



M2M.

Ready for communications technology
that will change our everyday lives?

Life is for sharing.



Contents.

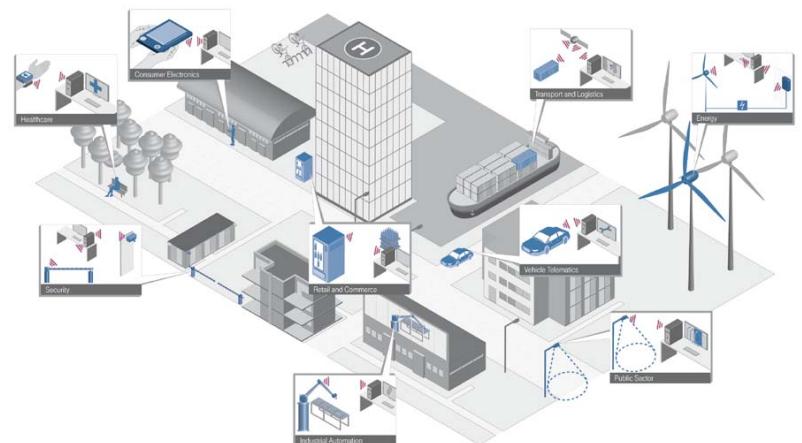
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M2M Revolutionises Our Lives. And With It, Your Business.

It is a technological revolution that will change our everyday lives: machine-to-machine communication, or "M2M" for short, stands for automatic data communication between a diverse range of technical devices, e.g. vehicles, containers, alarm systems or electric meters. By linking these "machines" via Deutsche Telekom's mobile or fixed networks, machines, individual modules and even complete systems can communicate with one another across the world – while also being monitored and serviced. The benefits of M2M will soon be tangible in all areas of life. Driving will become safer, packages will reach us more punctually, our electricity bills will be lower – and that is not all. Your company will also profit comprehensively from M2M: complex processes can be more easily managed, productivity increased, costs reduced, and resources used in optimal fashion.

Implementing an M2M solution is much faster and easier than you might expect. Decentralised data access is possible at any time and also fulfils the highest security standards. At the same time, depending upon your requirements, the costly set up and operation of your own local infrastructure can be avoided.

The following pages will give you an overview of what M2M can do for you. We will present our solutions for a wide range of applications. Become acquainted with partners who collaborate with us in the M2M field. At the same time, gain information about M2M technology from Deutsche Telekom, possible rate and business models, and much more.



Energy.

Using resources more intelligently: real-time monitoring and control of energy consumption.

Change is steadily underway in the energy sector. New laws are coming into effect, price models are changing, and consumers are taking advantage of innovative options to save energy. Intelligent power networks and meters are helping metering point operators, energy providers and the housing industry to meet new regulations. This is all based on intelligent consumption measuring in real time.

Since 2010, the new EU Energy Efficiency Guidelines have regulated annual electronic electricity meters and consumption information. Further guidelines will be issued. For energy providers, public services and metering point operators, this regulation carries considerable expense.

Thanks to M2M technology from Deutsche Telekom, conversion and operation has become economical for both energy providers and end customers.



Solutions

Cost-effective conversion and operation: smart metering.

- Infrastructure, maintenance and installation conducted by Deutsche Telekom.
- Data is read and transmitted via mobile networks to the data processing centre.
- Access at all times to customers' consumption data.
- Consumers can monitor their consumption independently.
- Invoices can be generated according to consumption levels.

Advantages

Reduced costs and improved customer satisfaction through automatic metering.

- Lower personnel costs through elimination of meter reading dates and manual entries.
- Optimised customer service.
- Minimised error rates lead to fewer customer complaints.
- Improved invoicing quality, leading to greater customer satisfaction.
- Better system load planning enables more economical procurement conditions.

Uniformly automated infrastructure: smart grid.

- End-device management through electricity supply with two-way technology.
- Permanent monitoring of energy supply and demand.
- Efficient burden sharing and better controllability of the decentralised power generation infrastructure.

One-stop service: smart home.

- Electricity, warm water and heating data is collected per building in a communication box.
- Data is then handled in Telekom's data processing centre; fully automatic invoice transmission.
- Encryption technologies ensure maximum security.
- Auxiliary services, including fire alarms, emergency calls, etc. can be easily integrated.

Long-term business optimisation through intelligent power networks.

- Prerequisite created for intelligent networks and intelligent living.
- Low investment costs using the Telekom infrastructure.
- Real-time reaction to critical incidents, such as unexpected demand peaks.

