

Position

POSITION OF FEDIL – FIXED ULTRAFAST BROADBAND FOR EUROPE

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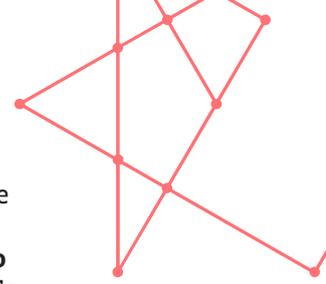
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This position paper constitutes Fedil-ICT members' contribution to the subject "Fixed ultrafast broadband for Europe: the Luxembourg perspective for the future development of the electronic communication framework"

THE NEED TO INVEST IN NEXT GENERATION NETWORKS

In the context of the revision of the EU electronic communications framework there is a major need for Europe to set a bold, ambitious direction that sends a clear signal to investors and electronic communications' operators. This signal for the digital economy and the society of the future will help European economies to grow and will attract more and more investors. All businesses and consumers should benefit from widespread connectivity of very high speed technology by robust, reliable and future-proof fixed and mobile technologies.



There should be a deep ambition for Europe in the context of the Digital Single Market. The review of the current framework should be a step forward for **digitalisation and appropriate investment in next generation networks to support and drive Europe's economic growth in connecting everyone**. The EU's competitiveness at international level and ability to connect Europe to the rest of the world will depend on the right regulatory incentives.

Vital sectors of the global economy rely on those infrastructures to innovate, produce and deliver goods and services. More and more customers want to have access to high-quality reliable infrastructure and services. Europe needs to achieve this to offer both because these services are a chance and bring additional GDP growth.

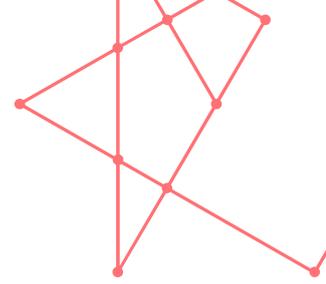
THE NEED TO FOSTER PENETRATION

Even though Europe is making huge progress in terms of availability of NGN networks, penetration seems to be lacking in many markets. Again, investments in NGN are huge and have a very long ROI, hence there is a need to **stimulate the demand for high-quality broadband access**. There is a need for a global European strategy on how to drive e-services across all areas, especially in sectors like health, education and other public services. Also, demand stimulation needs to be linked to horizontal policies that ease access to content. Furthermore, it is essential to adopt the right mix of technologies to ensure that NGN are available.

THE MAIN TECHNOLOGIES TO DELIVER ULTRAFAST BROADBAND

No single technology will be able to cope with the data challenges that networks are facing: 1 zettabyte by the end of 2016, 2 zettabytes expected in 2019. Only a smart combination of infrastructure elements, based on the most efficient technologies, will be able to meet the constantly growing demand and traffic.

- **Fibre:** FTTH is the only technology that delivers the same quality to every customer without degradation in quality over long distances. The investment in next generation networks and very high speed technology should be combined with significant upload speed capacity to deliver true ultrafast broadband of 1 Gigabit per second.
- **Cable** has played a key role in fostering broadband penetration and the technology is by far not yet End-of-Life. While cable networks are continuously being upgraded and a complete transition of the cable networks to FTTH network might come someday, it is indicated to further support cable operators right now in order to fulfil the present demand for ultra-high-speed internet.
- **Satellite:** this is one of the most cost and spectrum efficient technologies and plays a significant role in trunking, backhauling and communications on the move, and also in complementing terrestrial broadband to ensure 100% coverage, and avoid a digital divide.
- **5G** and future generations of mobile connectivity will be complementary to fibre. 5G will be a seamless integration of different network technologies and will enable a higher bandwidth usage.



HETEROGENEOUS REGULATIONS AND MARKETS WITHIN EUROPE

The regulation of fixed networks has gone a long way since 1997. While the initial framework, set in 2002, was mainly focusing on opening markets, the next Telecom Packages were aiming to create a common set of rules applicable to all EU-member states. In practice, the implementation of regulation policies and remedies have however always been a national matter. National regulators have tried to find the “local” answer to possible market failures or to stimulate competition. Delays for transposing telecom directives have varied extremely within Member States. At the end this has led to very different approaches and very different results as well. While some markets have been severely shaken by regulation remedies, others have progressed much slower. For instance, distribution of market shares on broadband varies dramatically between EU member states: incumbent’s market share varies between 40 and 70%. Coverage and penetration figures on NGN vary even more.

