



EUROPEAN CELLULAR TECHNOLOGY:

The Key Trends and Factors to Consider for Long-Term IoT Success

Without connectivity the IoT would not be possible as it is powered by a broad range of cellular network technologies that facilitate the transfer of data among devices and systems. To achieve long-term IoT success, companies must remain up-to-date on the latest innovations and trends in cellular technology to optimally power their IoT solutions:

IoT devices that leverage emerging Low Power Wide Area Network (LPWA) LTE networks can boast a battery life of 10 or more years, making it a perfect fit for geographically dispersed or embedded applications.

10+
YEARS

YEAR
2020

By 2022, it is expected that the number of LPWA connections will exceed 2G, 3G, and traditional 4G LTE to become the leading IoT network technology due to the many benefits LPWA provides for IoT.

There are 2 dominant LPWA LTE network technologies that were specifically designed to support the growth and scalability of IoT: Category M1 (Cat-M1) and Narrowband IoT (NB-IoT)

2
TECHNOLOGIES

21
COUNTRIES

As of September 2018, 11 cellular operators have commercially launched NB-IoT networks in 18 EU countries and 3 cellular operators have commercially launched Cat-M1 networks in 3 EU countries (totally 21 countries with LPWA LTE availability), with many more in planning, development, and piloting phases.

With the first commercial launch expected to take place in 2019, 5G network technologies will aim to provide 20x the peak data rate, 10x lower latency, and 3x greater spectral efficiency than 4G LTE.

20x
PEAK DATA
RATE

50%
OF SIM
DEPLOYMENTS

eSIM and eUICC capabilities are predicted to become the new standard for use in IoT innovations, as it is predicted that 50% of all SIM card deployments will use an eSIM format by 2024.

The best network technology choice will be dependent on the unique requirements of your IoT solution, however there are a number of key factors organisations should consider when selecting a connectivity partner in the highly competitive European marketplace:



Security

The majority of IoT devices collect some form of personal information making it critical to keep this data confidential.

Businesses should be asking providers what private network solutions they can offer as well as timeframes for implementation.



Coverage Requirements

Geographical coverage will vary greatly among carriers, and many IoT applications require a multi-carrier approach to get the coverage they need.

Businesses should consider partnering with a provider that can offer global coverage to ensure optimal scalability.



Connectivity Management

With potential IoT deployment sizes ranging from hundreds to millions of connected devices, it is critical for **businesses to engage with a connectivity provider that empowers customers with a robust connectivity management platform.**



Services Beyond Connectivity

Aside from connectivity, there are many additional components that must be integrated for IoT success.

Businesses should evaluate what complementary products or services their network provider can offer to simplify IoT solution management.

For more information on European cellular technologies and the key factors to consider during partner selection, reach out to KORE or download our eBook:

"Guide to European Cellular Technology and Trends"