



**ECTA RESPONSE TO THE PUBLIC CONSULTATION ON THE  
DRAFT BEREC WORK PROGRAMME 2016  
(BOR (15) 140)**

**30 OCTOBER 2015**

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## EXECUTIVE SUMMARY

ECTA fully supports the role played by BEREC in ensuring the consistent application of the EU Regulatory Framework and its contribution to the development of the internal market for electronic communications.

ECTA broadly agrees with the deliverables put forward in the draft BEREC Work Programme 2016 and particularly welcomes the continued prevalence of, and focus, on promoting competition and investment in the sector. ECTA fully shares BEREC's views, expressed in its Strategy 2015-2017, that:

*BEREC and its members, the National regulatory authorities (NRAs), must promote effective competition, and in so doing promote efficient investment and innovation in new and enhanced infrastructures and services. Central to this approach is the understanding that effective and sustainable competition is what drives efficient investment.*

And also that:

*Competition also serves the interests of European end-users, as it helps to fuel innovation and provides for maximum benefit in terms of choice, price, and quality. Finally, effective competition at the national level fuels the development of the internal market – Europe's global competitiveness relies on competitive European (national) markets. A competitive European telecoms sector in turn contributes to a vibrant European economy, which in turn should provide the conditions for continued efficient investment and innovation.<sup>1</sup>*

ECTA fully supports BEREC's deep involvement in the review of the Regulatory Framework for electronic communications and we urge BEREC to ensure that promoting competition remains the primary objective of our framework and that the current pro-competitive thrust of the framework is strengthened.

We commend BEREC's conviction that an evolutionary approach must be retained and support BEREC's commitment to:

*(...) protect the underlying principles of the current Framework, which have been broadly successful in promoting the effective competition based on a conviction (supported by the evidence) that end-users benefit from competitive markets, and that innovation and efficient investment (both critical to Europe's global competitiveness) are spurred by that competition.<sup>2</sup>*

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<sup>1</sup> BEREC Strategy 2015-2017, Section 3, Strategic Pillar 1.

<sup>2</sup> BEREC Strategy 2015-2017, Section 5, Strategic Priority 1 (c).

In fact,

*An environment where investment in high-speed networks can flourish depends on market players being able to rely on a stable regulatory framework enabling effective competition in downstream markets.*<sup>3</sup>

There is a plethora of evidence showing that competition in legacy broadband, injected in the sector via wholesale access regulation, has enhanced consumer welfare, boosted broadband penetration, increased broadband revenues for the sector (from €19 billion in 2005 to €46 billion in 2014) and thus triggered significant network investments. Competition has delivered for all.

The key concern with regard to next generation access networks (NGA) today is two-fold: (i) take-up of fast and ultrafast broadband is low and only slowly increasing, and (ii) incumbents hold significant wholesale and retail broadband shares across all technologies. We more than ever need to ensure that the broadband success story, delivered by competition enabled by wholesale access regulation, is continued in an NGA setting. The pro-competitive thrust of the regulatory framework must therefore be reinforced.

Competitors have played a significant role in driving NGA broadband take-up, by more aggressively promoting higher speeds, offering more services in their bundles and setting lower prices than incumbents for similar or more performant bundles. Enabled by regulation, in particular LLU, alternative operators have made broadband a mass-market (more than 40 million lines in the EU are today served by alternative operators).<sup>4</sup>

Competitors were also the first to kick-start FTTH/B roll-out, yet replication of the last mile is not economically sustainable or desirable in all cases and regulation of fixed infrastructure thus remains an essential competition enabler in an NGA environment. The availability of appropriate, harmonised, fit-for-purpose and pro-competitively defined NGA wholesale products, at prices which allow a return on investments for all parties involved, must therefore be ensured. NGA wholesale products must be designed to allow similar gains and benefits to what LLU has enabled. Physical access thus remains key and to be complemented, where appropriate, with active access products (e.g. to serve business customers, as a complement in less dense areas, etc.).

ECTA's concrete proposals *vis-à-vis* the BEREC draft Work Programme 2016 can be found in the sections hereunder.

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<sup>3</sup> BEREC Strategy 2015-2017, Section 5, Strategic Priority 1 (b).

<sup>4</sup> LLU and shared access account for around 80% of new entrants DSL subscriptions.

## ***I. INTRODUCTION***

ECTA recognises and fully supports the role played by BEREC in ensuring the consistent application of the EU Regulatory Framework and its contribution to the development of the internal market for electronic communications, in particular by ensuring that competition and innovation are fostered.

ECTA very much welcomes the thorough and ambitious draft BEREC Work Programme 2016 (WP2016) and the possibility to contribute to its further refinement and improvement. ECTA broadly agrees with the deliverables put forward in the BEREC WP and particularly welcomes the continued prevalence of and focus on promoting competition and investment in the sector.

ECTA would like to reinforce a few key points and put forward concrete recommendations. Below, we provide general and specific comments on the draft WP2016, including proposals on new deliverables which are listed in Annex I to this response.

## **II. GENERAL COMMENTS**

### **1. COMPETITION DELIVERS FOR ALL. NO TRADE-OFF BETWEEN INVESTMENT AND COMPETITION.**

#### **Strengthening the pro-competitive thrust of the Regulatory Framework is key**

The EU electronic communications sector is at a key stage of development, with the transition to NGA progressing steadily and the review of the EU pro-competitive regulatory framework starting to take form. It is more than ever fundamental to take stock of the benefits of competition in legacy broadband and enhance the pro-competitive thrust of the regulatory framework, thus ensuring that the benefits gained in a legacy world are continued in an NGA environment. Only a pro-competitive framework will ensure that efficient investments in NGA are made, that demand from European end-users (consumers and businesses) is stimulated through the availability of innovative products at affordable prices, which will in turn ensure that the needed take-up of fast and ultrafast broadband effectively takes off.

BEREC's continued focus on promoting competition and investment is most welcomed. As recognised by BEREC in its Strategy 2015-2017:

*BEREC and its members, the National regulatory authorities (NRAs), must promote effective competition, and in so doing promote efficient investment and innovation in new and enhanced infrastructures and services. Central to this approach is the understanding that effective and sustainable competition is what drives efficient investment.*

*(...) Competition also serves the interests of European end-users, as it helps to fuel innovation and provides for maximum benefit in terms of choice, price, and quality.<sup>5</sup>*

We note that competition is, and will continue being, the key to satisfying explicit demand and discovering latent demand from customers (consumers and businesses), including the price points at which large-scale adoption of services takes off, thereby driving take-up of services, achieving broad socio-economic benefits, and generating economic rewards for those companies which best satisfy evolving customer demand and are best able to industrialise the satisfaction of such customer demand. Competitive pressure is, and will continue being, in an NGA environment, the trigger for innovation and investments by telecoms companies.

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<sup>5</sup> BEREC Strategy 2015-2017, Section 3, Strategic Pillar 1.

