



European Economic and Social Committee

TEN/611
European Gigabit Society

OPINION

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Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Connectivity for a Competitive Digital Single Market - Towards a European Gigabit Society

[COM(2016) 587 final]

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Consultation	European Commission, 24/11/2016
Legal basis	Article 304 of the Treaty on the Functioning of the European Union
Section responsible	Transport, Energy, Infrastructure and the Information Society
Adopted in section	11/01/2017
Adopted at plenary	26/01/2017
Plenary session No	522
Outcome of vote (for/against/abstentions)	163/2/1

1. **Conclusions and recommendations**

- 1.1 The EESC would like to emphasise the fact that digital technology is playing an increasingly important role in our economy and social life. Significant investment in digital infrastructure must be a high priority to remain competitive and allow for new businesses and new jobs, particularly in light of investments by Europe's main competitors: the USA and Asia.
- 1.2 The EESC welcomes the communication and the related EU initiatives regarding the European Electronic Communications Code, the Body of European Regulators for Electronic Communications (BEREC), the 5G action plan and the support scheme for public authorities wanting to offer free wifi access (WiFi4EU).
- 1.3 The fragmentation of network providers in Europe means that EU guidelines are required to achieve coherent, pan-European modernisation in support of the Digital Single Market.
- 1.4 The EESC notes that the Strategic Objectives for 2025 are ambitious but realistic, although they are largely dependent on national funding (private and public) with EU funding triggering and coordinating projects. In this context, the EESC welcomes the establishment of and support for the EU network of Broadband Competence Offices at regional/national level which will help local administrations to apply and use the Structural Funds.
- 1.5 The EESC also welcomes the introduction of a voucher system, intended to reduce administrative costs and burdens, particularly for small communities and SMEs.
- 1.6 The EESC is pleased to note that the European Structural and Investment Funds (ESIF) are providing considerable funding for high-speed broadband networks. The European Fund for Strategic Investment (EFSI) also plays an important role. The EESC recommends that this role be strengthened by supporting large-scale European projects for high-speed broadband networks, including along the Trans-European Transport Core Network, as well as by defining the appropriate financial and regulatory framework.
- 1.7 The full economic and social benefits of this transformation to Gigabit connectivity will only be delivered if Europe can provide high-capacity networks in urban and rural areas and across all of society. There is a need for public investments since, on its own, the market will not cover all remote areas and guarantee minimum digital access for the vulnerable members of our society.
- 1.8 The EESC recognises the positive momentum in the Member States with regard to the broadband targets set by the Digital Agenda for Europe in 2010, which serve as a reference for policy and national or regional broadband plans.
- 1.9 The EESC is pleased to note the free "WiFi4EU" initiative for all Europeans in public places, public administrations, libraries and hospitals, as well as outdoor spaces. This initiative should offer everyone the option of a free internet connection which has the same digital identity throughout the EU. In particular, the EESC recommends following the eIDAS regulation¹ on

¹ Regulation (EU) No 910/2014 on eIDAS (electronic IDentification Authentication and Signature).

digital identity, which offers guarantees for data protection and public security against improper use of the service (i.e. terrorism).

2. Introduction

- 2.1 Very high-capacity internet connectivity is a key infrastructure for the transport of data, similar to the way that roads, railways, harbours and airports are essential for the transport of goods and people. Since the transport of data is increasingly important in our economy and social life, it is crucial for our society that we invest in this infrastructure in order to remain competitive and allow for new businesses and new jobs.
- 2.2 Internet connectivity is important for the Digital Single Market. The Commission's Digital Single Market Strategy of May 2015 created the right environment and conditions for the deployment of advanced digital networks. The EESC has addressed the importance of these issues in several opinions^{2,3}.
- 2.3 The expectations that the quality of service of internet connectivity will improve by 2025 are well documented (for instance in the European Commission's public consultation).
- 2.4 The basic broadband available today to almost every European is no longer good enough. Over the next 10 years, very high-capacity broadband networks (Gigabit) will be needed for a large variety of applications, such as the Internet of Things (mostly wireless), cloud computing, high-performance computing and big data, next generation TV or virtual and augmented reality.
- 2.5 The quality of data transfer is characterised not just by speed but also by latency and reliability. Much lower latency than is currently possible and high reliability will open the door to new applications requiring fast feedback control, such as connected and automated driving, remote surgery, tactile internet or precision navigation.
- 2.6 The COM(2016) 587 communication accompanied by the staff working document SWD (2016) 300 sets out a vision for a European Gigabit society with three strategic objectives for 2025:
- Gigabit connectivity driving socio-economic development,
 - 5G (wireless) coverage for all urban areas and all major terrestrial transport paths,
 - Access for all European households to internet connectivity offering at least 100 Mbps.

