Telekom has not recruited any new civil servants since the company was privatized. While some civil servants left the company upon reaching retirement age, others also took advantage of early retirement with volunteer work (dedicated retirement) or moved to other agencies. This led to a continuous drop in the number of civil servants in our workforce.

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</thead>
<tbody>
<tr>
<td>Active civil servants</td>
<td>15,999</td>
<td>15,482</td>
<td>13,757</td>
<td>12,153</td>
<td>10,983</td>
<td>9,653</td>
<td>8,381</td>
<td>6,891</td>
</tr>
<tr>
<td>Civil servants on temporary leave from civil servant status <em>(a)</em></td>
<td>889</td>
<td>731</td>
<td>457</td>
<td>533</td>
<td>405</td>
<td>311</td>
<td>256</td>
<td>212</td>
</tr>
<tr>
<td>Civil servants at affiliated companies</td>
<td>10,627</td>
<td>10,480</td>
<td>9,785</td>
<td>9,720</td>
<td>7,425</td>
<td>6,723</td>
<td>5,856</td>
<td>4,942</td>
</tr>
<tr>
<td>Civil servants (total)</td>
<td>27,216</td>
<td>26,499</td>
<td>23,550</td>
<td>21,424</td>
<td>18,412</td>
<td>16,736</td>
<td>14,474</td>
<td>12,045</td>
</tr>
<tr>
<td>Number of non-civil servants in Germany</td>
<td>76,946</td>
<td>75,203</td>
<td>74,143</td>
<td>72,685</td>
<td>70,620</td>
<td>68,424</td>
<td>66,946</td>
<td>66,555</td>
</tr>
<tr>
<td>Total number of employees in Germany</td>
<td>131,663</td>
<td>131,100</td>
<td>129,092</td>
<td>127,111</td>
<td>123,927</td>
<td>120,540</td>
<td>116,892</td>
<td>114,600</td>
</tr>
<tr>
<td>Proportion of civil servants in Germany (in %)</td>
<td>26.48</td>
<td>26.20</td>
<td>24.42</td>
<td>22.77</td>
<td>20.68</td>
<td>19.7</td>
<td>17.8</td>
<td>15.3</td>
</tr>
</tbody>
</table>

*(a)* Civil servants whose civil servant status is suspended. They have temporarily changed to an employment contract.
We keep on heading for success – with our ideas management

Our employees come up with creative ideas for ways to improve our processes, products, and services – and thereby strengthen Deutsche Telekom’s competitiveness. We promote a corporate culture in which we encourage our employees to take an active role. We trust in the competency and will of every individual to move our company forward. Our Idea Management unit develops concepts and measures for making the most of our employees’ potential.

Also, in Germany, we maintain an “ideas portal,” and invite any and all of our employees to submit ideas through it – acting either alone or as part of a team. At the end of March 2023, we shut down our central “Ideas Garden” platform. For managing our internal ideas development, we are now using a decentralized approach in which we invite employees, throughout Deutsche Telekom’s different areas, to actively develop ideas on their own initiative. Ideas that seem well-developed and promising are reviewed by our ideas management team, on the basis of various criteria. New ideas are also assessed – and implemented, if appropriate – by the responsible specialist department. The process, which is extensive overall, ensures that each and every idea can be individually considered and promoted. Our employees are paid a reward for each submitted idea that is pursued.

In 2023, we received a total of 4,516 submissions from our employees in Germany (2022: 4,016). These ideas led to savings and new business potential worth about 56.4 million euros (2022: 82.7 million euros). This achievement also shows that we value and implement ideas from our employees.

In 2023, Deutsche Telekom took first place in the German Idea Management Award in the category “Best solution for 150 years of idea management, 2023”. Our ideas management was evaluated in the categories “effectiveness,” “impact on the organization” and “commitment.”

