



## ERT TRILOGY ON THE DIGITAL ECONOMY

### Paper #2 “Connectivity-Infrastructure”

Digitisation is essential for the growth of the European economy. In the meeting with Chancellor Merkel, President Hollande and Commission’s President Juncker and on 1 June 2015, the ERT had listed some of the key enablers for the digitisation of European industries:

- The European Industrial Internet will be based on Cloud computing, Big data, Internet of Things, Secure Networks, Platforms for communications/sharing/commerce. ERT members across industry will invest and transform their business faster if provided with ultra high speed quality networks, ultra low latency ubiquitous connections (tactile Internet), price competitive services, a EU wide digital data ownership protection system (physical and legal).
- The European Consumer Internet will continue to grow and became one of the four large world markets if provided with Competitive services, developed also by European entrepreneurs/companies, at affordable prices for universal access, with adequate Privacy protections

The European leadership recognizes the crucial importance of digitisation and has asked to debate the ERT’s recommendations in the critical policy areas of Europe’s digital economy.

ERT paper #1 covers the topic of Data Protection/Privacy/Security.

ERT paper #2 covers requirements of Connectivity/Infrastructure.

ERT paper #3 covers Start-Ups/Entrepreneurship.

#### **1. EU context**

In their meeting on 20 July 2015, the European Commission and the ERT representatives all recognised the importance of the digital as a growth sector for the European economy.

The reinforcement of the European digital economy is of utmost importance for the supply and the demand side. It represents a great opportunity for Europe to recover the leadership that it not so long ago had in the digital ecosystem. The profound

transformation that is taking place in all sectors as a result of this digital revolution must be seized by Europe to boost its presence and competitiveness in all areas of the digital economy.

Developing advanced digital technologies (like 5G) requires high R&D investments from the EU digital ecosystem, including manufacturers. Therefore, balanced policies which incentivise, value, and protect R&D investments and which are pro-innovation are required (e.g. in the fields of standardisation, IPR and taxation).

This paper focuses on important aspects of “Connectivity/Infrastructure”, which does not only stand for the transportation of data, but covers all requirements to support Europe’s digitised companies in providing specialised services in Automotive, Transportation, Health, Industrial Automation/Robotics, Entertainment etc.

To unlock the potential of digitisation for the European industry, continuous investments in Europe in the most advanced digital infrastructures and best in class ultra-fast broadband fixed and mobile networks are now imperative. Europe needs high quality infrastructures capable of:

- a) Supporting large increases in traffic and provision of new services resulting from the digital revolution,
- b) Managing ultra-low latency to deliver those services instantaneously and ubiquitously, and
- c) Competition to offer choice of suppliers and world-class costs/quality levels.

For this purpose, the first challenge that Europe faces now is to enhance the incentives for operators to invest, which has been undermined by existing regulation.

On the investment front, Europe faces a structural problem: while increases in demand for telecommunications traffic have been comparable to the ones in other advanced economies and prices have declined steadily, overall revenues have been declining. The sector faces an enormous investment challenge, as it will have to cope with substantial deployment of fixed and mobile ultra-broadband networks and communication services, vital for the ERT member companies.

Therefore, competition and user choice must be encouraged to preserve EU industry cost competitiveness, as well as efficient market consolidation and infrastructure sharing to promote investment and quality. Sustainable competition among strong operators with sufficient scale, capable of greater investments and support to all EU industrial and service sectors should be the goal for Governments and National Regulatory Authorities. In Europe, the regulatory framework urgently needs to be adapted to foster the new investments.

Europe must therefore undertake a thorough review of its regulatory structures and mechanisms, including its objectives, in order to promote investment and innovation,

focusing on all those aspects that enable deeper use of new high-quality technologies by European citizens and businesses. With this idea in mind, it is necessary to place the promotion of sustained **investment as an EU-wide political priority** in the overhaul of the telecoms regulatory framework that will soon be initiated.