All three objectives are key for Europe's growth and jobs, competitiveness and cohesion.

3. The need for EU coordination

- 3.1 Europe has to cope with the ongoing modernisation of the digital infrastructure of its main competitors in the USA and Asia. Europe has the advantage of lower consumer prices for

² [JO C 487, 28.12.2016, p. 92.](#)

³ TEN/601 *Online Platforms* - Not yet published in OJ.

internet services due to higher competition within its internal market, along with the disadvantage of much more fragmented network providers. There is therefore a clear need for EU guidelines to achieve coherent, pan-European modernisation in support of the Digital Single Market.

3.2 In this context, the EESC welcomes the communication and the related EU initiatives, which the EESC has addressed in specific opinions^{4,5,6,7}:

- A new rule book for providers of internet access and communication services - the European Electronic Communications Code,
- Body of European Regulators for Electronic Communications (BEREC),
- 5G action plan.

A support scheme for public authorities wanting to offer free wifi access.

3.3 The EESC recognises that to date, broadband targets set by the Digital Agenda for Europe in 2010 have been accepted in Member States and serve as a reference for policy in Member States. Many Member States have in fact aligned their national or regional broadband plans with the objectives.

3.4 The EESC is also pleased that the objectives were taken up as reference points under the rules and guidelines of both the European Structural and Investment Funds and the Connecting Europe Facility (CEF Broadband), as well as under the Broadband State Aid guidelines.

3.5 The Strategic Objectives for 2025, as presented in the communication, set a timetable for developing the European high-capacity broadband infrastructure. They are derived by assuming an accelerated investment rate to ambitious but still realistic values:

- Gigabit connectivity for all main socio-economic drivers,
- All urban areas and all major terrestrial transport paths to have uninterrupted 5G coverage,
- 5G connectivity to be available by 2020 as a fully-fledged commercial service in at least one major city in each Member State,
- All European households, rural or urban, will have access to internet connectivity offering a downlink of at least 100 Mbps, upgradable to Gigabit speed,
- Member States should efficiently combine their public support via grants and financial instruments to achieve the long-term objectives,
- Launch of a Broadband Fund by the end of the year, building on the CEF and EFSI,
- Weigh up the need for adequate budgetary resources for efficient broadband financing in underserved areas under CEF financial programming beyond 2020,

4 TEN/612 *European Electronic Communications Code (Recast)* - Not yet published in OJ.

5 TEN/613 *Body of European Regulators of Electronic Communications (BEREC)* - Not yet published in OJ.

6 TEN/614 *Internet connectivity in local communities* - Not yet published in OJ.

7 TEN/615 *5G for Europe* - Not yet published in OJ.

- Dedicated ESI funds support, possibly with an indicative share, for the digital transformation,
- Set up a public wifi voucher scheme for public authorities to offer free wifi connections in town centres,
- Call on Member States to review progress on their National Broadband Plans and update them by the end of 2017,
- Set up a participatory broadband platform by the end of 2016, ensuring a high level of engagement and cooperation between relevant public and private entities for broadband investment and progress in implementing national broadband plans,
- Establish and support the EU network of Broadband Competence Offices at regional/national level.

By 1 July 2018, assess the impact on the cost of EU-funded broadband projects and issue guidelines on promoting best practice.

3.6 The full economic and social benefits of this digital transformation will only be delivered if Europe can ensure widespread deployment and take-up of very high-capacity networks in rural as well as urban areas and across all of society. However, the market will not solve all problems. Specifically, it will not:

- cover remote areas, and/or
- bridge large gaps between implementation of advanced technology and first applications and customers for new services,
- guarantee minimum digital access for the vulnerable members of our society.