Create tenant loyalty through optimal service and housing quality.

- Energy savings lead to lower auxiliary costs, increasing the attractiveness of properties.
- Automated processes relieve the administrative burden.
- Area upgrade through attractive additional services for more security and comfort.
- More flexible price models and lower energy costs.

Vehicle Telematics.

Arrive better, faster, safer:
localisation and monitoring of vehicles.

The automotive market is undergoing radical change. Sales, particularly for passenger cars, are stagnating, while the demand for inexpensive vehicles with lower fuel consumption is growing. Consumers want more safety, improved navigation and infotainment convenience. For their part, companies are placing a greater value on efficiently managing their fleets.

M2M solutions from Deutsche Telekom allow applications which not only serve the driver, but also the vehicle and its use. The driver receives positional services and real-time traffic information related to the planned route; the vehicle can be remotely localised and monitored via the mobile network. In fleet management, for example, this leads to optimal resource planning while also minimising operational and administrative costs.



Solutions

Precise navigation, current traffic information.

- Traffic information (traffic jams, construction sites, etc.) available in real time.
- Positional services are possible, including information about the weather, parks, events and more.
- Maps are updated regularly.

Comprehensive fleet monitoring.

- Real-time information on the position and availability of the fleet.
- Remote diagnosis of vehicle status is possible at any time.
- Vehicle software is continuously updated.
- Digital logbooks are possible.

Optimal linkup of mobile workforce.

- Information on position and availability in real time.
- Use of mobile workers can be planned and controlled in real time.
- Remote diagnosis of vehicle condition (tyre pressure, brake force, etc.).

Advantages

Improved comfort and safety due to better navigation and information.

- Improved customer service through optimal use of field staff.
- Circumnavigating traffic jams and other obstacles saves time and money.
- Better use of road infrastructure.
- Increased convenience through positional services for route and destination.
- Travel times are easier to calculate thanks to optimal route planning and forecasts.
- CO₂ emissions are reduced.

Higher operating and planning efficiency through real-time monitoring.

- Lower operational and administrative costs.
- Lower vehicle depreciation through optimised maintenance planning.
- Improved control of fleet use lowers risk of abuse.
- Real-time reporting enables greater planning reliability.

More precise planning, coordination and administration of customer service requests.

- Better employee control and safety through positioning.
- Expanded communication channels to mobile employees.
- More precise SLA compliance improves service quality.

Health.

Effectively caring for what is most important:
health monitoring.

The health care industry is currently facing three central challenges: the population is growing older, chronic diseases are drastically increasing, and the budget situation in the public health sector is worsening. For these reasons, innovative and cost-effective methods are required. These include telemetric health monitoring, which is increasingly in demand.

M2M solutions from Deutsche Telekom increase efficiency in the health care sector while allowing greater safety for patients.



Solutions

Remotely monitoring patients.

- Remote monitoring allows the chronically ill a safe life at home.
- Sensors in portable or embedded devices monitor bodily functions.
- Transmitted data immediately informs physicians and the nursing staff about symptoms such as heart failure, diabetic coma or epileptic seizure.

Raising the level of safety for the elderly.

- Patient tracking systems assist in everyday tasks.
- The location is transmitted and the nursing staff is informed of any critical situation.
- GPS enables alarm signals to be sent out if a specific environment is left.

Advantages

Countering cost pressure, providing safety.

- Thanks to remote monitoring, improved, safer and more efficient patient care is provided.
- Clinical interventions can be avoided or reduced.
- Hospital overhead costs are reduced due to an inexpensive technology option.
- Greater freedom of movement for the patient through wireless systems.

Swift action thanks to mobile networks.

- Improved safety for the elderly and their families due to quick detection of accidents and automatic alarms.
- More independence, as dementia patients can live at home for longer.
- Missing or injured people can also be located without GPS connection.

Retail.

Selling made easier: cashless payments, monitoring processes and increased sales.

Changing consumer behaviour is shaping retail development. Customer interaction is becoming more personal. Improved customer service is now in demand – online as well. Most notably, Web 2.0 is providing attractive options in this context: new feedback mechanisms and sales channels are being created.

Deutsche Telekom supports retail outlets in this process – with intelligent M2M solutions in the area of payment services, vending machines and advertising spaces.



Solutions

Vending machine management.