## **2. The European challenge of /infrastructure investment within the new digital ecosystem**

It is essential that both the European institutions and Member States promote and accelerate the changes required **to strengthen Europe's position in connectivity/infrastructure**. The new Commission strategy correctly aims for the creation of a Digital Single Market (DSM) that both facilitates and incentivises economies of scale for efficient network operators and service providers so as to ensure their global competitiveness.

The DSM strategy identifies reforms in the areas that the ERT considers vital to be addressed:

- a) Achieve a **regulatory environment** that encourages investment in digital infrastructure, which provides companies seeking to invest the support they need to research, innovate and grow. In Europe, it is clear that the current regulatory regime has not achieved the goal of effective and continuous research and investment in connectivity services. The objective to be set is the simplification of regulation, focusing on what is necessary to ensure more sustained investment and competition and healthy R&D levels.
- b) Adjust the regulatory environment to the digital age to ensure a **level playing field** for the provision of digital services. Europe needs a new convergent framework for the digital economy that reflects the increasing convergence of the digital value chain and supports the case and sustainability of investment in connectivity services. A substantial and ambitious revision of the current regulatory framework is therefore required. This implies that European digital users should be granted the **same rights and the same protection**, regardless of the underlying technology of the services they use, or the nature or location of the company that provides them ("same service, same rules, same protection"). For example, the current imbalance in areas such as data protection, tax obligations, or contribution to universal service is hurting European network operators. This, situation must be corrected, reducing regulation where possible. It must also ensure that the new possibilities enabled by the Internet technology are taken into account when it comes to assessing competition and eventually the need for regulation.
- c) Achieve an efficient and EU consistent **spectrum policy**. The policies applied so far have fallen short of the sector's needs. It is fundamental to have a technically and economically more efficient management of this resource, which does not hinder investments and network development. The conditions applied must allow quality

services to be offered at competitive prices rather than serving national fiscal purposes, all in a context where there is adequate coordination at European level. Europe must create a framework that encourages and promotes R&D, experimentation and investment in new generation mobile networks (recovering leadership in the development from 4G+ to 5G, i.e. Tactile Internet).

### **3. ERT recommendations to address the connectivity challenge**

We recommend that the European leadership considers urgently developing:

#### ***a) A regulatory environment that encourages investment in digital infrastructure.***

The current framework has led to over-fragmented competition and has failed to deliver the necessary roll-out of networks.

Europe should adapt access regulation and focus on improving the investment conditions by recognising the value of connectivity, simplifying access regulation, encouraging risk-sharing models, all of which will lead to a fair long-term return on investments in new infrastructure.

Europe should also revisit the balance between ex-ante and ex-post regulation as competition develops. Ex-ante regulation will still have a role to play but should preferably be seen as the exception rather than the norm. An environment where competitive forces determine prices should always be preferred. Regulatory intervention should be reserved for protecting the market mechanism in cases where the market fails, rather than being a substitute for the market mechanism. Within this context, market consolidation can have positive dynamic effects and boost investments, which are currently below the desired level given the competitive fragmentation of markets in Europe.

Finally, it is essential to ensure that the enforcement of Net Neutrality legislation recently agreed does not foreclose innovation in the value chain. Specialised services under the appropriate safeguards will be crucial for the competitiveness of the European economy and a necessary condition for societal innovations such as remote health care, self-driving cars, remotely managed robots, smart buildings, unmanned security systems, etc. Specialised services by Telecom operators, supported with proper traffic management, require optimum capacity rollout and increased investments in networks to contribute greatly to an upward spiral of increasing economic activity and innovation across all European industrial and service sectors.

#### **Specific recommendations:**

- Ensure regulation stays focused on the indispensable access obligations to promote sustainable competition. Mobile networks should be exempted from access obligations and fixed network regulation should be substantially simplified.