New impetus with the help of an external think tank

Via our Ideenschmiede (think tank; only available in German), which has been in place since 2018, we invite persons from outside the company, including both customers and non-customers, to actively help us design our products, services, and processes. Around 18,000 users have registered for the site in order to contribute ideas and impetus. Users also have the opportunity to take part in surveys, polls, and discussions, and to place suggestions in our digital suggestion box. Workshops, both online and in person, also give them an opportunity to exchange information with one another and with Deutsche Telekom experts, contribute ideas, and develop suggestions further. The Ideenschmiede has conducted around 450 surveys on 320 different topics since January 2018. The results are impressive: in all the topics covered, customer feedback has led to the implementation of a project or to measurable improvements. In addition, ideas submitted to our suggestion box help us continually improve and refine our products and services. Since the beginning of 2018, persons outside the company have submitted some 6,400 ideas in the Ideenschmiede framework.

In 2023, on the occasion of the Ideenschmiede’s fifth anniversary, we held a special online event for employees and selected Deutsche Telekom customers. During the event, we took the opportunity to honor our employees for the ideas they submitted in the year under review. Significantly, intensive exchanges of ideas between persons inside and outside of the company have also helped encourage our creative employees to keep on submitting ideas – in the interest of our business customers’ and consumers’ satisfaction.

How customers are changing Deutsche Telekom

The Ideenschmiede primarily serves to solicit requests and requirements from customers, elaborate them further, and structure and document them. All the same, we sometimes let users vote on alternative solutions, too. One example involved finding a name for the MagentaTV MegaStream rate plan, which was decided by a majority vote among users.

Another example of the influence of user feedback involves the help website for Cell Broadcast, a topic of current interest. A targeted survey on the Ideenschmiede platform helped us make the texts more understandable and answer open questions.

In addition, the Ideenschmiede regularly provides suggestions regarding activities and service offerings specifically for older people. To make it easier for them to participate in the digital world, the Ideenschmiede developed the initial content for a “Tablet for beginners” seminar, which we now offer regularly in the Telekom Seniors’ Academy framework.

Portfolio of Intellectual Property Rights

In the reporting year, Deutsche Telekom held a total of 7,875 patent rights. We are firmly committed to expanding our patent portfolio, taking relevant current and future technologies into account. This will secure the value of our innovations in a dynamic world and bolster the Group’s competitiveness. We predominantly license our patents through our membership of patent pools.
Patents are gaining more and more significance in the telecommunications industry. Our patent strategy has to keep pace with the constant evolution of market players and fields of activity. On the one hand, our Group's scope for action needs to be maintained. On the other hand, we want to protect the results of our own research and development, and to use these in cooperation and partnership with other companies. National and international patent rights are vital for these types of activity. We are therefore strongly dedicated to developing, granting, and maintaining our own patents.
Deutsche Telekom has been involved in CR reporting for more than 25 years. In addition to our CR report, we have been publishing a non-financial statement in our annual report since reporting year 2017. As a result, we are fulfilling the requirements of §§ 289c to 289e HGB (German Commercial Code), §§ 315c in conjunction with 289c to 289e German GAAP (HGB) and complying with the EU Taxonomy Regulation.

To identify the key reporting topics for our company and stakeholders, we carry out a comprehensive materiality process each year. Our reporting is supplemented by updates in the Corporate Responsibility section of our website.

Structure of the online report
The 2023 CR Report is a Communication on Progress that looks at the key developments during the reporting period.

- The home page provides an overview of the most important KPIs and highlights relating to the report topics from the year 2023. From the home page, it is possible to navigate to the different sections of our “Management & Facts” Communication on Progress. This covers the four pillars of strategy, economy, environment, and social, and includes information relating to our sustainability strategy, targets, and progress from the reporting year. Under economy, environment, and social, we also provide a brief overview of the key progress and KPIs from the reporting year. The foreword is presented in the appropriate place in the strategy section. For the first time, the 2023 CR report includes information about progress and activities in the four operating segments Germany, United States, Europe, and Systems Solutions, which have been presented in separate country profiles in previous CR Reports. This new, integrated presentation enables us to map out the Group structure better in the 2023 CR Report. In some topic areas, interested readers are able to contact Deutsche Telekom experts directly.