- M2M technology informs when supply levels of individual items are low.
- Updated data on fast-moving items (according to the time of day and placement) are permanently available.
- Temperature and system status can be transmitted; remote maintenance is possible.
- Theft is prevented.

Digital advertising spaces.

- Use as news medium, information terminal, welcoming system or on-board system.
- Advertising campaigns for special products and target groups can be adapted in real time.
- Target group and location-specific information is gained.

Advantages

Optimised business processes and cost structures.

- Downtime and sales losses are reduced through real-time information on system status.
- Cost reduction thanks to fewer controls at automatic machines and status-oriented servicing.
- Optimised location selection and delivery based on current sales figures.
- New price models, e.g. depending on the time of day, can be introduced.
- As goods are constantly available, profitability and customer satisfaction increase.

Higher sales through optimal time and resource management.

- Increase turnover by boosting target group awareness and directly influencing purchase decisions at the point of sale.
- Save time and resources thanks to automated operation.
- Customer interaction and experience in real time.

Industrial Automation.

Successful production: tracking, monitoring and remote diagnosis.

In industrial production, the topic of efficiency is a central issue. In agriculture, aspects of quality and transparency are gaining increasing importance. The efficient use of natural resources is also becoming more and more important. Due to increasing international trade, secure and optimised monitoring and maintenance of export goods abroad are taking on a central role. The simple integration of machines into a company's existing IT architecture is now in demand more than ever before.

M2M solutions from Deutsche Telekom help industrial users and farmers to significantly increase the efficiency and output of their production processes.



Solutions

Controlling and monitoring manufacturing processes.

- The machine status is continuously reported, allowing the user to control the frequency and intensity of use.
- Remote maintenance solutions monitor the function, availability and performance of industrial applications.
- The system informs the service team itself if problems occur and suggests necessary measures, as required.

Advantages

Increase efficiency, raise productivity.

- Remote maintenance and monitoring enable more efficient processes for service and maintenance providers.
- Early detection reduces downtime of machines and production lines or completely eliminates the possibility of breakdown.
- Greater transparency for companies in the areas of machine usage and quantity of consumables.
- Feedback processes for machine optimisation or employee training are established.
- Mobile infrastructure can be used independently to the existing one.

Environmental information on fields in real time.

- Agricultural automation encompasses solutions for irrigation, soaking, precipitation measurement, monitoring of soil moisture and environmental data, as well as measuring ammonia and methane levels and livestock localisation.
- Sensors monitor fields and soil; prompt evaluation allows precise control of plants and animals.

New possibilities in data evaluation.

- Systematic data acquisition leads to increased yields in crop cultivation.
- Crops are healthier and productivity increases, as the farmer can better intervene in the growth process.
- Service providers profit from new possibilities in data evaluation for farmers.

Public Sector.

Ensuring convincing work: monitoring public resources.

Rising expenses for infrastructure, education and administration, as well as the changing age structure of society, are forcing the public sector to deliver savings. Nevertheless, citizens expect high-quality services – transparency is a particular concern here. For this reason, cities and municipalities are searching for ways to reduce costs and obtain additional sources of income.

M2M solutions from Deutsche Telekom support the public sector by providing a basis for the efficient use of public resources, while also creating added value for citizens.



Solutions

Controlling parking availability in real time.

- Telemetric connections allow parking fees to be adapted in real time, e.g. during peak times.
- Parking availability is published in real time.
- Parking meters are connected via modem to service centres; the existing infrastructure is utilised.

Street lighting on demand.

- Connection to a service centre enables the selective activation of individual street lights.
- Street lights can be controlled as needed.
- Further sensors allow environmental information to be recorded.
- Connection to mobile networks is independent from the existing infrastructure.

Advantages

Optimal utilisation of public parking capacities.

- Increased sales by aligning parking fees to current needs. Availability information also ensures more customers.
- Drivers save time, as they are informed about available parking spots.
- Shorter search times protect the environment and resources.

Reducing costs, offering transparent services.

- Electricity costs and consumption can be reduced by up to 35% thanks to controllable street lighting.
- Error identification becomes easier; reduced administrative costs.
- Citizens also profit from greater security, as street lights illuminate e.g. car parks as needed.
- Network operators can switch off street lighting as required during high load times.

Security.

Eliminating risks: remote surveillance of properties.

Security is one of the basic needs of people. In order to minimise risks, precautions have to be taken in both private and commercial sectors. Some of these are required by law for public or commercial buildings, or represent a prerequisite for various insurance schemes. Cost-efficiency, simplicity and automation are central components which must be taken into consideration.

