IoT forecast: connections, revenue and technology trends 2018–2027

Michele Mackenzie and William Hare

About this report

This report analyses cellular and LPWA IoT adoption and summarises the forecast data that is published in detail in DataHub. The report includes the analysis of:

- technology trends including the number of 2G, 3G/4G, 5G, NB-IoT, LTE-M and 'other LPWA' connections worldwide
- key industry sectors and the share of connections and revenue that they contribute
- the revenue generated worldwide from hardware, applications and connectivity services.

WHO SHOULD READ THIS REPORT

This report addresses the requirements of executives and analysts that are assessing the demand for IoT supported by cellular and LPWA networks. These include:

- senior executives of IoT business units
- senior executives responsible for R&D and network innovation
- market analysts responsible for M2M market sizing.

Our forecasts are refined throughout the year. This report presents the results at the time of publication and will continue to give useful background information about key drivers. However, we recommend that you always use the Analysys Mason DataHub to view the latest data associated with this report.

GEOGRAPHICAL COVERAGE

- Central and Eastern Europe (CEE)
- Developed Asia–Pacific (DVAP)
- Emerging Asia–Pacific (EMAP)
- Latin America (LATAM)
- Middle East and North Africa (MENA)
- North America (NA)
- Sub-Saharan Africa (SSA)
- Western Europe (WE)

- Full coverage of the forecasts for 80+ countries is included in the DataHub.

KEY METRICS

- Revenue for the following value chain elements:
  - applications
  - connectivity services
  - IoT hardware.
- IoT connections worldwide and by region, by technology type:
  - 2G
  - 3G/4G
  - 5G
  - NB-IoT
  - LTE-M
  - 'other LPWA'.
- Connections and revenue, by sector:
  - automotive
  - finance
  - health
  - industries
  - smart cities
  - retail
  - smart buildings
  - utilities
  - agriculture
  - tracking.

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12. Worldwide: revenue from LPWA connectivity will be low and subject to intense pricing pressure as new connectivity suppliers enter the market
13. Worldwide: the largest share of revenue will come from the automotive sector, despite large numbers of LPWA connections from elsewhere
14. Worldwide: China will continue to be the largest single IoT market in 2027
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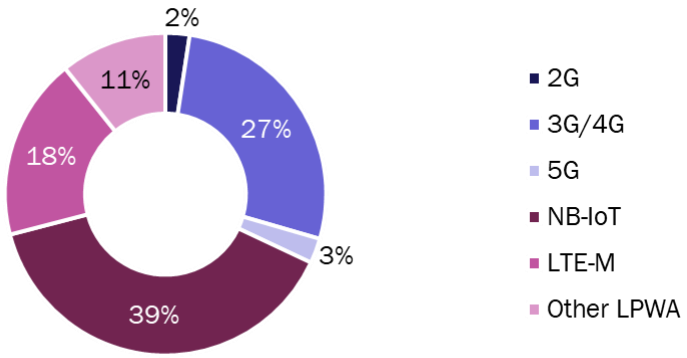
All network types

Worldwide: the number of IoT connections will grow strongly over the forecast period, driven by an increase in LPWA connectivity

The total number of IoT connections[1] will reach 5.4 billion in 2027; cellular IoT connectivity will grow steadily, but LPWA is likely to accelerate the overall growth.