Therefore, public support schemes have to be implemented to achieve the goals for the entire EU and for all Europeans.

4. **New initiatives for Europe**

4.1 The EESC welcomes the establishment of and support for the EU network of Broadband Competence Offices at regional/national level. This will be key for rural areas and small communities. It will help local administrations to apply and use the Structural Funds, by providing best practice and advising local administrations. This will be a big step forward for developing rural areas as well.

4.2 EU strategies and instruments are technology neutral. However, it is well known that eventually only optical fibre can provide optimal performance. The old monopolies (such as German Telekom) should not hinder the installation of optical fibre while continuing to invest in their copper cable infrastructure.

4.3 Only some countries, such as Malta, Lithuania, Belgium and the Netherlands, already have nearly comprehensive coverage by Next Generation Access (NGA) networks. Elsewhere, NGA coverage is less advanced. Some Member States with currently less developed infrastructure

have even been able to leapfrog technology steps. The installation of optical fibre gives them an advantage.

- 4.4 "EDUROAM" is the biggest and most successful roaming system for free wifi worldwide, developed in the EU for academics. It gives millions of students and other academics free access to wifi. The EESC is pleased to note that this success story could serve as a role model for the free "WIFI4EU" initiative for all Europeans in public places, public administrations, libraries and hospitals, as well as freely accessible outdoor spaces. This initiative should offer everyone the option of a free internet connection which has the same digital identity throughout the EU. In particular, the EESC recommends following the eIDAS regulation on digital identity, which offers guarantees for data protection and public security against improper use of the service (i.e. terrorism).
- 4.5 Designed to support SMEs, vouchers will be used by local authorities to pay for installations (cables, antennas, etc.). Companies installing the material will send the vouchers to the EU in order to be paid. Apart from reducing administrative costs and burdens, the system will allow easy monitoring and good quality objectives.
- 4.6 The EESC welcomes the goal of upload-download symmetry for all socio-economic drivers as this will be essential for many future applications.
- 4.7 The EESC asks for a scheme to ensure that vulnerable end-users have access to reasonable and adequate connectivity allowing them to participate socially and economically in modern society. WiFi4EU could be one element of this.
- 4.8 Regulatory incentives for network providers to support the COM(2016) 587 objectives should not conflict with other important objectives, such as network neutrality.
- 4.9 In the long term, people in rural areas should also be able to benefit from healthy competition and freedom to choose their internet access provider. Regulatory measures should therefore also provide incentives for such competition.
- 4.10 5G technology will not only enable new mobile applications, it will also serve as a bridge technology bringing high-speed connectivity to rural areas more rapidly. Nevertheless, only a fibre-based infrastructure will provide the stability and reliable bandwidth required by many new applications.

5. **Financing**

- 5.1 The EESC is pleased to note a sharp increase in funding from the European Structural and Investment Funds (ESIF) for high-speed broadband networks from EUR 2.7 billion in 2007-2013 to around EUR 6 billion for 2014-2020. Most of this investment is expected to take the form of grants. With the leverage effects on national and/or regional co-funding and private co-funding, it is expected that EUR 9-10 billion will be invested in broadband during the 2014-2020 programming period. This will be key for commercial investments to provide high-speed connectivity for the rural population.

- 5.2 The European Fund for Strategic Investment (EFSI) also plays an important role. This role could be strengthened by supporting large-scale European projects for high speed broadband networks, including along the Trans-European Transport Network, Industrial Gigabytes, and Industry 4.0, as well as by having DG CONNECT represented on the EFSI Steering Committee. The Commission should also be proactive in defining the appropriate financial and regulatory framework.
- 5.3 The Connecting Europe Facility (CEF) in the digital area has a budget of EUR 150 million to support deployment of state-of-the-art broadband infrastructure, based on the provision of financial instruments via the European Investment Bank (EIB). The broadband component of the CEF is expected to mobilise at least EUR 1 billion of additional investment through a dedicated fund for broadband network infrastructure, which could be further supplemented by the EFSI.

Brussels, 26 January 2017

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The President of the European Economic and Social Committee