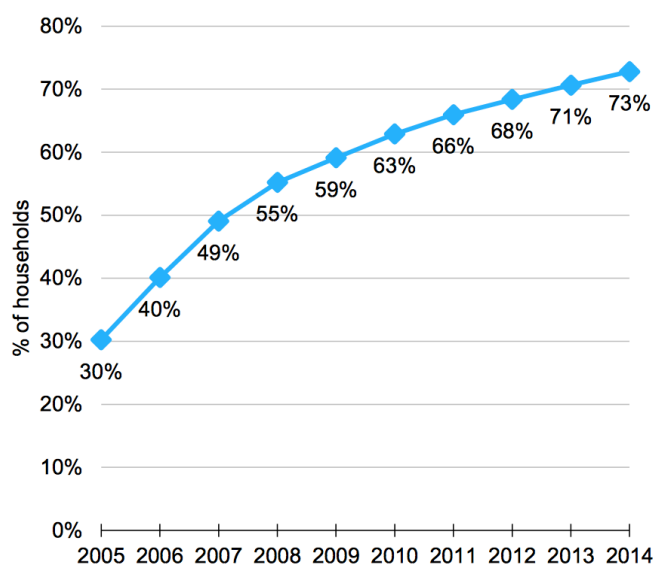
Competition is also a building-block and pre-requisite for the completion of the internal market. As acknowledged by BEREC in its Strategy 2015-2017:

*Finally, effective competition at the national level fuels the development of the internal market – Europe’s global competitiveness relies on competitive European (national) markets. A competitive European telecoms sector in turn contributes to a vibrant European economy, which in turn should provide the conditions for continued efficient investment and innovation.*<sup>6</sup>

## Competition delivers for all

There is a plethora of evidence showing that competition in legacy broadband, injected in the sector via wholesale access regulation, has enhanced consumer welfare but also increased broadband revenues for the sector and triggered significant network investments. Fixed broadband product components and quality have increased massively, which in turn triggered a considerable growth in broadband take-up (from 30% in 2005 to 73% in 2014), making broadband a household staple. Moreover, despite falling unit prices, total revenue from the broadband sector have increased significantly (from €19 billion in 2005 to €46 billion in 2014).<sup>7</sup>

### Fixed broadband penetration of households in the EU

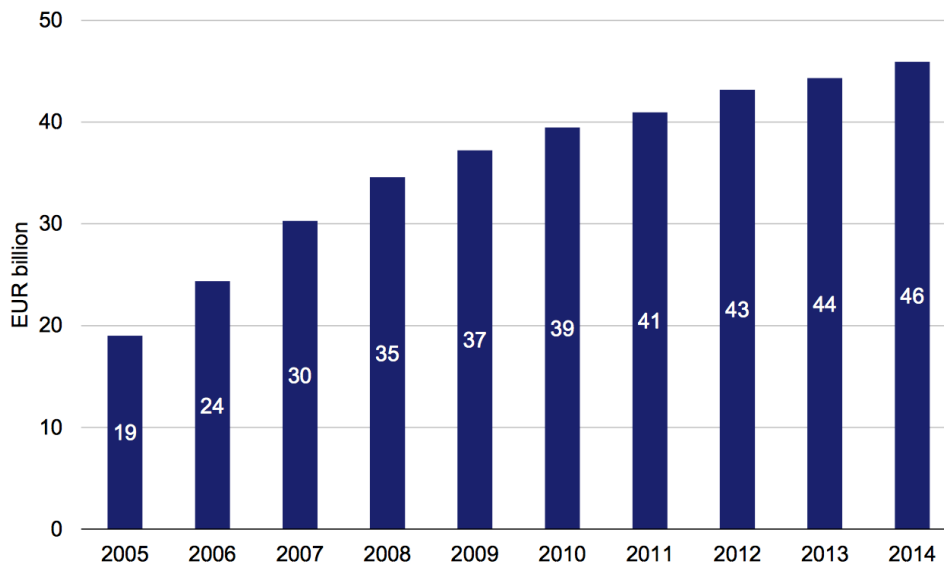


Source: Analysys Mason (2015) for ECTA, *The digital single market and telecoms regulation going forward*

<sup>6</sup> BEREC Strategy 2015-2017, Section 3, Strategic Pillar 1.

<sup>7</sup> Analysys Mason (2015) for ECTA, *The digital single market and telecoms regulation going forward*

## Fixed broadband revenue in the EU25



Source: Analysys Mason (2015) for ECTA, *The digital single market and telecoms regulation going forward*

Competition enabled by access regulation has therefore been a win for all - it has led to an increase in broadband penetration and revenues, with benefits shared between end users, who have gained access to (better) broadband products at lower prices, and operators, through a massive increase in revenues which has allowed re-investment in network development.

### The EU is leading on broadband and NGA deployments are progressing steadily

Claims are sometimes made that Europe would be lagging behind other regions of the world (notably the USA) in terms of broadband performance and fibre deployments and that this would stem from our pro-competitive regulatory model. Fact is that today Europe is a leader on broadband performance and this is largely due to a well-functioning framework delivering competition. Evidence of Europe's leadership is provided in numerous studies and reports.<sup>8</sup>

Investments in NGA networks are progressing steadily under the current pro-competitive framework. Total NGA coverage (including cable, FTTH/B and FTTC) has increased significantly, reaching 68% of households at the end of 2014, up from 48% in 2010. FTTx coverage is at 47% of households, up from 23% in 2010. Investment in FTTx networks is

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<sup>8</sup> E.g. [The State of Broadband 2014: Broadband for all](#), by the Broadband Commission; [Quality of Broadband Services in the EU](#), October 2014, study by SamKnows commissioned by the EC; [Akamai State of the Internet report for Q1 2014](#); [The Future of Regulation](#), February 2014, by Webb Henderson/ SPC Network.



increasing since 2011. In addition, there are numerous currently ongoing and committed NGA deployments across Europe leading to an estimated Fttx coverage in Western Europe by 2020 of around 80%. Europe is not lagging behind – but in fact ahead of – other countries such as the USA in terms of FTTH/B roll-out: Europe has a 19% coverage of FTTH/B whereas the USA only 17%.

As recently recognised in the Digital Single Market Strategy<sup>9</sup>, in several recent EC Commissioner speeches<sup>10</sup>, in the BEREC Strategy 2015-2017 and in the 2010 EC NGA Recommendation, there is no trade-off between investment and competition - competition is in fact the key driver of investment.

While investment is needed, investment should however not be an end in itself but a means to an end i.e. to achieve a connected society and economy, through affordable adoption. We should aim at efficient investment to genuinely increase the benefit and welfare for all types of end-users, and the economy as a whole, with fair returns for all segments of the industry. What ultimately matters and will make EU a connected continent is the take-up of very high speed services over the new networks.

## **2. COMPETITION IN NGA NEEDS BOOST TO FOSTER TAKE-UP**

In order to ensure European leadership on NGA, and that take-up takes a leap forward, a strong pro-competitive environment must be re-gained.