Even though the present European regulation frame strives to enable sustainable competition the objective to create a true European telecom market has not yet been reached so far. Today, we are facing a very fragmented telecom market with different rules across all EU member states that makes any attempt of pan European operators to create cross border offerings and services more difficult. It must be stated that cross border synergies and economies of scale remain unused, even within large European telecom providers. We further support the role of national regulatory agencies for regulating the electronic communication markets in the respective member states.

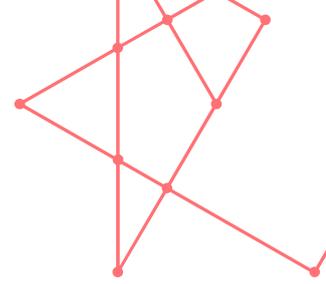
PERSPECTIVES AT EUROPEAN AND NATIONAL LEVEL

What should be expected from a revised European Regulatory Framework is a balanced set of incentives with a focus on creating a real single telecom market in the EU while, at the same time, assuring that competition and innovation continue to develop at a national level.

First of all, it is important is to rightly implement key principles of the existing Telecoms Regulatory Framework, namely technology neutrality and the promotion of efficient investment and innovation (while taking into account existing and upcoming investments).

Further, the present framework puts a very strong focus on national competition, without being sufficiently objective-driven. Regulation is considered a massive burden by many stakeholders, including alternative operators and even the regulator itself. Incumbent operators have often been imposed very complex, costly and heavy remedies, which often did not have a major impact on the market itself. For instance, in some markets, regulators have forced telecom operators to open their network under a set of very complex procedures, (such as “Local Break Out” in roaming regulation) and cost-models. At the end of a two-year process, it was stated that the market did not pick up these offers. In some cases, the attempt to regulate different markets has solely resulted in increased cost for the regulated operators.

Even though regulation is and will remain necessary, it seems clear that the



present framework has reached its limits to some extent and that changes are necessary.

Regulation shall not be an end in itself but shall be objective-driven. Focusing on clear objectives will lead to a straight-forward and more efficient regulation, which will finally support the given EU-objectives in terms of coverage and penetration.

The current regulatory spirit aims at promoting healthy competition, but other main issues such as investment incentives in next generation network are not sufficiently promoted. There is a huge financing gap between what is expected from the operators and the amount of investment required, especially in rural areas. The future regulation framework will have to find the right balance between the encouragement of large investments in NGN networks and the promotion of competition.

In order to free the huge potential that lies in cross-border synergies and economies of scale, the future telecom framework must deliver a more homogeneous regulation in terms of remedies AND timing.

THE MAIN ISSUES LINKED WITH OTTS

The whole telecom industry is facing huge competition from so-called “Over-the-Top” players. The principles of “net neutrality” guarantee that these operators can distribute their services, via the networks of the telecom providers, without any additional cost. On the other side, telecom operators must invest constantly in increased bandwidth and capacity. At the same time there is no additional revenue that could be generated.

At a certain point in time, operators will not be able anymore to economically sustain, without additional revenues or reduced cost, the constant bandwidth growth.

Some OTTs do as well compete directly with telecom operators on services like IP-TV or voice. While telecom operators are often subject to heavy and costly regulation procedures and even license and spectrum costs, most of the OTT operators remain completely unregulated, even though they offer similar services. Real-time services like game streaming, will require high quality connections with very low latency. Operators will have to technically support these new services. The upcoming regulation package shall enable both, OTT players and telecom operators, to closely cooperate within a given framework in order to support and promote new and innovative services. Finally, market analysis shall take a wider view of taking into consideration the activities of OTT's for regulated markets such as voice termination for fixed and mobile.

“Four Priorities for achieving the future of electronic communications”:

In the perspective of Fedil-ICT, European policymakers need to take into consideration four key priorities for achieving Europe's Digital Single Market:

1. Stimulate investment in next generation networks on a technology-neutral basis
2. Stimulate the demand for high quality broadband access
3. Stimulate objective-driven regulation as an incentive for investment
4. Market analysis with a wider view of taking into consideration the activities of OTT's for regulated markets such as voice termination for fixed and mobile