

# Working Group 3: Synthesis of Outputs

July 13<sup>th</sup>. 2011

## 1. Assessment of current situation

Fixed NGA penetration (all FTTx and DOCSIS 3.0 technologies) in Europe remains below 10%, compared to 40%+ in developed Asia-Pacific countries and between 10% and 30% in North America. However, at the country level, the development of NGA is far from homogeneous. For example, in 2010, in the Netherlands or Belgium where telecom and cable operators already compete, almost 80% of households have access to NGA networks and 15% to 20% are connected<sup>1</sup>.

To reach the Digital Agenda broadband targets of 100% households passed by 30Mbps+ offers and 50% connected to 100Mbps+ offers, the overall investment to be made remains high. It is estimated between 140bn€ and 290bn€<sup>2</sup>.

Many industry players have already invested or plan to invest in NGA networks: cable operators have upgraded a significant part of their network for a cost of above 16bn€ while other telecom operators have committed more than 22bn€ for the next six years.

However, significant barriers to NGA roll-out, common to all European countries remain at this stage:

- There is a **fundamental uncertainty on the level of demand for NGA** in terms of volume but also of value, considering the limited willingness of consumers to pay a premium price for NGA offers. This impacts all current and potential investments since it increases the level of risk and questions the ROI.
- The deployment of NGA represents **an investment** of up to several thousand euros per household in less dense areas. Even if the deployment costs depend on the area typology and on the underlying technological choices, there is an agreement that **civil works and fibre in-building wiring** may represent up to 80% of these costs<sup>3</sup>.
- Under the current market and regulatory conditions, shareholders of telecom operators are **not willing to commit the necessary funds to achieve a massive NGA roll-out**. ROI expectations on NGA in Europe are not considered as favourable as in other markets such as wireless or as in other regions.

It should be the focus of the European Commission, the National Regulatory Authorities and the Member States to lift these barriers and thus foster the development of NGA roll-out.

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<sup>1</sup> Source of data: FTTH Council, Analysis Mason, Arthur D. Little, Exane BNP Paribas

<sup>2</sup> Based on EIB, Arthur D. Little, Exane BNP Paribas and Mc Kinsey estimates

<sup>3</sup> Source of data: FTTH Council, Orange/FT Group, Swisscom, Telefonica

## 2. Some Principles

A first step for Public Authorities should be to promote some Business Principles and thus create a supportive and stable business environment for the development of NGA networks in Europe:

- There will be **no one-size fits-all** response for all EU 27 countries to the NGA investment challenge. Any EU level approach to NGA investment should leave enough flexibility to accommodate the different competitive situations and roll-out conditions between Member States.
- The investments in NGA should be driven by **private money as much as possible**: policies should aim at improving private sector investment conditions and public funding should be targeted in order to promote, and not to crowd-out, investments in the telecom industry. Effective mechanisms for investors and access seekers to share the risks of NGA roll-out should be supported.
- Parties may choose **different investment models for NGA**, investing on their own or in co-operation with third parties from outside or from inside the telecoms sector. Any such arrangements and choice for partners should remain on a voluntary basis but can be incentivized.
- Telecom players should be left **free to choose the network technology** adapted to the market needs. In particular, wireless technologies can contribute to achieving the Digital Agenda targets. Also, public policies should be careful to avoid any competition distortion in favour or against solutions developed by cable operators.
- Competition remains the most important driver for end-user benefits and innovation. The EU's legal and regulatory regime has to remain built on the principle of allowing and **fostering competition between operators competing at the lowest infrastructure level possible**.

## 3. Recommended Measures

On top of these principles, to lift the identified barriers, the stakeholders of the Working Group 3 recommend that the European Commission enforces a set of 6 measures and initiates the discussion around their national application with the Regulatory Authorities and the Member States.

The first three recommended Measures aim at **lowering the cost of deployment**, with a focus on civil works and fibre in-wiring:

1. Member States should implement a **public database**, providing a list of all available compatible telecom- infrastructures<sup>4</sup>, as well as a centralized list of civil engineering works (24-month period) and house/building owners. Access must be controlled by the NRA and limited to interested parties.

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<sup>4</sup> Cable operators limit this Measure to the compatible telecom infrastructures of non-telecom players (utilities...)

2. **Access to civil infrastructures<sup>5</sup>** should be **facilitated** for all purposes, including **mobile backhaul**:
  - The publication of a public reference offer by each owner<sup>2</sup> of compatible telecom infrastructures should be made mandatory.
  - Member States should define where and at which conditions to grant access to aerial infrastructures.
  - Member States should also encourage non-telecom players to systematically consult telecom operators when planning civil works, in order to coordinate NGA wires hosting.
3. **Building owners should have an obligation to deploy in-building fibre**, with the following distinction:
  - For all existing buildings: obligation to deploy (and contribute to ~50% of the financing of) 5 years maximum after the NRA has declared the building connected<sup>6</sup>.
  - For new buildings: mandatory wiring during the construction phase.

Two additional Measures would **foster demand** with focused **tax incentives**:

4. A first set of tax incentives should directly be aimed at **end users**, in order to reduce the potential financial impact for them when they upgrade their connections to NGA networks:
  - Direct financial incentives could be given to building owners to recover at least part of the cost of fibre wiring; in exchange, open access to fibre in-wiring should be given to all telecom operators.
  - When telecom operators invest themselves for deploying fibre, the tax incentives could be transferred to them.
  - Public incentives should also help compensate higher retail prices in areas with abnormally high “horizontal” NGA roll-out costs.
5. A second set of tax incentives should be targeted at **companies investing** in long-term NGA infrastructures or in the development of innovative services in line with the Digital Agenda objectives. Additionally, companies making an extensive use of these innovative services (e.g. teleworking) could also benefit from these tax exemptions.

Finally, a sixth measure would contribute to **improve the investment conditions**:

The European Commission should **provision public funding** (incl. structural funds) to be used in risk sharing mechanisms between the EIB and the EC, for viable telecom infrastructure projects. It should also **expand the RSFF's investment capacity** & eligibility to broadband investments.

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<sup>5</sup> Cf. footnote 4 – same comment

<sup>6</sup> Building “passed” horizontally by a NGA network– may depend on local topography

#### **4. Recommended investment models: a geo-segmented view**

The market of NGA will be differentiated, based on local circumstances.

In black areas, where competition on infrastructures already exists, NGA recommendations should be applied as currently stated. Only a voluntary basis, some operators may engage in co-investments.

In grey areas, where only one network being commercially viable, co-investment models should be promoted where this allows for better roll-out conditions. Co-investment may take several forms, IRU-based (where a single operator leads and manages its NGA roll-out) or JV-based (where several market players co-invest in a common passive infrastructure). Whether some specific co-investment models should benefit or not from regulatory and financial support is open for discussion. Also, the question remains to know if co-investment vehicles should benefit from these incentives if they cover geographies mixing competitive and uncompetitive areas.

In any case, in white and ultra-white areas, where even one network is not commercially viable in the long run, public intervention, through Public-Private Partnerships and subsidies, is legitimate and lighter regulation may be studied.

Finally, the deployment of new technologies, including mobile technologies, to meet the Digital Agenda broadband targets by enhancing existing networks in sparsely populated areas should be promoted.