M2M solutions from Deutsche Telekom enable applications that use sensors, e.g. to monitor fires and break-ins, as well as a range of other undesirable events. All the alarms are transmitted economically via mobile networks to a central control station, which can then react in real time. The customer can access a security application via his or her mobile phone.



Solutions

Automating the fire alarm.

- Connecting the fire alarm system to the mobile network enables alarms to be transmitted automatically.
- The connected service centre forwards the alarm to the fire brigade.

Advantages

Lower risk through direct assistance.

- Early fire alarms help to save lives and protect property.
- Insurance companies profit from reduced damage.
- Security providers can offer new services.

Remote surveillance of the alarm system.

- Mobile networks allow the system to be economically connected to a surveillance centre.
- Sophisticated sensors react to foot and window contact or motion.
- The alarm system can be installed either independently or as a supplement to the existing infrastructure.

Cost advantages through mobile network-assisted technology.

- A prompt reaction to break-ins is guaranteed.
- Insurance premiums are reduced; in some situations, insurance becomes possible for the first time.
- Lower installation costs ensure higher demand.

Telecontrolling the video surveillance.

- Systems supported by mobile networks can be installed quickly and cost-effectively.
- A security service centre analyses the surveillance images before storing them.
- Thanks to image recognition and other sensors, appropriate measures can be automatically triggered.
- The system can also be controlled by mobile phone.

Reduced costs and simple installation.

- Quick implementation, as installation is independent to the existing infrastructure.
- Reduced costs make video surveillance attractive for new customer segments.
- Digital, standardised technology opens the market for providers of software and Web cameras.

Transport and Logistics.

Everything under control:
monitoring cargo transportation worldwide.

Millions of trucks and containers are transported annually. The demand for global solutions that guarantee a smooth workflow, on-time deliveries and cargo monitoring is continually growing. But security is not the only important criterion here. Environmental parameters, such as temperature, humidity or acceleration, are relevant and must often be permanently monitored due to specific regulations or laws.

M2M solutions from Deutsche Telekom guarantee a homogeneous standard of knowledge for all parties involved. Mobile networks keep customers, carriers and terminal operators informed at all times on the current status of a shipment, allowing them to make relevant decisions or react to unplanned events in real time.



Solutions

Continuous monitoring.

- Sensors inside the containers report on the freight's environmental conditions (temperature, humidity, etc.).
- All relevant data is monitored in real time, assisted by mobile networks.

Secure control chain.

- Environmental parameters are reliably monitored from the production plant, during transport and temporary storage and all the way to the destination point.
- Unaffected by the means of transport employed, regardless of whether rail, truck or container.

Permanent tracking.

- Proof of delivery for shipments is documented via a portable scanning device.
- For real-time monitoring, delivery vehicles and scanning devices are connected to the service centre via mobile networks.
- By using further sensors, package scanning can be fully automated.

Advantages

More efficiency through dynamic information.

- Stocks can be reduced; transport and routing errors can be more quickly identified.
- Tracking reduces the risk of loss, theft or damage to the container.
- Insurance premiums become more economical.

Higher quality through permanent control.

- A high level of delivery quality is ensured.
- Reliable product quality of sensitive and perishable goods.
- Alarm sensors prevent theft and manipulation.

Better customer service through 24/7 tracking.

- Customers can follow the status of their packages around the clock.
- Tracking enables more punctual deliveries and helps to identify reasons for delay.
- Mobile network-assisted solutions allow a uniform infrastructure across all carriers; the logistics process becomes easier and more economical.

Consumer Electronics.

Share the latest with others:
interaction and localisation.

The Internet is becoming increasingly integrated into our everyday lives. Of central importance to the consumer is quick access to data anywhere, as well as easy operation of consumer electronics. Overall, the digitalisation of the media world is leading to the decline of print media. At the same time, sharing self-produced digital content in social networks is becoming more and more popular. As user behaviour changes, income models are also affected. Throughout the end-customer market, the purchase price is increasingly being replaced by a continuous service charge.

With M2M solutions from Deutsche Telekom, many attractive options are being opened up to providers of entertainment electronics and Internet services. By taking advantage of these options, they can launch new services, products and portals.



Solutions

Increasing utility values through real-time interaction.

- M2M increases the interaction possibilities of devices through mobile communications, e.g. using social networks.
- MP3 players have access to a global music archive; digital cameras load images or electronic picture frames to photo-sharing communities in real time; electronic readers use online libraries.