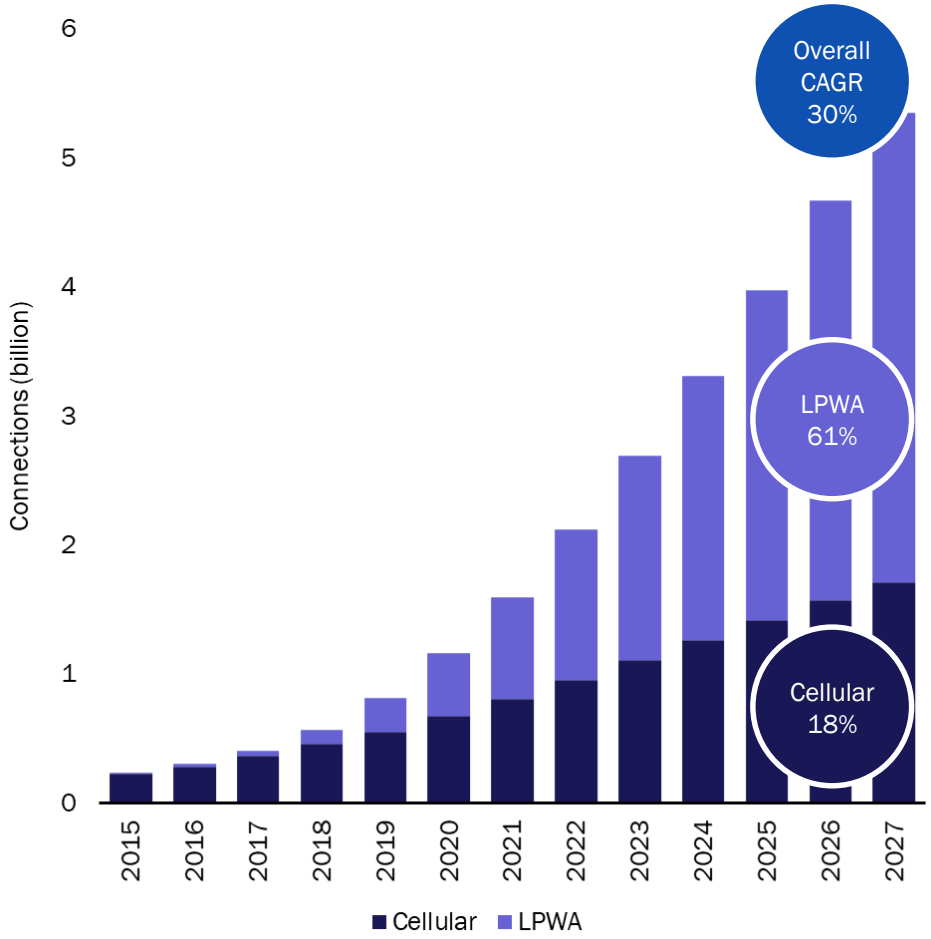
The number of cellular IoT connections will continue to grow steadily and will reach 1.7 billion in 2027. The automotive sector will continue to be the largest adopter of this connectivity. 2G will form only 2% of the total number of IoT connections by 2027, as operators close their networks. In contrast, 5G will be in ascendancy and will power 3% of all IoT connections, primarily in the automotive sector. The number of LPWA connections will grow to 3.6 billion. NB-IoT will be the fastest growing LPWA technology and will form 39% of all IoT connections in 2027. Most developed countries (led by China) are rapidly deploying NB-IoT networks.

Figure 1: IoT connections by network type, worldwide, 2027



Source: Analysys Mason

Figure 2: Total IoT connections by network type, 2015–2027



Source: Analysys Mason

[1] IoT comprises cellular and LPWA technologies for the purposes of this forecast analysis. We include 2G, 3G/4G and 5G in our cellular analysis. We recognise that NB-IoT and LTE-M are cellular technologies, but we include them in our LPWA category to analyse the impact of these emerging technologies on the traditional M2M market.

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About the authors and Analysys Mason

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About the authors

Michele Mackenzie (Principal Analyst) is an analyst for Analysys Mason's *IoT and M2M Services* research programme, with responsibility for M2M and LPWA forecasts. She has 17 years of experience as an analyst. She produces reports and forecasts on M2M and IoT in industry sectors such as transport, healthcare and smart cities, and analyses the impact of IoT network technologies such as LPWA networks. Prior to joining Analysys Mason in February 2014, Michele was a freelance analyst with a focus on M2M and IoT technology and trends. She has written reports for Machina Research and produced research for other clients in areas such as mobile broadband and digital media.

William Hare (Principal Analyst) is the leader of Analysys Mason's *Telecoms Market Matrix* research programme, which tracks and compares telecoms metrics and market shares for all the major fixed and mobile operators in Europe. He also leads the *European Country Reports* programme, which provides insightful reports on 30 European telecoms markets. He is a key contributor to our *European Core Forecasts* and *Global Telecoms Data* programmes, specialising in business and market modelling and data analysis. William joined Analysys Mason's Research practice in 2010 after 3 years as a consultant in our Consulting practice, working directly with clients in Europe, Asia and Africa. He read mathematics at the University of Cambridge.