### **Two-fold problem – low take-up and lack of competition in NGA**

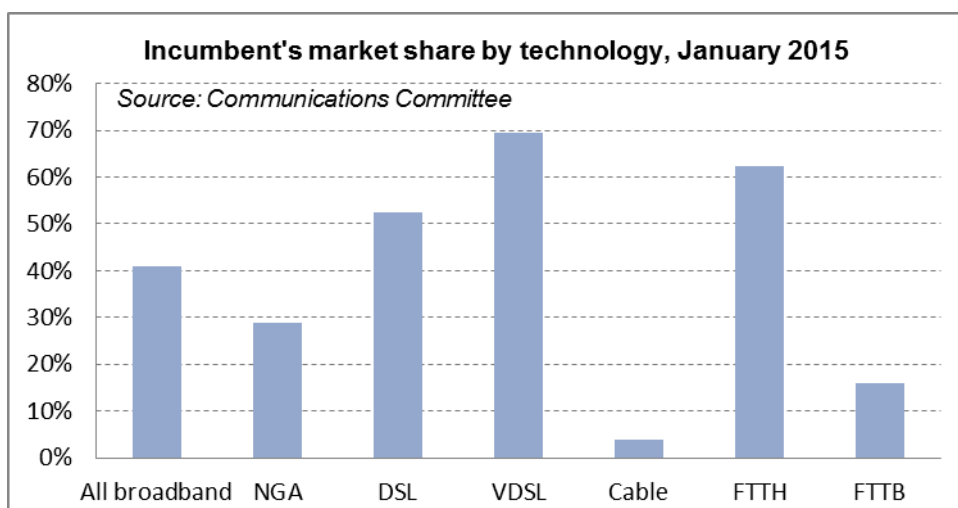
The key concern with regard to NGA today is two-fold: (i) take-up of fast and ultrafast broadband is low and slowly increasing (in July 2014, only 16% of EU households subscribed to fast broadband and 5% to ultrafast broadband), and (ii) incumbents hold significant wholesale and retail broadband shares across all technologies, including a share of 69% on VDSL.<sup>11</sup> This shows a severe lack of competitive dynamics.

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<sup>9</sup> A Digital Single Market Strategy for Europe - COM(2015) 192 final

<sup>10</sup> E.g. speeches by [Commissioner Ansip](#) and [Commissioner Oettinger](#) at the event *FTEtno: Broadband, the next investment wave and EU policies*, October 13, 2015.

<sup>11</sup> Note that 70% of all fixed broadband subscriptions today are xDSL.



*Source: EC Digital Agenda Scoreboard 2015*

At times of technological transition, it is recurrent that dominant companies attempt to re-gain and abuse/leverage market power, squeezing out competitors. In the transition from dial-up Internet access to basic broadband, many former monopolist telecommunications operators were found to have abused their dominant positions, with very negative consequences for the level of competition in the markets and for consumer welfare. In the transition to NGA, re-monopolisation must be prevented.

### Competition is key to drive NGA take-up

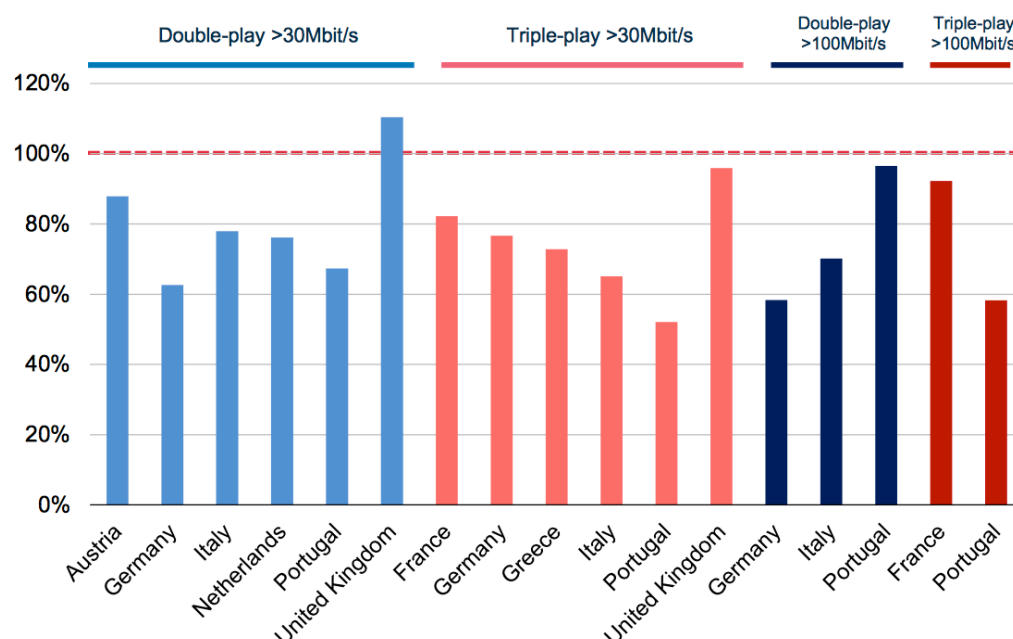
A high level of take-up is always delivered by a highly competitive market which makes products affordable, appealing and tailored to what end users want and need. Competitors, enabled by regulation, have taken and continue to take a leading role in the diffusion and take-up of fast and ultra-fast broadband services. When compared to incumbent operators, alternative operators tend to:

- (i) more aggressively promote higher speeds and offer more services in their bundles than the incumbents, and
- (ii) set lower prices than incumbents for similar NGA bundles or bundles which *exceed* those of incumbents.<sup>12</sup>

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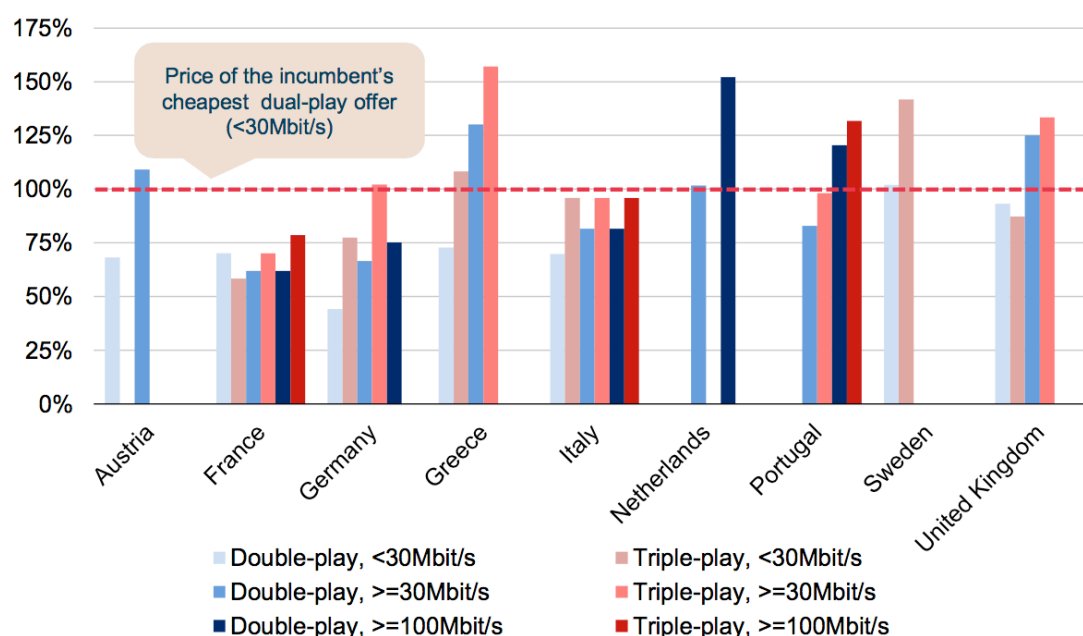
<sup>12</sup> Sources for the figures: Analysys Mason (2015) for ECTA, *The digital single market and telecoms regulation going forward*.

