Get the most from your investment

IoT Connectivity

Connectivity – mapped use cases

2G	3G	4G	NB-IoT	LTE-M	5G
<40 Kbps	<7 Mbps	<100 Mbps	CaT NB1 <26 Kbps	CaT M1 <1 Mbps	<10 Gbps
Wearables Sports White goods	Asset tracking Fleet management Retail solutions	Connected health care Smartphones Video streaming	Simple monitoring Utilities & waste mgmt Facility mgmt	Smart buildings Utility metering City infrastructure	Autonomous vehicles Security solutions Machine communication

There might not be one single technology that is suited to all potential IoT use cases – instead, the available technologies coexist to complement one another

Tele2 IoT already supports all critical technologies that are crucial for your connectivity to work efficiently - 2G/3G/4G/5G/LTE-M/NB-IoT and roaming rollout is continuously ongoing.

From a roaming perspective, while our SIM cards enable you to use IoT technologies, availability is set from the roaming partner network. Traditional cellular technologies (2G-5G) are examples of wide area solutions that offer excellent outdoor coverage, even in urban areas, whereas LPWA (low power wide area) technologies – LTE-M and NB-IoT – are more suited to remote areas and indoor coverage in combination with long battery life.

Today's connectivity technologies

Technical development within connectivity has continuously given us new generations of mobile networks, with new iterations more or less every 10 years. Each generation has brought higher data speed, increased data transmission, and better throughput.

2G was in many ways the starting point for IoT with the introduction of data transfer and SMS functionality. Even today, speeds of up to 40 Kbps give payment terminals, vending machines, and utility meters the functionalities they need.

3G combined aspects of the 2G network with new technologies and protocols that provided noticeably quicker data speed/data transfer rate, up to 7 Mbps. Asset tracking and fleet management are examples of business areas that have been developed using this generation.

Benefits

- Global coverage & roaming in 190+ countries & 450+ available networks
- Modular pricing based on 7 geographical price zones
- Simplicity in the setup
- Reliability in the networks
- Optimal for your needs – local/global, standard/premium coverage
- Keeping you updated of sunset status (2G, 3G)
- Reduced security risk exposure

4G opened new doors with increased speed up to 100 Mbps. High speed, high capacity, low latency, and low cost per bit are all crucial for video streaming in, for example, surveillance and connected healthcare, which 5G also enables.

5G improves the capacity of the radio network by a factor of nearly 100 when compared to 4G, providing speeds of up to 10 Gbps. In combination with low latency, 5G opens up new possibilities for things like security solutions, connected care, and remote control of vehicles.

What does the future hold?

LTE-M and NB-IoT technologies are the first 5G components to be rolled out with pure IoT requirements in mind. The advantages are found in low power usage and long battery life. LTE-M use cases include smart buildings and mobile assets, while NB-IoT needs even less speed and offers devices with low-complexity in, for example, metering and waste management. LTE-M and NB-IoT were both designed to be plug-in replacements for 2G/3G-based communication solutions, but they also offer more, such as deep sleep stand-by and non-IP communication for further enhanced power and data management.

The future does not only offer new technologies, it also includes shutting down old ones. The usage of 2G connectivity has been well established in the IoT area, which has sometimes meant challenges as the market began to shift in recent years. To free up frequencies for newer technologies, operators are closing down (sunsetting) 2G and 3G networks. But because 2G and 3G are still the most used technologies for deployed IoT devices, the move from legacy technologies can have a significant impact on many IoT solutions. Please feel free to raise any questions you have about this with us, and we will guide you through your options.

Ready to start? Get in touch: info@tele2iot.com

Coverage

Tele2 IoT covers the majority of countries in the world with one to multiple networks. We also ensure that we have the best possible agreements in terms of quality, technologies, and cost in our roaming footprint from a contractual perspective.

The availability of roaming networks depends on the current status of roaming agreements between Tele2 IoT and our roaming partners, which can vary over time. The networks and their supported services are defined in the Tele2 IoT Roaming Reach List, which is amended quarterly and available upon request.

Tele2 IoT uses a Swedish IMSI range belonging to Tele2 Sweden. For specific premium cases we can offer access to non-Tele2 operators in Sweden where the IMSI range belongs to Tele2 Estonia.

We have excellent solutions for every customer, no matter where they operate in the world. Whether you need national coverage or global coverage with roaming as a base, we can present a broad offer to you.

Cost vs Coverage

Different customers have different needs. Price might be your main concern, or maybe premium coverage is crucial. It's not a "one size fits all" question and we are happy to guide you in the decision making.

No matter what is important to you – low cost or extended coverage – we can offer you different solution set ups, all supporting Data, Voice, and SMS, as well as all available technologies