- Management & Facts is supplemented with an interactive benchmarking tool under “Key figures”, which enables users to put together customized sustainability KPIs. The KPIs are presented at both segment and unit level.

- Under Specials, we provide information in an easily understandable way for a wide range of readers. The content of the Specials is not part of the "Management & Facts" Communication on Progress. The Specials provide a general overview of relevant sustainability topics at Deutsche Telekom. Due to their general applicability, they continue to be valid, and have therefore not been updated for this reporting year. Some of the Specials are also available in simplified language.

- The report is supplemented by the new CR facts format, which individual Deutsche Telekom departments use to report directly on their sustainability-related projects and measures. This format is also not part of the Communication on Progress for the reporting year. Readers can access the CR facts section at any time by clicking on the link in the report’s footer.

The report’s footer includes links to a download center, dialog functions, a glossary, and other relevant websites.

Scope, reporting period, and target groups
As a Group report, Deutsche Telekom’s “Management & Facts” Communication on Progress and the section on key figures with its interactive KPI tool include the segments and many national companies. It covers – like the Annual Report – the period from January 1 to December 31, 2023. CR reporting is carried out each year, with the 2023 Communication on Progress following up on that of 2022. Any deviations are marked accordingly. The date of publication is March 26, 2024. This Communication on Progress has been compiled in line with the 2021 GRI Standards.

The CR Report pertains to the Group with its 56 German and 238 international, fully consolidated subsidiaries; any deviations are marked accordingly.

This report is specifically addressed to Deutsche Telekom stakeholders. These include analysts and investors; CR ranking and rating agencies; NGOs; customers, employees, and business partners; and representatives from the worlds of business, science, research, education, and politics.

For purposes of inclusion, we have used gender-neutral terms and pronouns.

Implementation of high international reporting standards
The “Management & Facts” Communication on Progress and KPIs section comply with the internationally recognized guidelines (GRI Standards) of the Global Reporting Initiative (GRI). We also highlight our contribution to achieving the Sustainable Development Goals in many places. In addition, we use a special index to indicate which content in the 2023 CR Report contributes to meeting the criteria established by the Sustainability Accounting Standards Board (SASB). For the first time, the 2023 CR Report also highlights the negative effects (Principal Adverse Impacts, PAIs) from the Sustainable Finance Disclosure Regulation (SFDR) and the indicators of the Global System for Mobile Communication (GSM) sustainability standards with regard to the telecommunications industry. The latter standards aim to achieve better comparability in the telecommunications sector. In 2023, we published the...
latest Communication on Progress (CoP) for 2022 as part of the United Nations Global Compact.

Independent assurance report
Limited Assurance Report of the Independent Practitioner Regarding Sustainability Information

To Deutsche Telekom AG, Bonn/Germany

Our Engagement
We have performed a limited assurance engagement on the disclosures marked with the symbol ♣ in the Corporate Responsibility Report ("sustainability report") of Deutsche Telekom AG, Bonn/Germany ("the Company"). for the period from 1 January to 31 December 2023 ("sustainability information"). Our engagement solely covers the disclosures marked with the symbol ♣.

Our engagement does not cover the paragraphs not marked with the symbol ♣, or other disclosures in the sustainability report of the Company.

Responsibilities of the Executive Directors
The executive directors of the Company are responsible for the preparation of the sustainability report in accordance with the principles stated in the Sustainability Reporting Standards of the Global Reporting Initiative ("Reporting Criteria") and for the selection of the disclosures to be assessed.

These responsibilities of the executive directors of the Company include the selection and application of appropriate methods for sustainability reporting and the use of assumptions and estimates for individual sustainability disclosures which are reasonable under the given circumstances. In addition, the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of a sustainability report that is free from material misstatement, whether due to fraud (i.e. fraudulent sustainability report) or error.

The preciseness and completeness of environmental data in the sustainability report is subject to inherent restrictions resulting from the way in which the data was collected and calculated and from assumptions made.