## Alternative operators' NGA prices as a percentage of incumbents' prices, in nominal EUR at the end of 2014



Source: Analysys Mason (2015) for ECTA, *The digital single market and telecoms regulation going forward*<sup>13</sup>

## Alternative operators' bundle prices as a percentage of the incumbents' basic bundle prices (double-play, speed lower than 30Mbit/s)

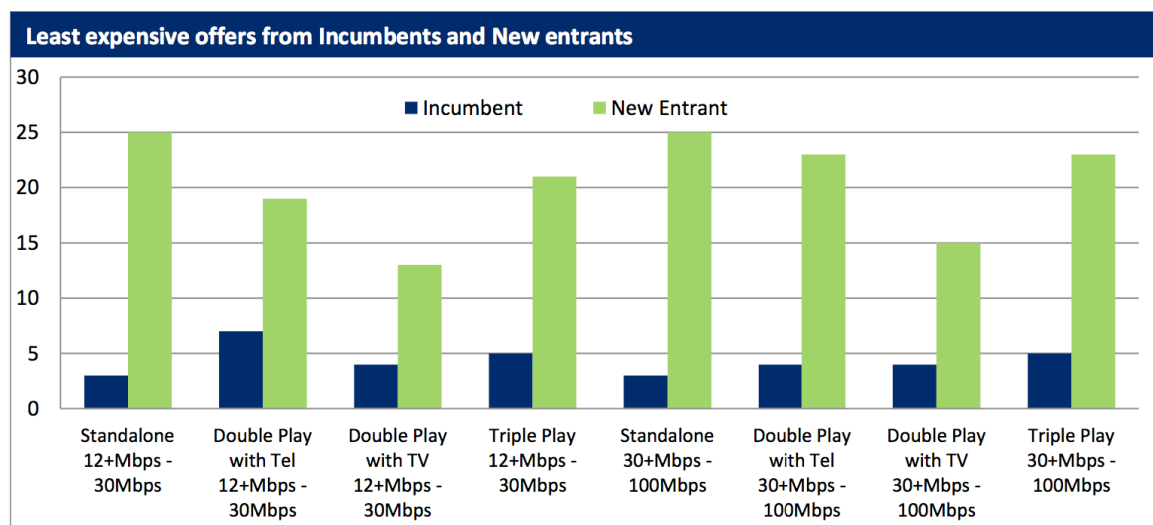


Source: Analysys Mason (2015) for ECTA, *The digital single market and telecoms regulation going forward*

<sup>13</sup> The analysis considers the cheapest comparable bundles, when available, of incumbent operators and alternative operators, excluding cable operators. A full list of the products considered in the analysis is provided in Annex B to the Analysys Mason study.

A recent study commissioned by the EC also concludes that the least expensive offers per country are, in around 80% of cases, provided by new entrants.

#### Number of least expensive offers from incumbent ISPs versus from New entrants



Source: Van Dijk (2015) for the EC, *Broadband Internet Access Cost (BIAC) 2015, Prices as of February 2015*.

Alternative operators have also introduced a numbers of innovations - e.g. Voice over IP, IPTV and VOD over broadband networks, cloud storage, unified communications (tele-presence, video conference) and modern CPE with advanced functions (e.g. personal video recorders) – which have contributed to driving demand for broadband services.

This illustrates that regulation enabling competition on the merits drives end-user demand and take-up and must therefore be strengthened in NGA.

**Altnets invest but bottlenecks persist. Wholesale access is key to enable Altnets to compete and innovate.**

It is alleged by some that alternative operators (altnets) are mainly resellers, that the ladder of investment has failed, that altnets are free-riding and do not invest. This is in our view plainly wrong.

Enabled by regulation, in particular LLU<sup>14</sup>, altnets have made broadband a mass-market (more than 40 million lines in the EU are today served by altnets). Altnets have also kick-started FTTH/B deployment in many EU Member States and their role in stimulating FTTH investments has been recognised in several studies and reports, most notably in a recent study by WIK for Ofcom.<sup>15</sup> WIK mentions several examples of alternative operators initiating

<sup>14</sup> There are currently more than 40 million unbundled lines at EU level; LLU and shared access account for around 80% of new entrants DSL subscriptions.

<sup>15</sup> WIK (2015) for Ofcom, [Competition & investment: An analysis of the drivers of superfast broadband](#).

investment in FTTH networks before incumbents, including Reggefiber in the Netherlands (before being acquired by KPN), as well as LLU operators such as Iliad (Free) in France and Optimus/Sonaecom in Portugal. We would also point e.g. to Fastweb in Italy.

Alternative operators are currently investing heavily, with CAPEX amounting in some cases to roughly 30% of revenues<sup>16</sup>.

A study for the European Parliament/ITRE Committee<sup>17</sup> has also concluded that altnets (fixed competitors relying on access) are NOT 'cream-skimming without making significant investments of their own:

*There is no evidence to suggest that entrants are making supernormal profits from the rental of access at the expense of incumbents or consumers. They pay incumbents a rate which reflects (at least) costs with a reasonable return on capital to rent access. Entrants are also significant actors in the roll-out of FTTP technologies (...)*

Altnets have, along with cable operators, delivered fantastic new services and bundles, which in turn pushed the incumbents to catch-up and invest.

Yet bottlenecks persist in the last mile of the physical network, and physical network duplication is not economically feasible or desirable at all times. This has not changed and will not change in the transition to NGA, with the emergence of OTT services and with developments in network virtualisation, which by definition are not physical. Regulation of fixed infrastructure therefore remains an essential competition enabler in an NGA environment. The availability of harmonised, appropriate, fit-for-purpose and pro-competitively defined wholesale NGA access products, at prices which allow a return on investments for all parties involved, must be ensured. Physical access/unbundling, which effectively allows altnets to differentiate their products and innovate, must not be replaced by second class products. Wholesale products in a fibre world must be designed to allow similar gains and benefits to what LLU has enabled.

In this regard, non-competitive solutions must be prevented - e.g. forestall the inappropriate removal of SLU and LLU; prevent the undermining of fibre unbundling; ensure that there is a regulatory push for the unbundling of PON networks via WDM; prevent the replacement of passive access by active access.

Wholesale inputs must also be available to allow the (cross-border) provision of services to business users, serving business customers in less dense areas, and complementing physical access in less dense areas.