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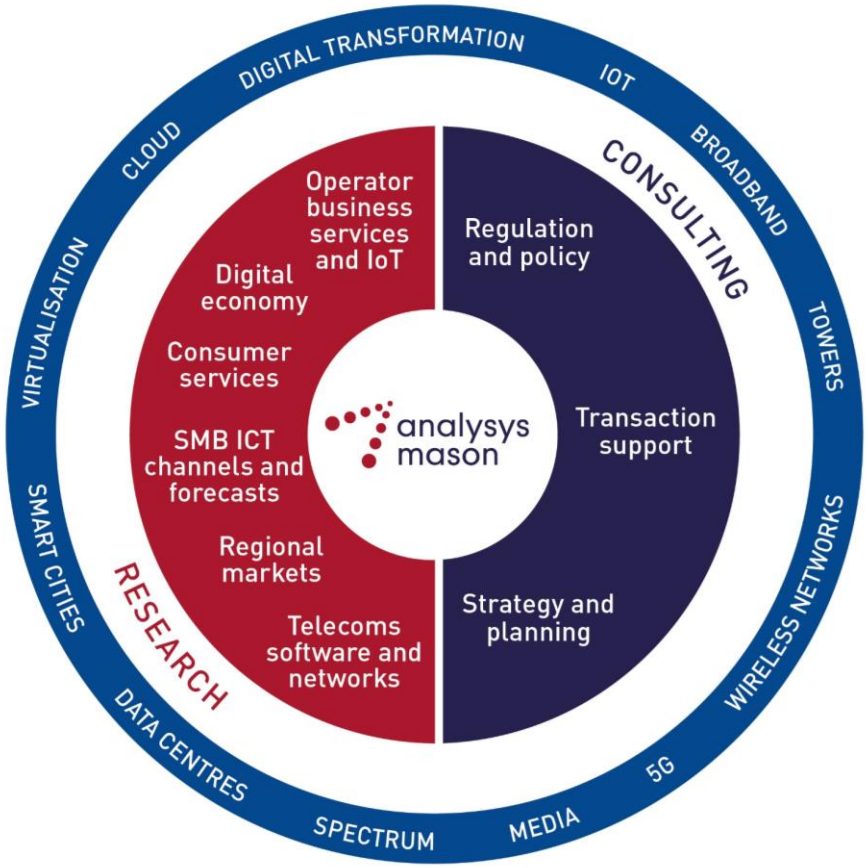
Analysys Mason's consulting services and research portfolio



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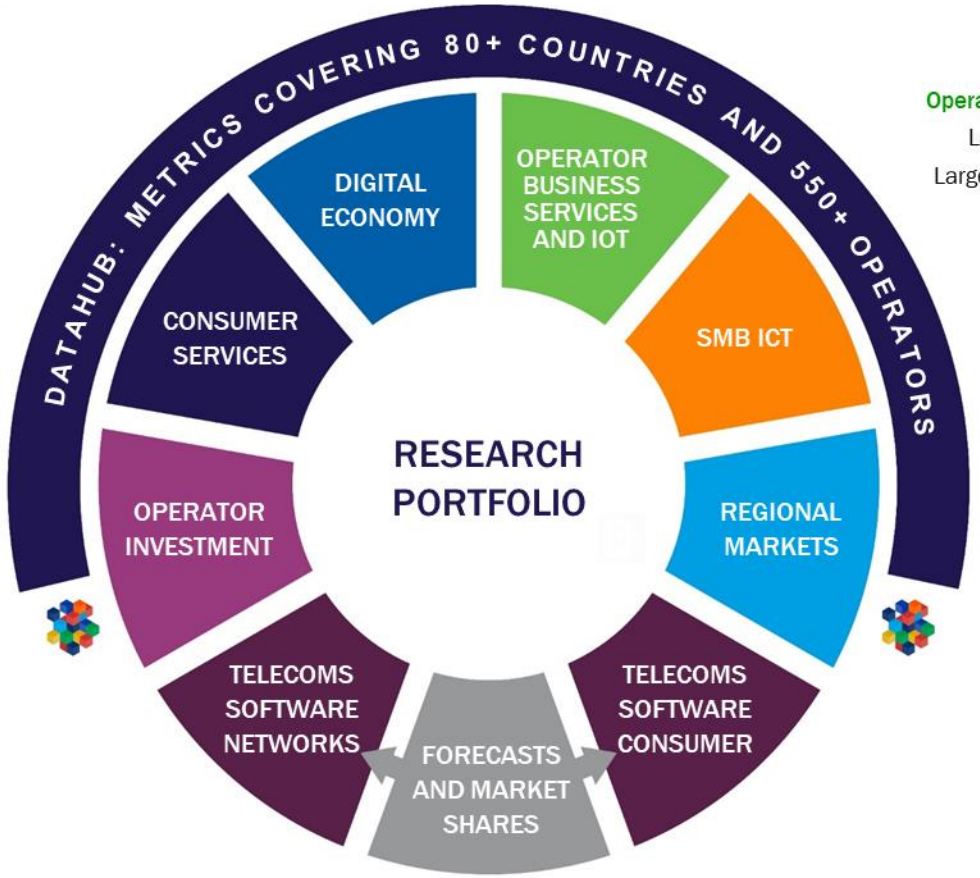

Digital economy programmes
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Future Comms

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