Advantages

Interaction and localisation in real time.

- New consumer interaction possibilities with family, friends and communities.
- Manufacturers can strengthen customer relationships and stand out from the competition by providing interaction.
- New sales channels are created for content; services can be better adapted to customer needs thanks to feedback.

Enabling sporting devices to interact.

- Mobile network connection allows transmission of training units to Web portals.
- Users can compare training plans to actual performance.
- Real-time information can be provided for sporting competitions.
- Athletes can be located in the case of an accident.

New services and greater customer loyalty.

- More user-friendly for consumers; access to new services, including virtual competitions.
- Device manufacturers profit from closer customer loyalty and the provision of new services.
- Sports clubs can optimise training.
- Fitness studios can stand out by offering services such as personalised workout monitoring.

Reference Customers.

Success speaks for itself.



BMW ConnectedDrive.

Connecting the driver with his or her vehicle and living environment in an intelligent way: this is what BMW ConnectedDrive stands for. With services such as emergency calls, breakdown service, telephone information service, traffic information, Internet access and much more. All these services are based on a Telekom M2M SIM-Chip that is permanently installed in the BMW. The full range of voice and data communication runs on Deutsche Telekom networks.

BLAUPUNKT



Fleet management with iTM.

Intelligent fleet management (iTm) was developed by Deutsche Telekom in collaboration with Blaupunkt and CargoBull Telematics. As a pan-European telematics solution, iTM enables the transport monitoring (position, refrigeration temperature, charge state, etc.) of trucks via GPS and GSM/GPRS. This allows transport planning to be optimised. Deutsche Telekom developed the central telematics unit as an ASP platform, supplies the SIM cards and is also responsible for system integration and operation.



Telematics solution with a lifetime fee for forwarding agencies.

This new application, developed for MAN AG within the scope of existing MAN TeleMatics services, allows the localisation of truck positions on a map. The vehicles send status reports and receive messages via GPRS. The system also registers the average speed, engine load, oil level and more, before sending the data to the newly designed maintenance data portal – which reduces the time spent in an automotive workshop. With its one-time price, the new rate model "lifetime fee" provides absolute cost control for the entire service term. Deutsche Telekom has been operating MAN TeleMatics services since 2002. It developed the lifetime fee specifically for these projects. It also designed the maintenance portal, which can be viewed by both forwarding agencies and MAN contract partners, and supplies the corresponding SIM cards.

German-wide toll collection with Toll Collect.



Toll Collect is a consortium consisting of Deutsche Telekom, Daimler and Cofiroute. On behalf of the German Federal Ministry of Transport, Toll Collect set up the truck toll collection system on German motorways – and has operated it ever since. A unit built into the truck containing a GPS and GSM module collects and transmits the data; accounting is carried out via the toll terminals and the Internet. Toll bridges and mobile checkpoints protect against abuse. Deutsche Telekom provides the system, operates the data processing centre and is responsible for calculating the trucks' toll invoices. Further services include SIM card supply, the qualified SIM card administration process, technical consulting and incident support.



Partners.

M2M requires the best team.

Over the course of longstanding activities in the M2M field, we have developed a dense network of flexible, innovative and competent partners, who almost completely cover the value chain for an M2M solution. Our partners have outstanding expertise and a profound understanding of the industry. They are closely interlinked with Telekom through technical and procedural interfaces, such as the IT Partner Programme of Telekom Deutschland GmbH.

We have already developed and successfully implemented numerous M2M solutions for a wide range of companies. These encompass developments from all segments that decisively improve processes, relieve the daily workloads of people and have long-term impacts.

Our M2M solution partners.



Strategic partnerships.



M2M Solution Factory.

Successful together.