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<sup>16</sup> See e.g. Iliad 1H 2015 Strategy & Results Presentation (August 31, 2015) – slide 22 [here](#) and Fastweb's press release [here](#).

<sup>17</sup> WIK, TNO and RAND (2013) for ITRE/EP, [Entertainment x.0 to Boost Broadband Deployment](#).

### 3. REGULATORY FORBEARANCE WILL NOT LEAD TO INCREASED NETWORK DEPLOYMENTS

Some have claimed<sup>18</sup> that regulatory forbearance could be a means to increase NGA deployments and thus ensure that the EU digital targets are met. We plainly disagree.

Evidence from a recent study for Ofcom<sup>19</sup> states, in this regard, that:

*It has been suggested by some operators<sup>14</sup> and analysts that limiting unbundling and regulated access to NGA networks ('regulatory forbearance'), such as the approach applied in the US and Canada, aids NGA deployment. But we did not find a clear pattern of evidence to support this theory. As the high NGA coverage in the US and Canada is largely explained by cable coverage, it cannot be proved that regulatory forbearance was a key factor in supporting NGA deployment in these countries. Conversely, there are examples of countries with historically strong NGA regulation, including the Netherlands and Sweden, which nonetheless have positive NGA outcomes.*

*We also did not find any clear link between regulatory forbearance on NGA (or indeed other regulatory approaches) and fixed revenues or investment, suggesting that regulation may not be a primary factor in driving these financial outcomes.*

It further states that:<sup>20</sup>

*In general, regulatory factors appear to date to have had less influence over NGA coverage and take-up than market-based factors such as infrastructure competition or online video. However, the existence and type of regulation does seem to have an impact on the number of players offering fast broadband services to end-users, which may affect consumer outcomes such as prices and speeds in the longer term.*

A study for the European Parliament/ITRE Committee<sup>21</sup> has also concluded that:

*Regulation is probably not the most significant influencing factor on NGA deployment, and circumstances may vary. Actual experience seems to suggest that non-regulatory factors play a greater role in NGA deployment than the pricing of access – in particular population density and the role of infrastructure competitors. Moreover, deployments by infrastructure competitors have happened under different scenarios of regulation and pricing.*

And also that:

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<sup>18</sup> BCG (2015) for ETNO, [Five Priorities for Achieving Europe's Digital Single Market](#).

<sup>19</sup> WIK (2015) for Ofcom, [Competition & investment: An analysis of the drivers of superfast broadband](#).

<sup>20</sup> *Ibid*, p. I.

<sup>21</sup> WIK, TNO and RAND (2013) for ITRE/EP, [Entertainment x.0 to Boost Broadband Deployment](#).

*Higher prices for access or the absence of access in some countries does not seem to have translated to greater duplication of the access network. This lends weight to the theory that fixed access may be an economic bottleneck.*

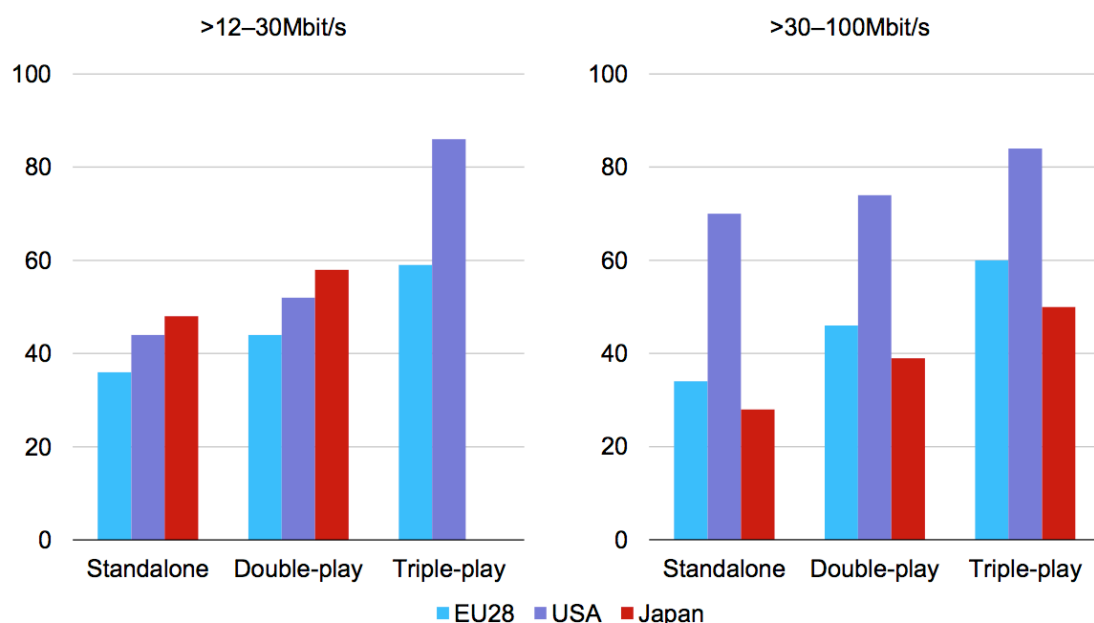
There is ample evidence sustaining that it is competition, enabled by regulation, which drives investment and NGA deployments. The EU pro-competitive framework, compared with the de-regulatory US regime, has delivered slightly higher levels of FTTH/B in the EU and the US and much better outcomes for customers in terms e.g. of more affordable prices – see the figures below. Calls for regulatory forbearance should therefore be dismissed.

#### Current NGA household coverage by technology

Geography	VDSL	FTTB/H	NGA cable
EU	38%	19%	47%
USA	37%	17%	83% <sup>194</sup>
Japan	-	96%	58%
Singapore	-	100%	99%
New Zealand	80%	29%	~14%

Note: In New Zealand the FTTH network is being deployed largely in parallel with an existing VDSL network, and so the technologies overlap. In the USA and the EU, the overlap between VDSL and FTTH is relatively small.

#### Comparison of retail median prices, in EUR/PPP (VAT included)



Source: Analysys Mason (2015) for ECTA, *The digital single market and telecoms regulation going forward*

### **III. SPECIFIC COMMENTS**

ECTA broadly agrees with the comprehensive actions put forward by BEREC in the draft WP2016. Please find below our recommendations regarding specific work streams.

#### **A. Promoting Competition and Investment**

As mentioned in the general remarks, ECTA most welcomes BEREC's commitment to promoting competition. We restate that, as acknowledged by BEREC, competition is the best driver of efficient investment. Safeguarding a competitive environment in an NGA setting is key.

We would welcome a more pronounced focus and positioning by BEREC, in this section of the WP2016, on the promotion of competition.

#### **1. Wholesale Products**

##### **➤ 1.1. Common Position on layer 2 wholesale access products**

ECTA welcomes the work developed so far on Layer 2 wholesale access products (L2 WAPs) and the effort made by BEREC to collect and systematise the regulatory rationale developed by those NRAs which have mandated L2 WAPs. We believe that this exercise can help clarify what constitutes best practice regarding the justification for mandating L2 WAP, the technical implementation of L2 WAP, and aspects such as points of hand-over.

