

# **A symmetrical regulation for an intensified very high broadband deployment**

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## **Abstract**

After two decades of regulations promoting competition in the European telecommunications sector, the European Commission has announced it will soon be revised. From former monopolies to intense competition on the broadband and very high broadband markets, the landscape has changed drastically since the regulatory framework was implemented. Taking into account the objectives and priorities of the new Commission, the revision of the regulatory framework will have to assess the current regulation's outcome in respect to competition and investment and its possible drawbacks in that respect. Mobile only operators weakened in a fixed-mobile converging world, debatable concepts like the "ladder of investments", challenges such as the definition and characteristics of network access services and unbalanced interconnection fee flows are some of the elements to be considered. At the end of the review, in a forward-looking view, the Commission will have to modernise the framework to better suit the current and future telecommunications landscapes. The evolution of this market must be sustained by heavy and continuous investment, especially in new generation networks, that demands an optimal level of competition for these investments to occur. Such an optimal level of competition promotes investment, giving rise to the continuous integration of advanced technologies and, as a result, reducing network capacity unit costs and ultimately unit prices. All the elements gathered lead us to propose a high priority for the new framework, namely investment in new networks and the adaptation of the regulatory rules in line with this objective. The level of competition and the continuous need for investments call for a move from the current asymmetric regulation, based on the SMP concept, to a symmetric one, to regulate fixed network access and interconnections, better suited and less intrusive for the benefit of the consumer and the European digital economy. Furthermore, the mobile market

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<sup>1</sup> The opinions expressed in this article are those of the author and do not necessarily represent the positions of Orange.

is not anymore a candidate for regulation being already under the constraints of a highly competitive market and of licence agreements obligations.

**Key words: regulation, telecommunications, network access, interconnection, investment, dynamics, unit prices, symmetry**

For two decades, the European Union has been promoting the development of effective competition in European telecom markets. The telecom sector is among the sectors that have been through the most important technological and user behaviour changes during the last few decades. A review of the current European regulatory framework has been announced by the European Commission to adapt it to the market context.

This paper suggests a revision of the telecom regulation's objectives and contents to support the new priorities of very high broadband infrastructure deployment and innovative end-to-end service development. The related network access and interconnection obligations must be tailored to better fit this VHB market's current and future states. After a reminder of the rationale behind the existing telecom network regulation, the paper studies the current characteristics and stakes of the European broadband and high-speed broadband markets. Particular emphasis is put on their technological intensity, leading to the need for sufficient profitability to answer a great and permanent need for investment. We then assess the reasons for reviewing the current rules and suggest we move from primarily asymmetrical regulation to primarily symmetrical regulation, to deal with fixed infrastructure access and network interconnection in a forward-looking manner, without disrupting the actual essence of the regulation.

## 1- Regulation of the telecom sector in short

### **Reasons for regulating the Electronic Communication networks: to break down historical monopolies and open up the networks to market competition for consumer surplus**

The legal evolution to move from public telecommunication monopolies to market competition started in the 80s, led by the European Commission. At that time each national market had a single copper network. Even after the telecommunication activities were legally opened to competition, markets were still dominated by the former monopolies operating the copper network. Political institutions considered that market entry should be supported by regulatory intervention to reach the state of effective competition required under standard European competition policy to optimise consumer welfare.

Market entry was first supported by ad hoc regulatory interventions (carrier pre-selection obligation, local loop unbundling obligation). Then, the European Regulatory Framework, adopted in 2002 and slightly revised in 2009, promoted market entry using the principle of ex ante asymmetric regulation based on the Significant Market Power (SMP) concept, in turn derived from the competition law principle of dominance. In particular, the SMP concept is

applied to the former monopoly which controls the copper network. Considering that rebuilding a copper network would be economically inefficient, regulation imposes that the existing copper network should be opened to new entrants at cost oriented price and under non-discriminatory conditions.

This so-called “asymmetrical regulation” is based on an analysis of the markets supposed to be regulated - because they face competition problems - and the possibility of finding an operator with Significant Market Power on this market. If one is found, it will then have rules (remedies) imposed upon it to give new entrants access to its network under technical and commercial conditions allowing them to become competitive on the retail market, and then build their own network progressively – a principle known as the “ladder of investment”.

Consequently, the incumbent fixed operators have been quite heavily regulated in Europe. Regulation has not only concerned the legacy assets, but also new infrastructures built after the market was opened: first broadband access infrastructure and related equipment, then fibre access infrastructures. This has led to many debates about the proportionality, fairness, and efficiency of this policy in an evolving market, when investments are required.

Besides access, the framework also imposes on network operators, being mobile or wireline, the obligation to negotiate interconnection with each other for the purpose of providing end-to-end telecommunication services, to ensure provision and interoperability of services all over the European Union. This obligation is symmetrical in the sense that it applies to all operators and not only to SMP operators. However, this symmetrical obligation generates for each operator a SMP concerning network traffic reception because they own their network (the “termination monopoly”), which is regulated under the instruments of asymmetric regulation. The “termination fee” paid by each operator to terminate a call on another operator’s network is also a symmetric obligation.

In its objectives, the telecom framework is deemed to promote the emergence of effective competition while supporting efficient investment - particularly in enhanced infrastructure. The need for ex-ante sector specific rules is supposed to decrease, as competition in the markets develops and electronic communications should ultimately be governed solely by competition law.