Independence and Quality Assurance of the Independent Practitioner’s Firm
We have complied with the German professional requirements on independence as well as other professional conduct requirements.

Our audit firm applies the national legal rules and professional pronouncements – in particular the Professional Code of Conduct for German Public Auditors and Sworn Auditors (BS WP/vBP) and of the Quality Management Standards issued by the Institute of Public Auditors in Germany (IDW), and accordingly maintains a comprehensive quality management system that includes documented policies and procedures with regard to compliance with professional ethical requirements, professional standards, as well as relevant statutory and other legal requirements.

Responsibilities of the Independent Practitioner
Our responsibility is to express a conclusion on the disclosures marked with the symbol ♣ in the sustainability report based on our work performed within our limited assurance engagement.

Our engagement does not cover the paragraphs not marked with the symbol ♣, or other disclosures in the sustainability report of the Company.

We conducted our work in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): “Assurance Engagements other than Audits or Reviews of Historical Financial Information”, issued by the IAASB. This Standard requires that we plan and perform the assurance engagement so that we can assess with limited assurance whether matters have come to our attention that cause us to believe that the disclosures marked with the symbol ♣ in the Company’s sustainability report for the period from 1 January to 31 December 2023 have not been prepared, in all material respects, in accordance with the Reporting Criteria. We do not, however, provide a separate conclusion on each marked disclosure.

The procedures performed in a limited assurance engagement are less in extent than for a reasonable assurance engagement; consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. The choice of assurance work is subject to the independent practitioner’s professional judgement.

Within the scope of our assurance engagement, which we mostly performed between October 2023 and March 2024, we performed, among other things, the following assurance procedures and other activities:

- Gaining an understanding of the structure of the Group’s sustainability organisation and stakeholder engagement,
- Inquiries of relevant personnel involved in the preparation process about the preparation process, about the internal control relating to this process and about disclosures in the sustainability report,
- Identification of likely risks of material misstatements in the sustainability report,
- Analytical evaluation of selected disclosures in the sustainability report,
- Examination of processes for collecting, controlling, analysing and aggregating selected data from different locations of the Company on a sample basis,
- Reconciliation of selected disclosures with the corresponding data in the consolidated financial statements and combined management report,
- Evaluation of the presentation of the sustainability report.
Practitioner’s Conclusion
Based on the work performed and the evidence obtained, nothing has come to our attention that causes us to believe that the disclosures marked with the symbol ★ in the Company’s sustainability report for the period from 1 January to 31 December 2023 have not been prepared, in all material respects, in accordance with the relevant Reporting Criteria.

Restriction of Use
We issue this report as stipulated in the engagement letter agreed with the Company (including the “General Engagement Terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften (German Public Auditors and Public Audit Firms)” dated 1 January 2017 promulgated by the Institut der Wirtschaftsprüfer (IDW)). We draw attention to the fact that the assurance engagement was conducted for the Company’s purposes and that the report is intended solely to inform the Company about the result of the assurance engagement. Consequently, it may not be suitable for any other purpose than the aforementioned. Accordingly, the report is not intended to be used by third parties for making (financial) decisions based on it.

Our responsibility is to the Company alone. We assume no responsibility with regard to any third parties. Our conclusion is not modified in this respect.

Düsseldorf/Germany, 22 March 2024

Deloitte GmbH
Wirtschaftsprüfungsgesellschaft

Dr Tim Hoffmann
Wirtschaftsprüfer
(German Public Auditor)

Dr Matthias Schmidt

Responsibilities of the Executive Directors
The executive directors of the Company are responsible for the preparation of the combined non-financial statement in accordance with Sections 289c to 289e German Commercial Code (HGB), Sections 315c in conjunction with 289c to 289e HGB and Article 8 of Regulation (EU) 2020/852 of the European Parliament and the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (hereafter referred to as “combined non-financial statement”). As requested, we have performed a reasonable assurance engagement on the indicators “energy consumption” and “CO₂ emissions (Scope 1 and 2)” presented in the combined non-financial statement (hereafter referred to as the “indicators”) and a limited assurance engagement on all other disclosures contained in the combined non-financial statement.