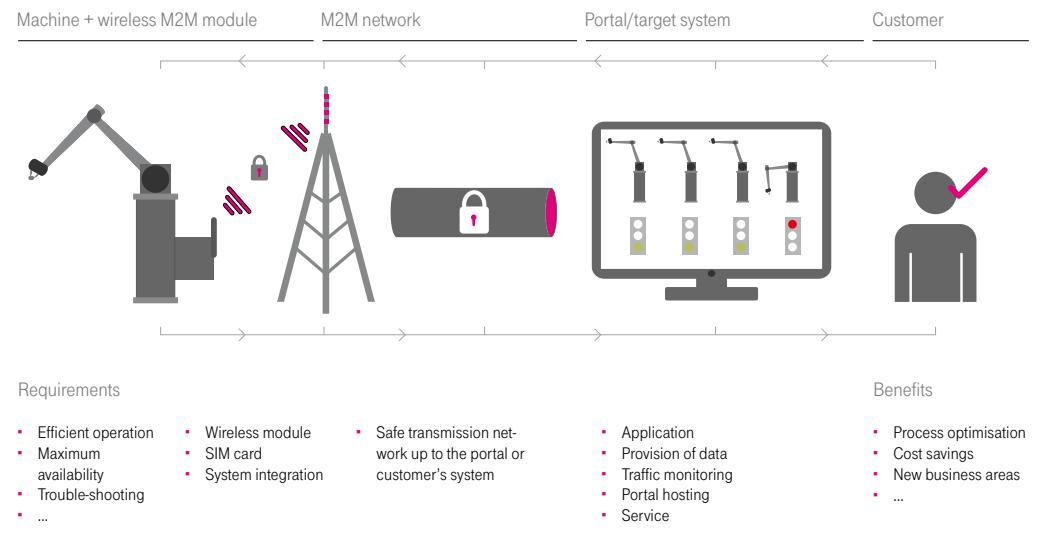
Advantages

- You profit from 'turnkey' solutions. We cover the entire value-added chain with competent partners.
- You significantly improve your market position. We jointly define your unique selling positions and subsequently implement them.
- You will be able to generate revenues in no time at all. Time-to-market for your product is minimised.
- You obtain optimum solutions profiting from the industry leaders' know-how.
- Your risk is minimised. We provide consultation regarding all business concerns.
- You can fully focus on your core business. The M2M Solution Factory will take care of everything else.

Many different components (connectivity, M2M module, managed services, etc.) must perfectly interact to ensure that an M2M solution functions properly. In order to fulfil these complex requirements, we established the M2M Solution Factory, a partner network consisting of a range of industry leaders and experts, each covering a section of the M2M value chain.

With the M2M Solution Factory, we can react quickly and flexibly to your individual requirements. Are you starting out with a new idea? Do you already have an offline solution that you would like to expand with M2M functionalities? Or would you simply like to refine a solution in this way? Together with our partners, we always offer you the ideal solution. Our successful customer projects speak for themselves. The experience gained in these projects flows into further work for our customers. And we are continually expanding our partner network to improve its quality even more. New partners are thus constantly bringing in new and valuable expertise.

Components of a complete M2M solution.



M2M Sales Factory.

Operating professionally on the market.