We welcome BEREC's intention to develop the report "*Common Characteristics of Layer 2 Wholesale Access Products*"<sup>22</sup> into a Common Position in order to further promote a harmonised approach and diffusion of best practices. We believe that the definition of what constitutes best regulatory practice and thus delivers pro-competitive outcomes, is of great relevance. See, in this regard, our comments to Section 1.6. of the draft WP2016.

As stated in our response to the public consultation on the draft BEREC report on L2 WAPs, we would caution BEREC against the acceptance and potential spread of 'bad practice', in particular in terms of NRAs being unduly tolerant of inadequate technical specifications (especially on bandwidth, QoS, and number of VLANs), and most critically in terms of wholesale pricing. The upcoming BEREC Common Position on L2 WAPs must be pro-competitively minded.

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<sup>22</sup> BEREC Report on Common Characteristics of Layer 2 Wholesale Access Products in the European Union, BoR (15)133, October 1, 2015.



We are concerned with the following statement included in the draft WP2016:

*L2 WAPs with local handover have been imposed on the wholesale local access market where physical unbundling (LLU/SLU) is no longer considered to be viable due to the NGA rollout by the incumbent operator.*

We urge BEREC to revise this text in order to ensure that the WP2016 in no way indirectly suggests that physical access could be considered unviable or become less relevant in an NGA setting. Physical unbundling may in some specific circumstances *not yet* be entirely possible, but the right regulatory push can and should make it happen.

From a technical perspective, we note the advanced development of multi-operator vectored VDSL2 (evolution of ITU-T G.993.5) and successor technologies, including the advanced work of AGCOM and industry in Italy, and also the standardisation of multi-wavelength NG-PON2 (ITU-T G.989.2).

From an economic perspective, we point to the large-scale actual competitive network roll-out based on physical copper SLU by ECTA members Fastweb and Vodafone in Italy, by multiple ECTA members in Germany, and smaller-scale alternative operator developments also in the UK. Fibre terminating segment unbundling is in widespread use in France, showing that GPON roll out by the incumbent does not prevent the use of passive access products if the regulator devises an appropriate framework regarding e.g. the location of the concentration point and allows alnets to use their own active equipment. Fibre unbundling is available and in use in The Netherlands and in Sweden. In light of the actual developing use of copper SLU, received wisdom on the economics of copper SLU cannot continue to drive regulation and permit the removal of SLU.

Indeed, not all operators can pursue the same business model and the situation varies between countries. For instance, operators focused on high-end business services and cross-border services can typically not achieve the economies of density to justify the purchase of physical loop or SLU, and in fact the same applies for L2 WAP with local PoH. Operators focused on consumer markets, or hybrid consumer/business services, may also lack the market share and scale to realistically pursue physical access including LLU and SLU/fibre terminating segment access.

From a regulatory perspective, BEREC abovementioned WP2016 statement seems to reflect a minority of NRA decisions which, in ECTA's view, have mistakenly accepted allegations regarding technology developments on copper and fibre networks, and lack of demand for copper SLU in the past. In this context, we recall that Article 23 of the 2010 EC Recommendation on Regulated Access to Next Generation Access Networks specifically states that:

*NRAs should mandate unbundled access to the fibre loop irrespective of the network architecture and technology implemented by the SMP operator.*

We would further like to reiterate:

- Our position which refutes any alleged substitutability between physical access and any form of active or ‘virtual’ access, including all L2 WAPs, regardless of the PoH. Our position has always been, and remains, that physical access is paramount to enable competition, whilst active access is a relevant and in most cases necessary complement, when/where physical access is not viable (which does not mean not available) and depending on alternative operators’ ability to compete (overall market share, residential/business focus, and indeed regulation).
- The critical importance of the availability of *both* physical access and L2 WAP, and also the parallel availability of L2 WAP with local PoH and with regional PoH. Each of these access solutions is and will remain necessary to enable and promote competition, innovation and investment by alternative operators.

All in all, we urge BEREC to modify the wording of the abovementioned WP2016 statement in order to avoid conclusions which could lead to questioning the relevance and feasibility of physical unbundling in an NGA setting and to ensure that the upcoming Common Position is pro-competitively minded and reflects the critical importance of physical access. Note that ECTA also urges BEREC to defined harmonised characteristics for wholesale physical access products – see below our comments to Section 1.6. of the draft WP2016.

Finally, we would restate our views, expressed in the ECTA response to the public consultation to the draft BEREC report on common characteristics of L2 WAPs, that in order to be considered the best complement to physical access, any given L2 WAP with local or quasi-local PoH must offer the maximum speed technically possible and wholesale prices must not be bandwidth-dependent. Unfortunately, we observe that this is not always the case. The BEREC report on common characteristics of L2 WAPs (see in particular pages 25-26 and the graph on page 9) provide conclusive proof that, in several cases, wholesale prices for L2 WAP are disconnected from the charges for wholesale physical access/unbundling and from underlying costs, due to the introduction of speed tiering. The Austrian case is particularly concerning in this regard.

This should be a red light warning signal for all NRAs, for BEREC, and for the European Commission, to the effect that any stepping away from physical access, or unduly tolerant NRA decisions on the characteristics and wholesale pricing of L2 WAP, is likely to enable SMP operators to structure the downstream markets to their advantage. SMP operators are thus able set their preferred wholesale bandwidth-related charges and *de facto* place a price premium on speed, thereby depriving competitors from the ability to commercially differentiate their offers from those of the incumbents. This must be prevented.

➤ **1.2. Potential regulatory implications of Network Functions Virtualization (NFV) and Software-Defined Networking (SDN)**

We welcome BEREC's proposed work stream and the assessment of the potential implications that NFV and SDN may have on regulation.

In ECTA's view, such technological developments do not seem *prima facie* to affect the physical network layer and thus would not affect the need to retain regulation in market 3a. The same is likely the case for Layer 2 transport as such, and hence it would not affect the need to retain regulation in markets 3b and 4.

We urge BEREC to ensure that a thorough understanding of the features of NFV and SDN is gathered before any regulatory implications are drawn.

➤ **1.4. Migration to all-IP in the access networks**

ECTA very much welcomes BEREC's deliverables, namely the upcoming report which will focus on the migration from current access technologies (POTS, ISDN) to IP-based networks, the impact of migration on wholesale access products and the necessary forms of regulation.

ECTA would like to recall that maintaining competition in the transition to all-IP should be made a key priority in this work stream. In the transition to all-IP, access takers must be able to continue to avail themselves of fit-for-purpose wholesale access products. Wholesale demand will 'migrate' to an all-IP context because the all-IP networks will be predominantly controlled by the same (SMP) operators who owned the PSTN network. The fact that both networks are in most cases controlled by the same operator will lead to the operator being able to leverage its retail and wholesale dominance on PSTN to its all-IP network. Hence the need to make the safeguarding of competition a clear element and priority of this work stream.

Stakeholders would benefit from the draft BEREC report on the migration to all-IP in the access networks being subject to public consultation.

