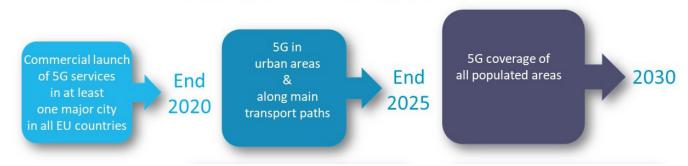# Europe's 5G strategy in the Digital Decade

The COVID-19 pandemic has increased public awareness regarding the need for advanced connectivity. Without such connectivity, many administrations, businesses and educational establishments would not have been able to continue to operate. And, the pandemic highlighted the enormous potential of connectivity for the future of our economy.

The Commission set out a European approach to a digitalised economy and society, taking account of the strategic importance of the digital transformation. The 2030 Digital Compass Communication ['The European way for the Digital Decade' (https://digital-strategy.ec.europa.eu/en/policies/digital-compass)](https://digital-strategy.ec.europa.eu/en/policies/digital-compass) outlined this approach.

5G will play a key role in reaching one of the cardinal points targeted by the digital compass: secure and performant-sustainable digital infrastructure. The Commission proposes to raise the level of ambition at EU level regarding the deployment of 5G infrastructures. It aims to ensure that all European households are covered by a Gigabit network by 2030, with all populated areas covered by 5G. The strategy also aims to deploy a minimum of 10,000 climate neutral, highly secure, edge nodes within the same period.

In this context, the Commission is reviewing Europe's 5G strategy as set out in the 5G Action Plan of 2016.

5G networks are currently deployed in the leading regions around the world. While most EU countries have launched commercial 5G services, the spectrum assignment and network deployment is not as fast as in leading countries such as South Korea and the US.

However, Europe has taken the lead in developing 5G industrial ecosystems with ambitious trial investments offering vast new market opportunities. Building 5G lead markets will be of key importance in this context. And, because industry R&I investments tend to relocate where markets are more advanced.

One area of high potential for such a lead market is 5G-based Connected and Automated Mobility (CAM). The Connecting Europe Facility Digital programme should support the rollout of 5G Corridors for CAM. This will unlock this ecosystem in Europe following a Strategic Deployment Agenda (SDA) developed by a broad range of stakeholders.

On the supply side, an important success factor is to create and seize such opportunities so Europe can be a standard setter in 6G and the related technology fields.

Firstly, European actors can help to ensure that emerging network technology standards are defined following European values, such as data protection or human-centric approaches.

Secondly, they need to shape key technology standards, in particular in the field of radio communications, as they determine the position of European players in the field of intellectual property rights.

Finally, European players need to shape the next generation network architecture in order for European suppliers to remain competitive, and to ensure the delivery of advanced service features. For example, through the effective use of software technologies and open interfaces, while meeting energy-efficiency requirements. The proposed [European Partnership on Smart Networks and Services (SNS) (https://digital-strategy.ec.europa.eu/en/policies/smart-networks-and-services-joint-undertaking)](https://digital-strategy.ec.europa.eu/en/policies/smart-networks-and-services-joint-undertaking) will be a key enabler in achieving these objectives.

Whereas the strategic objectives of the 5G Action Plan remain relevant in particular in view of the needed investment

towards 2025, the new 2030 target raises Europe's ambitions for a wide availability of 5G services, for the development of 5G based lead markets and for a good starting position for 6G service expected for the end of this decade.