Creating the Conditions for 5G Leadership

Seven Policy Actions for a New Telecoms Framework in Europe

May 2016

5G

As the European Union moves towards the Digital Single Market and the European Commission reviews the Telecoms Framework, policymakers have an opportunity to position Europe at the forefront of the global digital economy through leadership in 5G.

In **2015**, online services captured nearly half of the revenues of the internet ecosystem

47%
€1.4 trillion

Among these services, a few powerful players are expanding their influence by acquiring players in other segments

Connectivity revenue grew from **€199** billion in **2008** to **€508** billion in **2015**, but connectivity as a share of total internet value is declining

This trend poses a challenge for investment in mobile networks, which support the growth of the internet ecosystem

Europe can achieve leadership in **5G** through mobile industry investment and supportive public policy

Source: GSMA 2016, "The Internet Value Chain."

Connectivity is at the heart of the growing internet ecosystem, supported by investments in mobile broadband. Citizens are experiencing all that the internet has to offer - community, convenience, entertainment, empowerment - through smartphones and other mobile devices. Mobile is now the main way for people to access the internet around the world.

Europe is making good progress on 4G network deployment. Approximately 90 per cent of the population is currently covered by a 4G signal and, by 2020, nearly 60 per cent of all mobile connections will be 4G. Despite the heavy investments in infrastructure that have made these advances possible, Europe lags behind global pacemakers such as the United States and South Korea in mobile broadband deployment and consumer adoption. Some observers have noted that the region is about two years behind the United States in 4G network investment and adoption[1].
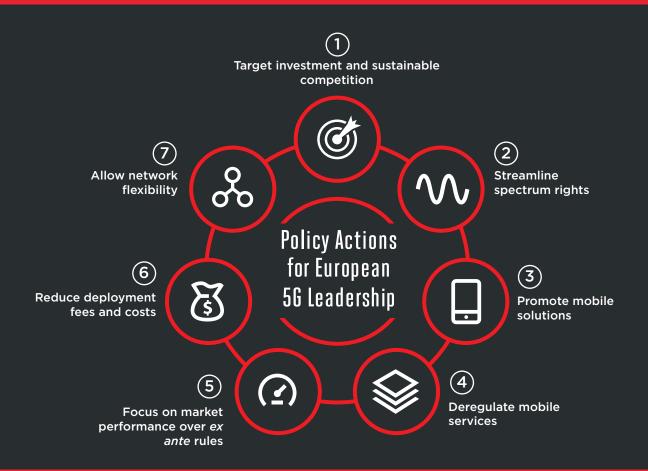
There is an opportunity now for Europe to embrace the next generation of mobile, in partnership with the mobile industry, as 5G technology is defined, developed and deployed. Leadership in 5G will help achieve the potential of the Digital Single Market by establishing fast, secure and ubiquitous communication networks across the region to drive growth, jobs and competitiveness in the global digital economy. 5G will also be a critical enabler of the next digital leap forward, the Internet of Things, which could reach 6 billion connections across the European Union by 2020.

To realise this vision of European mobile leadership, significant investment will be needed to drive continued innovation and future 5G deployment. However the changing market landscape is a factor. While online services are growing rapidly and expanding into additional segments across the internet ecosystem, mobile operators are in a different position. The growing demand for mobile data is not translating into the higher revenues mobile operators would need to support further network investment. This creates a disconnect between flat revenue growth and the ability to meet growing internet ecosystem demands.

Regulatory reform and a productive partnership between the mobile industry and the EU institutions can deliver European 5G leadership, resulting in better public services and a thriving, competitive European Digital Single Market. It is time to ensure Europe's citizens and businesses reap the maximum benefits of the digital and mobile revolution.

1. IDATE/Ericsson 2015. http://www.ericsson.com/res/thecompany/docs/publications/business-review/2015/ebr-issue4-2015-operator-investments.pdf

SEVEN POLICY ACTIONS TO SUPPORT 5G LEADERSHIP IN EUROPE

Policy Actions for European 5G Leadership

1. Target investment and sustainable competition
2. Streamline spectrum rights
3. Promote mobile solutions
4. Deregulate mobile services
5. Focus on market performance over *ex ante* rules
6. Reduce deployment fees and costs
7. Allow network flexibility

Outcomes of Targeted Policy Action

1. Higher investment without sacrificing price efficiency
2. Higher investment due to adequate spectrum supply and simplified, long-term licences
3. More mobile-enabled public services that support policy goals
4. A more dynamic mobile sector, released from legacy regulations
5. A clear view of the enablers and policy levers to realise global leadership in 5G
6. Network improvement and expansion due to lower cost of sites, spectrum and taxes
7. Responsiveness to new network demands (e.g. Internet of Things, connected apps)

SEVEN POLICY ACTIONS TO SUPPORT 5G LEADERSHIP IN EUROPE

1. Focus the telecoms framework on network investment and sustainable competition

Greater investment is needed to deliver advanced connectivity for the long-term benefit of citizens. However, this can only happen if regulators allow sustainable levels of competition in communications markets.

2. Streamline and simplify spectrum rights

Spectrum licences should be simpler and renewal terms clearer, with a shift to perpetual licences in the long term. As more spectrum is released, the need for spectrum caps should fall, while action is needed on fees, reserve prices and obligations.

3. Promote mobile solutions

European policies should prioritise mobile solutions in the delivery of public services. Any required subsidies should be met from general taxation, although some policy goals can be achieved commercially.

4. Deregulate mobile services

Policymakers should boldly seize the opportunity to deregulate, acknowledging the new competition in telecoms services markets from internet players. Sector-specific regulation should be withdrawn where competition exists. Spectrum licence conditions, such as wholesale access obligations, which are unrelated to the efficient allocation of spectrum, should also be removed.

5. Focus on market performance over *ex ante* rules

BEREC, the body of EU telecoms regulators, should strengthen the factors that underlie high-performing markets. Regulators should expand spectrum supply to reduce the need for spectrum caps and other interventions.

6. Reduce network deployment fees and costs

The investment levels needed to drive European leadership in 5G can only be achieved if the costs of mobile network deployment are significantly reduced. The European Commission should further reduce the costs of mobile network deployment, including site costs, spectrum fees and other input taxes.

7. Give networks the flexibility to meet new demands

The Internet of Things, connected apps and explosive data growth will have far more complex network requirements. Regulations that set simple, uniform targets for network coverage or that ignore the vastly different performance standards required by different applications will inhibit innovation, raise costs and harm consumers.