*Proposed deliverable:*

- *Make the safeguard of competition in the transition to all-IP networks an explicit element and key priority of this work stream.*
- *Consult stakeholders on the upcoming BEREC draft report on the migration to all-IP in the access networks*

➤ **1.6 Monitoring implementation of the BEREC revised Common Positions – 3<sup>rd</sup> phase (Report)**

We welcome BEREC's upcoming report on the results of the monitoring exercises yet we urge BEREC to go further and reinforce actions aimed at ensuring the consistent availability of key wholesale access products throughout the EU.

The fact that (i) standards for Layer 2 Ethernet (including the Metro Ethernet Forum's 'carrier grade 2.0' Ethernet certification) are established, (ii) standardisation for G.Fast/FTTdp and WDM-PON is achieved, and (iii) tangible work is well advanced on multi-operator vectoring, shows that the current timeframe is particularly favourable for bold actions on harmonisation and the development of pro-competitive standards.

BEREC should include in its WP2016 a deliverable which would go beyond the best-practice tables on wholesale access which currently exist and thus define harmonised characteristics and specifications for key wholesale access products – not only virtual access products and terminating segments of leased lines but also physical unbundling products. This work stream would be linked to the on-going monitoring exercise and BEREC's work stream regarding Layer2 WAPs. BEREC should look closely to the work which the European Commission will be undertaking under the framework review in order to ensure coordination and provide technical advice whenever necessary/required.

ECTA's proposal is in line with BEREC's views on the 2013 EC draft Connected Continent Regulation proposal that *"where demand for a harmonised wholesale product is clearly manifested to address the needs of European electronic communications providers, the specifications of such a product should be developed by BEREC"*<sup>23</sup>.

Despite considering that physical unbundling products are not substitutes to virtual access products, the relevance of making fit-for-purpose VULA products available is unquestionable. BEREC should ensure that harmonised VULA products are defined in such a way so as to maximise the ability of the access taker to define its own downstream (retail or wholesale) service characteristics and pricing. In particular, wholesale charges for the harmonised VULA products should be usage independent and the product should allow, as much as possible, for innovation and the provision of bundled retail services. Standardisation should also ensure that any limitations in terms of the performance of VULA products are based on objective technical limitations rather than on particular business decisions of incumbent operators. These considerations are also relevant to the work which BEREC is carrying out regarding L2 WAPs (see our comments to Section 1.4. of the draft WP 2016)

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<sup>23</sup> BEREC views on the proposal for a Regulation "laying down measures to complete the European single market for electronic communications and to achieve a Connected Continent", BoR (13) 142, October 17, 2013.

An assessment of best-practices and how to incentivise the standardisation of pro-competitive technology solutions, such as multi-operator vectoring, is also warranted.

With regard to the business segment and the provision of ‘high quality’ services for business users (market 4/2014), we would in particular welcome harmonisation of service level agreements and operational matters (e.g. provisioning timescales, fault repair time and associated penalties). It must be ensured that the access bottlenecks encountered by business service providers are effectively tackled by means of increased, consistent and effective harmonisation.

The conclusions should be included in a dedicated report.

*Proposed deliverable:*

- *Report on the definition of common specifications for key wholesale access products*

➤ **2. Challenges and drivers of NGA rollout and infrastructure competition**

ECTA very much welcomes this work stream and the proposed BEREC report on “*Challenges and drivers on NGA rollout and infrastructure competition*”. It is more than ever fundamental to demystify wrong assumptions and collect evidence which supports a key principle - that there is no trade-off between investment and competition (and regulation) but on the contrary, that competition is the best driver of investment.

One important aspect to look into is how the lack of effective NGA access has impacted the level of competition in NGA.

BEREC should also ensure that investment models, Equivalence of Input, infrastructure sharing and forms of separation are specifically addressed in this work stream. In this regard, BEREC should look into topics such as:

- (i) the costs, risks and key characteristics (e.g. network capacity, future proofing, upgradability, impact on innovation and competition) of the different NGA technologies currently deployed and forthcoming (e.g. vectored VDSL2, G.Fast, FttDP, PON FTTH, P2P FTTH);
- (ii) the realistic investment models for their respective profiles and the actual investment made by operators (compared with assumed/announced investments). In this context, co-investment models, separation models as well as new forms of financing should be explored.

It is essential *inter alia* to:

- (i) assess to which extent separation models could play a role in making investments in NGA fit with the risk profiles of infrastructure funds;

- (ii) explore which investment models would best meet the objectives of ensuring competition and efficient investment;
- (iii) correctly characterise separation models, in particular with regard to these models meeting the conditions set by Article 13a of Directive 2002/19/EC, and in terms of their effective ability to prevent discrimination.

Moreover, the reasons behind the lack of progress in SMP operator network separation, and the generalised failure (with partial exceptions) of incumbent/altnet co-investment negotiations should be looked into.

BEREC should also assess whether persistent discrimination by incumbents needs to be further addressed by NetCo separation or whether additional options, such as permitting third parties (independent contractors appointed by altnets or altnets' own personnel) to perform activation and maintenance on the SMP operators' infrastructure, would be required.

*Proposed deliverable:*

- *Report on Challenges and drivers on NGA rollout and infrastructure competition to explore investment models, Equivalence of Input, infrastructure sharing and forms of separation*

### **3. Oligopolies**

- **3.1. Input to the Review with regard to oligopolies (criteria of tight oligopolies, symmetric regulation etc.)**

ECTA very much welcomes the work which BEREC is carrying out. Indeed, the development of oligopolistic market structures may in some cases contribute to a sub or non-competitive market outcome resulting in harm/welfare loss for users (consumers and businesses/public administrations) and thus require regulatory action. In particular, wholesale markets addressing the key inputs for fixed access network connectivity<sup>24</sup> are prone to the increased occurrence of duopolistic market structures. NRAs which have traditionally been focused on regulating markets characterised by individual SMP must have the proper tools to address joint dominance.

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<sup>24</sup> In particular markets 3a, 3b and 4 of the Commission Recommendation of 9 October 2014 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, OJ L 295, 11.10.2014, p. 79, available at: [http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L\\_.2014.295.01.0079.01.ENG](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2014.295.01.0079.01.ENG).

ECTA welcomes the guidance and suggested framework for assessing joint dominance provided in the draft BEREC report on Oligopoly Analysis and Regulation<sup>25</sup>, which can be a key contribution to making the concept of joint dominance operational.

ECTA is particularly concerned with fixed oligopolistic/duopolistic market structures and considers that the application *mutatis mutandis* of the principles underpinning the SIEC test to *ex ante* regulation of such type of market structures should be explored and thoroughly tested in the context of the Framework Review (even if the finding of single/joint SMP must remain the first and foremost threshold to regulate fixed network oligopolies/duopolies). An option worth exploring is to also allow for regulatory intervention in the absence of a single/joint SMP finding if remaining enduring economic bottlenecks or the market structure are on a forward looking basis likely to significantly impede the development of effective competition and thus evidence enduring market failure.

BEREC, the European Commission, and the co-legislators must ensure, in the context of the Framework Review, that NRAs have the necessary tools to remedy uncompetitive outcomes of oligopolistic/duopolistic market structures. Options such as the one presented above should therefore be explored.

