Ericsson.com/5G

Blazing the 5G trail

From 2011 to 2020 – and beyond

Ericsson and its key industry partners have reached several important milestones on the road to global 5G standardization.

2011

Early research lays the foundation for 5G

5G Our vision for 5G was developed, bringing benefits to people, business and society

We managed the METIS project, collaborating with the top four mobile infrastructure vendors to address the challenges of 5G mobile and wireless communications

2012–2015

We built a 5G radio testbed

We proved several tech concepts, including:

- 5G-LTE dual connectivity
- 5G multipoint connectivity with distributed multiple-input and multiple-output (MIMO)

2015–2016

Landmark 5G patent application filed – the largest in terms of inventors in the cellular industry in the world
(source: Derwent Innovation)

2016

5G advances

We won several early 5G awards

- Outstanding Contribution to Standards Development – Ericsson 5G Program
  Glotel, Global Telecoms Awards
- Biggest Contribution to 5G Development
  LTE Asia Awards
- Biggest Contribution to 5G Standards
  LTE & 5G World Awards

Use cases delivered:

Test peak rates of 15Gbps per user, and a latency below 3 milliseconds (with Telia)

20Gbps with 2 connected mobile devices outdoors (with DOCOMO)

25Gbps downlink throughput (with NTT DOCOMO and Korea Telecom)

2017

The most advanced outdoor 5G field trial reached a record-breaking 3.6Gbps at 170kph (with SK Telecom and BMW)

Ericsson performed the world's first federated network slicing live demo, providing seamless network service end-to-end between Korea and Germany (with SK Telecom and Deutsche Telekom)

Multiple 5G New Radio (NR) trials (with Qualcomm, SK Telecom, AT&T, NTT DOCOMO, Vodafone and Telstra Australia)

5G First public 5G live network use cases deployed in Europe (with Telia and Intel)

5G network tested at the historic Indianapolis Motor Speedway (with Verizon)

First deals including 5G technology, with Vodafone UK, Swisscom and Verizon

Global 3GPP standard for 5G NR non-standalone (NSA) approved

Technology milestone reached: Ericsson and Qualcomm, in collaboration with AT&T, NTT DOCOMO, Orange, SK Telecom, Sprint, Telstra, T-Mobile US, Verizon, and Vodafone, showcased 5G NR non-standalone (NSA) multi-vendor interoperability

5G deals with T-Mobile US and Sprint

2018

39 5G Memorandums of Understanding (MoU) signed to date with operators including Vodafone, Telefónica and China Mobile, to help define industry standards, drive innovation and launch equipment demonstrations

Global 3GPP standard for 5G NR standalone (SA) approved

TOMORROW

We will see 5G in action

Technology milestone reached: Ericsson and Intel, in collaboration with China Mobile showcased standalone 5G NR multi-vendor interoperability

There will be even more use cases and applications deployed, such as remote-controlled robots and fixed wireless access, ready for 5G subscription uptake in 2020

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