Our engagement does not cover the external sources of documentation and expert opinions stated in the combined non-financial statement nor the references to the United Nations Sustainable Development Goals (SDG) marked with the SDG symbol.

About this report

Independent assurance report non-financial statement
Limited and reasonable assurance report of the independent practitioner regarding the combined non-financial statement for the financial year from 1 January to 31 December 2023

To Deutsche Telekom AG, Bonn/Germany

Engagement
We have performed a limited and reasonable assurance engagement on the consolidated non-financial statement of Deutsche Telekom AG, Bonn/Germany, (hereafter referred to as “the Company”), which has been combined with the non-financial statement of the Company, and which is contained in the combined management report of the parent and the group, for the financial year from 1 January to 31 December 2023 (hereafter referred to as “combined non-financial statement”). As requested, we have performed a reasonable assurance engagement on the indicators “energy consumption” and “CO₂ emissions (Scope 1 and 2)” presented in the combined non-financial statement (hereafter referred to as the “indicators”) and a limited assurance engagement on all other disclosures contained in the combined non-financial statement.

Our engagement does not cover the external sources of documentation and expert opinions stated in the combined non-financial statement nor the references to the United Nations Sustainable Development Goals (SDG) marked with the SDG symbol.

Reporting against standards
Global Reporting Initiative (GRI)
- GRI 2–5 (General Disclosures)
Some of the wording and terminology contained in the EU Taxonomy Regulation and the delegated acts adopted thereunder are still subject to considerable interpretation uncertainty and have not yet been officially clarified. Therefore, the executive directors have laid down their own interpretation of the EU Taxonomy Regulation and of the delegated acts adopted thereunder in the section “Compliance with the EU taxonomy transparency requirements” of the combined non-financial statement. They are responsible for the reasonableness of this interpretation. As there is the immanent risk that indefinite legal concepts may allow for various interpretations, the legal conformity of the interpretation is prone to uncertainty.

The preciseness and completeness of environmental data of the combined non-financial statement, which include the indicators, is subject to inherent restrictions resulting from the way in which the data was collected and calculated and from the assumptions made.

**Independence and Quality Assurance of the Audit Firm**

We have fulfilled the requirements of German professional law on independence and further professional rules of conduct.

Our firm applies the national statutory rules and professional announcements – particularly of the “Professional Charter for German Public Auditors and German Sworn Auditors” (BS WP/vBP) and of the Quality Management Standards promulgated by the Institut der Wirtschaftsprüfer (IDW), and accordingly maintains a comprehensive quality management system that includes documented policies and procedures with regard to compliance with professional ethical requirements, professional standards as well as relevant statutory and other legal requirements.

**Responsibilities of the Independent Practitioner**

Our responsibility in each case is to express a conclusion on the indicators “energy consumption” and “CO₂ emissions (Scope 1 and 2)” presented in the combined non-financial statement based on our work performed within our reasonable assurance engagement as well as to express a conclusion on all other disclosures contained in the combined non-financial statement based on our work performed within our limited assurance engagement.

We conducted our work in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): Assurance Engagements Other than Audits or Reviews of Historical Financial Information, issued by the IAASB. This standard requires that we plan and perform the assurance engagement so that we

- obtain reasonable assurance to conclude whether the indicators presented in the combined non-financial statement for the period from 1 January to 31 December 2023 have been stated by the executive directors, in all material respects, in accordance with Sections 289c to 289e, Sections 315c in conjunction with 289c to 289e HGB; we do not, however, provide a separate conclusion for each indicator; and
- obtain limited assurance to conclude whether matters have come to our attention to cause us to believe that all other disclosures contained in the combined non-financial statement, with the exception of the external sources of documentation and expert opinions stated therein and the references to the United Nations Sustainable Development Goals (SDG) marked with the SDG symbol, have not been prepared, in all material respects, in accordance with Sections 289c to 289e HGB, Sections 315c in conjunction with 289c to 289e HGB, and the EU Taxonomy Regulation and the delegated acts adopted thereunder, as well as the interpretation by the executive directors disclosed in the section “Compliance with the EU taxonomy transparency requirements” of the combined non-financial statement.