ECTA welcomes BEREC's cautious approach *vis-à-vis* the regulatory treatment of tight oligopolies. A predictable regulatory framework is of utmost importance for all industry players and therefore the *ex ante* application of a variant to the SIEC test should be thoroughly explored, tested, based on a clear framework and not lead to arbitrary outcomes.

Whilst BEREC has already carried out a very thorough investigation, an issue such as the one at hand requires additional consultation and ECTA looks forward to further engaging with BEREC on this discussion.

➤ **3.2. BEREC input on mergers & acquisitions (input to be prepared by a consultancy)**

ECTA commends BEREC for commissioning an external fact finding study on "*Post-mergers & acquisitions market developments*". This fact-finding exercise will hopefully provide a good factual assessment of market developments post-merger, including effects on consumer welfare, the level of competition, and the effectiveness of the remedies imposed.

We would urge BEREC to go further in this work stream and to specifically look into the relationship between consolidation, investment and competition, combining the factual data collected by the external consultancy with an assessment of existing literature on this topic. The results of this assessment would be included in a separate report.

*New proposed deliverable:*

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<sup>25</sup> BEREC draft BEREC Report on oligopoly analysis and regulation, BoR (15) 74, June 2015.

- *Report on the relationship between consolidation, investment and competition*

➤ **4. Input to the Review with regard to spectrum (in cooperation with RSPG)**

We very much welcome BEREC's proposed report or input paper on best practices related to spectrum management. It is essential that best practices on pro-competitive spectrum auctions, which ensure a sustainable competitive market structure, as well as good examples of pro-competitive network sharing arrangements, are disseminated.

***B. Promoting the Internal Market***

➤ **6. Preparation of the review**

ECTA commends BEREC's deep involvement in the review of the Regulatory Framework for electronic communications. As stated in chapter II *supra*, a pervasive principle must underpin all of BEREC's activities – the reinforcement of the competitive thrust of the regulatory framework.

➤ **7. Economic impact of OTTs/CAPs on market definition and competition**

ECTA welcomes BEREC's on-going work on this topic and will respond to the dedicated on-going public consultation.

With regard to the impact of OTT services on the wholesale markets, notably on the provision of fixed voice services, ECTA would just like to reinforce the point that, based on their key characteristics (in terms of reliability, quality etc. and the usage patterns by end-users), it does not appear that unmanaged VoIP/OTT services constitute a substitute and effective competitive constraint to fixed voice. Whilst unmanaged VoIP services are increasingly being used by residential consumers, a substitution trend cannot be clearly identified which could justify deregulation at the wholesale level. Fixed voice subscriptions are not being given up by consumers – the percentage of households with a fixed subscription has been stable over the last few years – and there is evidence suggesting that unmanaged VoIP is used as a complementary service to traditional fixed voice.<sup>26</sup>

➤ **8. International roaming**

***Proposal supported by most challenger ECTA MNOs/MVNOs***

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<sup>26</sup> Only 36% of European households with Internet access use the Internet to make calls over the Internet. 30% of households with Internet access make use of VoIP to make free calls to individuals who have subscribed to the same Internet phone service. Only 4% of households use a VoIP service to make calls to landlines or mobile numbers. See the [Special Eurobarometer 414 - E-communications and telecom single market household survey](#), March 2014.



In light of the roaming reform put forward in the recently adopted Telecoms Single Market Regulation, it will be key to ensure, as a matter of priority, that wholesale voice/sms termination rates are harmonised and reduced, and that wholesale international roaming caps are reduced to reflect underlying costs. This will be essential to enable a working transitory regime on international roaming from 15 April 2016 and the abolition of retail roaming surcharges by 15 June 2017. This must occur in a manner which enables all operators (including MVNOs) to compete for bundled mobile domestic and international roaming services, for data-led services, for M2M/IoT services, and supports innovation going forward.

➤ **9. Article 7/7a Cases**

BEREC's involvement in Article 7/7a cases ensures an appropriate system of checks and balances and is of great value added.

It would be highly beneficial for stakeholders to have access to the Article 7/7a Phase II database which BEREC has developed.

***C. Empowering and Protecting End-users***

➤ **12. Input to the Review with regard to the revision of the Universal Service Directive**

ECTA welcomes BEREC's involvement in the review of the Universal Service Directive and of the scope of the Universal Service.

ECTA would caution against the inclusion of broadband access/connection in the scope of the Universal Service Obligation. Key concerns include:

- transfers between parts of the industry leading to distortions, especially if the amounts are large;
- no wholesale access conditions attached<sup>27</sup>
- disputes/long history of litigation
- poor performance of the USO
- administrative cost for USO funding

With regard to the review of the Universal Service Directive and in particular of the rights and obligations designed to protect end-users, ECTA would like to reiterate that the

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<sup>27</sup> The first two concerns listed can be avoided if State Aid funding is used to subsidise broadband roll-out in non-addressable areas.

different needs of consumer and business customers must be acknowledged. In fact, legislation and rules aimed at protecting consumers' rights often extend the scope of specific obligations to business operators even if such extension is not required. Imposing rules whenever strict arrangements<sup>28</sup> with business customers (of potentially any type or size) are already in place through contract negotiations can add an unnecessary administrative burden or create disproportionate obligations on operators serving business customers. This results in additional costs in service provision, investments in very expensive IT solutions and potentially prevents business operators from providing innovative and future-proof services to business customers. This type of situations could be avoided by clearly defining the scope of application of consumer protection rules e.g. by consistently using appropriate wording (i.e. "consumers" or "mass market"). This issue should be considered during the review of the Universal Service Directive and of the EU Regulatory Framework.

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<sup>28</sup> E.g. high level of quality of service provision, dedicated helpdesk, SLAs with very strict penalties in case of non-compliance.

## **ANNEX I - PROPOSED DELIVERABLES AND RECOMMENDATIONS**

Issue	Deliverables	Timing	Public consultation
<b>Migration to all-IP in the access networks</b> (Chapter 1.4)	<ul style="list-style-type: none"> <li>▪ Make the safeguard of competition in the transition to all-IP networks an explicit element and key priority of this work stream.</li> <li>▪ Consult stakeholders on the upcoming BEREC draft report on the migration to all-IP in the access networks</li> </ul>	-	Yes
<b>Monitoring implementation of the BEREC revised Common Positions – 3<sup>rd</sup> phase (Report)</b> (Chapter 1.6)	<u>New deliverable:</u> Report on the definition of common specifications for key wholesale access products	Q4/2016	Yes
<b>Challenges and drivers of NGA roll-out and infrastructure competition</b> (Chapter 2)	Report on challenges and drivers of NGA roll-out and infrastructure competition to explore investment models, Equivalence of Input, infrastructure sharing and forms of separation	Q3/2016	Yes
<b>BEREC input on mergers and acquisitions (input to be prepared by a consultancy)</b> (Chapter 3.2.)	<u>New deliverable:</u> Report on the relationship between consolidation, investment and competition	Q4/2016	Yes