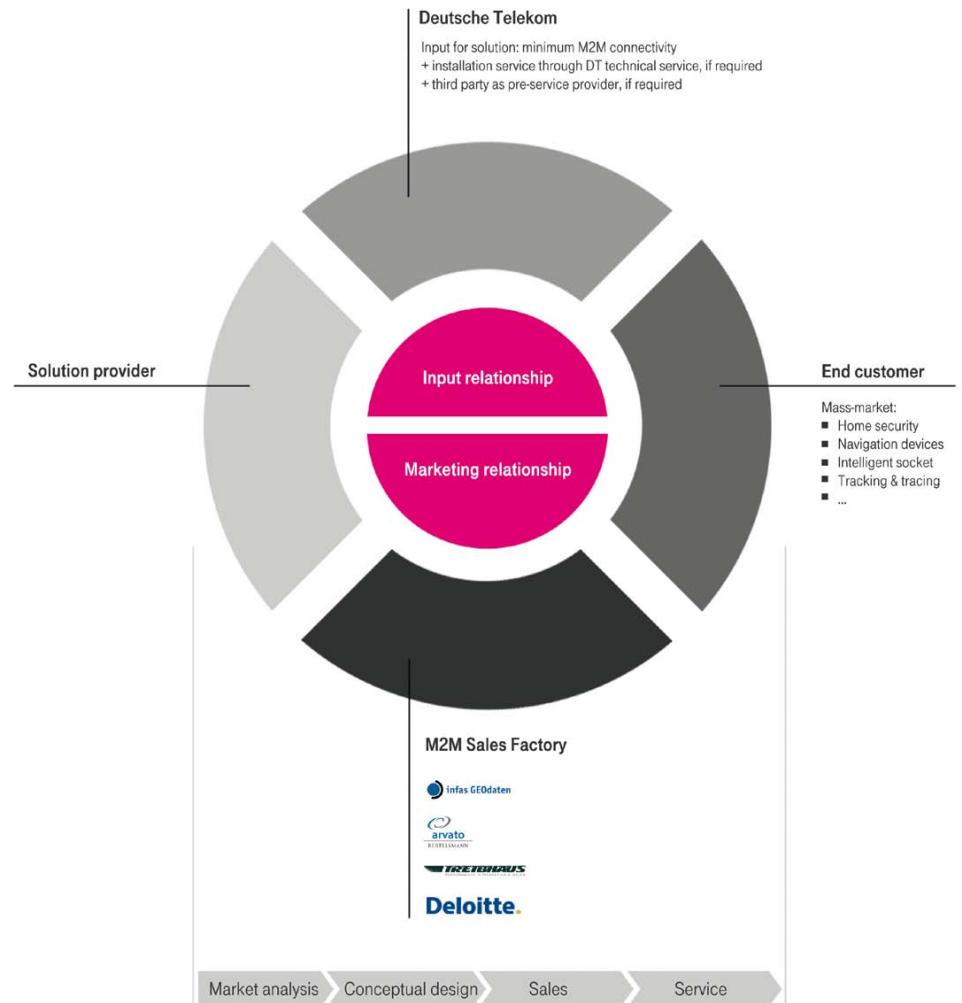
Advantages

- Establish exciting M2M solutions on the market.
- Profit from short product launch schedules.
- Access professional sales, marketing, PR and market research.
- Gain new contacts and fresh expertise on partner enterprises.

Deutsche Telekom established the M2M Sales Factory specifically for partner companies in the M2M sector. After all, a product launch can only take place with a nationwide sales organisation, professional marketing and an accompanying communication strategy.

The M2M Sales Factory is a flexible network of experienced partners that cover the complete launch process, from market analysis through conceptual design to sales. This diminishes the market entry barriers for mass-market M2M products while also significantly reducing the time-to-market. Risk is also minimised through a profit-related payment system that is largely in place for partners.

The model is suitable for attractive M2M mass-market solutions in the B2C and B2B segments. Without professional sales support, these could not be successfully launched on the market – or only launched very slowly, and in most cases at a very high cost.



M2M SIM-Chip.

Small detail with a big future.

As many M2M solutions place great demands on the hardware used, we offer not only standard SIM cards but also a special M2M SIM-Chip. This chip was specifically developed for industrial requirements – and unlike the standard SIM card, it has very special characteristics. It can be soldered into place, is non-corroding, can also be used under strong temperature fluctuations and offers a longer life cycle. In this way, downtimes and the associated outlays of time and effort are all but eliminated. If desired, we can also supply the M2M SIM-Chips with an extended warranty.

SIM card

- Designed and perfectly suited for use in mobile telephones.
- Used since the start of GSM.
- The classic "plug-in SIM" is only suitable to a limited extent in the growing M2M market, depending on the specific solution requirements.

M2M SIM-Chip

- Minimal risk of contact loss between SIM and module due to soldering, which also provides additional protection against theft.
- Special design makes it non-corroding, allowing it to also be used without any problems in difficult environmental conditions.
- Automated installation is possible in a pick & place process.
- The production process is largely automotive-compliant.
- Available upon customer request: extended warranty, self-administration option, individually adapted file system, and much more.
- Customised packaging can be arranged.





M2M Rates.

Suited to the business model.

Those who would like to operate an M2M solution cost-effectively need a rate that is optimally aligned to the application's utilisation profile while also taking into account the specific volume of data transmitted. Which service is required? Are low or high volumes of data transmitted? Does the transmission take place regularly or variably? By upload or download? At home or abroad?

That is why at Deutsche Telekom you will find an extremely variable rate portfolio for M2M – and even rates structured specifically for your application, allowing the mobile network components of your solution to be customised.

Perhaps you would like to bill your customers for mobile network services yourself? Thanks to our "wholesale" business model, this is easily possible. The delivery of detailed usage data also places your company in the convenient position of being able to organise your customer invoicing regardless of the selected rate.

Would you like to offer your customers an M2M solution that includes connectivity? Or separate the mobile network contract completely from the M2M solution? In each case, we can offer you a business model that suits your individual requirements. Simply contact us.



M2M Platform.

Coordination made easy.

In order to coordinate your M2M solutions with a minimum amount of effort, your company will receive a central management unit along with the rate and SIM card offer. This is known as the M2M Platform.

M2M Platform makes the respective workstation part of the control centre for the individual M2M solution. This is where all the communication data converges. From this point, data can be managed and evaluated in centralised fashion.