The procedures performed in that part of our engagement to obtain limited assurance are less in extent than for a reasonable assurance engagement; consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. The choice of assurance work is subject to the practitioner’s professional judgement.

Within the scope of our assurance engagement, which we mostly performed between October 2023 and February 2024, we performed, among others, the following assurance procedures and other work:

- Gaining an understanding of the structure of the Group’s sustainability organisation and stakeholders engagement,
- Inquiries of relevant employees involved in the preparation of the combined non-financial statement about the preparation process, about the internal control relating to this process and about disclosures in the combined non-financial statement,
- Identification of potential risks of material misstatement in the combined non-financial statement,
- Analytical evaluation of selected disclosures in the combined non-financial statement,
- Comparison of selected disclosures with corresponding data in the consolidated and annual financial statements and the combined management report,
- Evaluation of the presentation of the combined non-financial statement,
- Evaluation of the process to identify taxonomy-eligible and taxonomy-aligned economic activities and the corresponding disclosures in the combined non-financial statement.
In addition to the above, we performed the following procedures and other work within the scope of that part of our assurance engagement performed to obtain reasonable assurance regarding the indicators presented in the combined non-financial statement of the Company:

- Evaluation of the design and implementation of the systems and processes for determining, processing and monitoring the disclosures relating to the indicators,
- Risk evaluation,
- Tests of details on a sample basis.

In determining the disclosures in accordance with Article 8 of the EU Taxonomy Regulation, the executive directors are required to interpret undefined legal terms. Due to the immanent risk that undefined legal terms may be interpreted differently, the legal conformity of their interpretation and, accordingly, our assurance engagement thereon are subject to uncertainties. This uncertainty, in particular, also affects the quantification of performance indicators in measuring and/or evaluating these performance indicators.

Practitioner’s Conclusions

We conclude that the indicators “energy consumption” and “CO₂ emissions (Scope 1 and 2)” presented in the combined non-financial statement for the period from 1 January to 31 December 2023 have been stated by the executive directors, in all material respects, in accordance with Sections 289c to 289e, Sections 315c in conjunction with 289c to 289e HGB.

Based on the work performed and the evidence obtained, nothing has come to our attention that causes us to believe that all other disclosures in the combined non-financial statement for the financial year from 1 January to 31 December 2023 have not been prepared, in all material respects, in accordance with the Sections 289c to 289e HGB, Sections 315c in conjunction with 289c to 289e HGB and the EU Taxonomy Regulation and the delegated acts adopted thereunder, as well as with the interpretation by the executive directors presented in section “Compliance with the EU taxonomy transparency requirements” of the combined non-financial statement.

We do not express a conclusion on the external sources of documentation or expert opinions stated in the combined non-financial statement nor on the references to the United Nations Sustainable Development Goals (SDG) marked with the SDG symbol.

Restriction of Use

We issue this report as stipulated in the engagement letter agreed with the Company (including the “General Engagement Terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften (German Public Auditors and Public Audit Firms)” as of 1 January 2017 promulgated by the Institut der Wirtschaftsprüfer (IDW)). We draw attention to the fact that the assurance engagement was conducted for the Company’s purposes and that the report is intended solely to inform the Company about the result of the assurance engagement. Consequently, it may not be suitable for any other purpose than the aforementioned. Accordingly, the report is not intended to be used by third parties for making (financial) decisions based on it.

We are liable solely to the Company. We assume no responsibility with regard to any third parties. Our conclusion was not modified in this respect.

Düsseldorf/Germany, February 21, 2024

Deloitte GmbH
Wirtschaftsprüfungsgesellschaft

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Wirtschaftsprüfer (German Public Auditor)

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Further information on Deutsche Telekom's corporate responsibility activities can be found at:
http://www.telekom.com/corporate-responsibility
and
http://report.telekom.com/annual-report-2023/

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