- Ensure that regulation avoids harm to a dynamic private investment process by recognising the long term value of infrastructure, encouraging competitive investments rather than promoting competition without investment incentives.
- Support commercial negotiations in order to conclude wholesale access arrangements between telecom operators. This commercial flexibility must allow wholesale agreements in which parties can share investment risks, i.e. via bulk access conditions, time commitments, or co-investment schemes. In order not to undermine this commercial flexibility for risk sharing, it is necessary to phase out regulated wholesale access on pure resale terms that do not reward investment risks.
- Allow markets to consolidate as this can increase the scale and efficiency of investments. To this end, dynamic efficiencies should be included in the competitive assessment of the Commission when analysing mergers. This is compatible with the main objectives of the merger control regime as it fosters long-term consumer welfare, which should be not only based on the short-term criteria related to the level of prices but also on other relevant variables, like quality or innovation, driven by the level of investment.
- Enforce legislation on Net Neutrality to allow innovation at all stages of the value chain, including the offering of specialised services, many of which have not yet been launched, or even designed/invented.
- Consider effective ways to accelerate regulatory reforms through intermediate steps such as regulatory decisions and Commission recommendations.

***b) Adjust the regulation for the digital age to ensure a level playing field.***

The current regulatory framework is outdated. It was formulated when services were not provided over the Internet. Today many services (voice, messaging, and video) are provided over the top, by players such as Google, Facebook/WhatsApp, Microsoft/Skype, Netflix, which compete with services provided by telecom operators, but with different rules.

Current regulation should change, in order to achieve the application of the “same service, same rules, same protection” principle in the digital space. Only services with a strong public interest would need to be regulated. The objectives should be:

- a. To guarantee that European digital users have the same rights and level of protection, regardless of the technology underlying the services they choose or the nature or location of the company that provides them (See ERT Paper #1).
- b. To guarantee that all players can compete in the global arena on equal footing. This situation is not balanced today, mainly to the disadvantage of telecom operators, and reduces the incentives of telecom operators to invest – affecting in turn the connectivity- because the benefits of such investments are not proportionately distributed.

- c. To address imbalances created by the current regulatory framework on issues such as communication services, levies, fees and taxes, user protection, legal interception, interoperability/portability, fair application of competition policy.

**Recommendations:**

- Address these issues as soon as possible by opening a review and in-depth analysis of competitive dynamics in digital markets, taking into account all the relevant elements of the digital value chain and the position of all players in identical services, even if delivered over different platforms
- End the dichotomy between telecoms and OTT communications services through a review of the obsolete concept of electronic communication services, in order to achieve a level playing field by design.
- Acknowledge increasing competition dynamics of digital markets, shifting from an ex-ante regulatory model to ex-post competition based market supervision, expanding Competition bodies' analytical tools and resources, or even modifying specific legal instruments to intervene on a timely basis throughout the whole digital value chain when needed and swiftly to prevent "new digital dominances" to prevail in absence of rules.

***c) An efficient and EU consistent spectrum policy***

More harmonised, affordable and easy-to-trade spectrum is a fundamental ***prerequisite for European competitiveness*** and the Digital Single Market.

There is an urgent need for closer coordination of spectrum auctions (timings and rules) with a longer term for licenses and spectrum trading being actively encouraged to incentivise network investment. Spectrum trading will allow the industry to achieve an efficient structure both in terms of in-country and cross-border trading.

**Recommendations:**

- Pursue the harmonisation of timetables and license durations for new spectrum. In particular, Europe should be harmonized in allocating and making spectrum available for mobile broadband in the 700 MHz band and when deciding the long term future use of the UHF band below 694 MHz.
- Ensure fair and reasonable coverage obligations especially for low bands such as 700 MHz which can provide access for the underserved and boost the overall uptake of services.
- Use spectrum auctions as an efficient, market-based mechanism for assigning spectrum and not for purely fiscal targets.

- Extend license durations to a minimum of 25 years to support the most efficient use of spectrum by means of spectrum trading and by incentivising continuous technology upgrades.
- Avoid, in order to improve investment and planning certainty, the use of spectrum awards processes to dictate the market structure, i.e. ensure that an objective, transparent and non-discriminatory treatment of existing and potential applicants for licenses is put in place (no reservation).

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A new regulatory framework incentivising investment, level playing field across platforms for same services and a consistently future oriented management of spectrum across Europe will be powerful enablers of modernisation, innovation and expansion for European companies and – with the right support as illustrated in the ERT Paper #3 – a new generation of European start-ups and entrepreneurs.