The platform offers your customers a wealth of functions. They can not only manage data transmission or receive diagnoses and reports in real time here. Quick and easy administration as well as auto-provisioning of SIM cards can also be carried out.

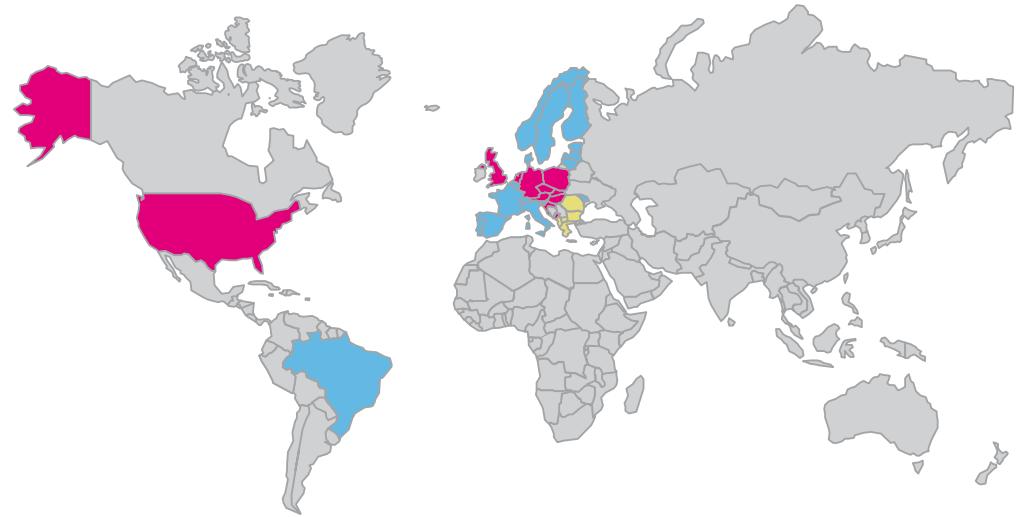
Mobile Network.

Top quality worldwide.

With its mobile networks and roaming partners, Deutsche Telekom covers nearly the entire globe. It is the only German mobile communications provider that also has its own nationwide network in the USA.

As a transatlantic mobile network operator, Deutsche Telekom is your ideal partner when it comes to offering international solutions. Even in those countries in which Deutsche Telekom does not operate its own network, it ensures optimal network coverage through a range of roaming partnerships. And in 13 of 16 countries, it is either the No. 1 or No. 2 network provider.

Thanks to its reliable network availability and top transmission rates, Deutsche Telekom's networks are always the first choice for the full range of M2M solutions – even in the most remote places. This is not only true for network availability with GPRS and EDGE, but also for UMTS, the third mobile technology generation.



Legend

- Deutsche Telekom
- OTE/Deutsche Telekom
- FreeMove Alliance
- International roaming



Sustainability.

Innovative environmental protection.

With modern real-time navigation, computer-aided operation control systems, traffic jam warning systems and traffic routing on motorways, as well as dynamic parking management systems, traffic congestion can already be reduced to a minimum. What is more, traffic management systems will soon ensure open roads in metropolitan areas, significantly reducing CO₂ emissions. These systems collect traffic data in real time before converting it for drivers, control centres and emergency services.

For heavy traffic, information and communication technology concepts optimise fleet management, ensuring better use of capacities and fewer unloaded journeys. This protects the environment and also alleviates traffic infrastructures.

Transparent consumption information is necessary to ensure a more conscious approach to using energy. With the M2M solutions Smart Metering and Smart Home, private households can read and manage their current power consumption levels independently. And with our partner solutions such as Energinet, companies can monitor, control and significantly reduce their power consumption.



Dialogue.

From one person to another.

Contact Telekom Deutschland

Are you interested in an M2M offer, the M2M Sales Factory, or an M2M partnership? Would you like to obtain detailed information on the topic of M2M? Then we are looking forward to hearing from you.

The M2M Sales division of Telekom Deutschland would be happy to provide you with help and advice. If you already have a personal contact or account representative at Telekom, then, naturally, they can assist you further and will support you with all your M2M needs.

Send us an e-mail at: M2M@telekom.de. Your enquiry will be handled promptly.

Contact the Telekom M2M Competence Centre

The Telekom M2M Competence Centre focuses on cross-border, trans-atlantic M2M solutions. The ability to consolidate global expertise for the entire company represents a major advantage here.

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Life is for sharing.