## 2 – The current status of the market: a capital intensive market with the deployment of broadband and very high broadband networks and services in a highly competitive environment

### **2.1 Evolution of the broadband market: a great need for investments to build Next Generation Access Networks and the necessity to set an optimal level of competition intensity for these investments to occur**

The European Commission had high expectations for the economic benefits of very high broadband deployment for the European economy, as stated in its Digital Agenda for

Europe<sup>2</sup>. However, the current situation is not in line with the expectations and Europe is lagging behind the US and Asia in the digital area.<sup>3</sup>

The broadband landscape has radically changed since the last framework revision in 2009. Platform based competition has developed, with the rise of cable operators providing broadband and very high broadband access. In addition, local authorities and, in particular, municipalities have an increasing role in the roll-out of new wireline access infrastructure. Alternative fixed operators, MNOs or unbundlers have also been active, in particular under co-financing arrangements for NGA investments. With the deployment of new platforms there are now more and more competing network infrastructures and not only in dense areas. In addition, the retail market is highly competitive with diverse and enriched retail offers. The pressure of new unregulated competitors from the Internet world, as Over the Top Players, has erased any form of the former monopolies' market power on the retail service side and, more generally, generates a significant decrease in European telecom revenues.

Moreover, markets are now massively oriented towards fixed-mobile convergence which transforms the competition landscape.

There is a technological fragmentation in the wireline NGA networks with a patchwork of heterogeneous technologies, in stark contrast with the technical homogeneity of copper based telephone networks for which European regulation was designed. Correlatively, regulation applied to NGA networks is also much more heterogeneous than before in Europe, where unbundling was the standard.

Concerning interconnection, the levels of national termination fees have decreased but are still not harmonized, which generates unbalanced financial transfers between European countries and also between European and non-European ones.

**2.2 The particularity of the capital intensive network activity with fast technological progress: an optimal level of competition is needed to maximise the investment of the market players. This optimal level requires a degree of market concentration, which should not be confused with the degree of competition.**

Communications, including high speed access to Internet, are provided over wired and wireless networks. The role of network providers is to design, develop, maintain and upgrade the most efficient infrastructures for these exchanges and ensure the best experiences for users. Uses are permanently increasing and becoming more and more demanding in terms of bandwidth, speed, security and reliability. Consequently, the

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<sup>2</sup> <http://ec.europa.eu/digital-agenda/digital-agenda-europe>

<sup>3</sup> For example Telco investment per capita are twice higher in the US than in Europe, the wireless revenue per capita is 50% higher in US than in Europe in 2013...( Bernstein - European&LatAm Telcos: Consolidation, Regulation & Competition in One, Three & Five Years - 12May 2014); The U.S. led Europe in NGA coverage with 69% of the subscribers against 34% in June 2014 – Idate State of FTTx worldwide 2014

electronic communications industry is incorporating fast and continuous technological changes that require a high level of investment and a high rate of capital intensity. Real competition occurs through investment. Such intense competition generates dynamic efficiency gains beneficial to consumers and the economy in general. The benefits relate to the provision of a wide range of services at permanently and rapidly decreasing unit prices, with a knock-on-effect on adjacent industries due to the incorporation of technological progress, brought about by investment. Thanks to investments, the volume and the quality of services are continuously increasing. To sustain the investments which incorporate technological changes and allow for these dynamic efficiencies to occur, network operators need sufficient profit margins. An efficient level of competition is the level of competition for which the dynamic efficiencies provided by investments are at their maximum. In the telecom sector, this optimal intensity of competition can only occur in a concentrated market structure.

As a result, the main concern of competition authorities and policy makers in general should be researching the optimal level of competition intensity that allows dynamic competition through investment, rather than increasing the number of market players for the sake of reducing the degree of market concentration and achieving short term retail price decreases.

The key economic characteristics of efficient competition in telecommunications markets have been very well analysed in a comprehensive HSBC report released at the beginning of 2014: "Competition can boost innovation, but beyond a certain point, it can also hamper it. This suggests that there is an optimal relationship between margin and investment, and that considerable care is needed when working on the basis that competitive intensity necessarily drives investment." The report also shows that dynamic efficiency gains (specifically, capex) are primarily responsible for powering unit price declines, and that sufficient margins are required to support the capex involved. It concludes saying that higher margins would lead to higher investment, enabling European operators to optimise their capex to deliver capacity at the lowest unit cost.

Three recent articles illustrate the relationship between market structure, profit margin, investment and unit prices. The first one, by Georges Vivien Hounbouon and François Jeanjean (2014), is related to the level of competition intensity that maximizes private investment in the mobile telecommunications industry. This article empirically assesses the impact of competition intensity on investment in new technologies within the mobile telecommunications sector. Using firm level panel data and an instrumental variable estimation, it evidences an inverted-U shaped relationship between competition intensity and investment. The level of competition intensity that maximizes investment stands at 63 percent. This means that the maximal level of investment is reached, on average, when the operating profit represents 37 percent of total revenue.

This result is confirmed again by a theoretical model that yields an inverted-U relationship between competition and investment. It shows that the potential technological progress that may be incorporated through investment, drives the form of the relationship between static competition intensity and the level of investment. The higher the potential technological progress, the higher the level of profit - and the lower the level of static competition - that maximizes investment.

The second article, by François Jeanjean (October 2014), identifies the relationship between investment and the fall in unit prices of mobile telecommunications services. Mobile industry is characterized by a sharp, continuous fall in megabyte price, which greatly benefits the consumers. The author identifies the main parameters that lead to such a fall and shows that traffic growth is by far the main cause. Using a 20-country wireless market dataset, it proposes a parametric model showing that traffic growth and the reduction of unit prices per Mbyte predominantly stems from investment. The effect of margin reduction on investment and prices depends on the initial level of EBITDA margin. If EBITDA margin rates are above 40%, increased competition encourages investment and prices decline. If it is below 35%, increased competition reduces investment and slows down the decline in prices.

The third article, by Georges Vivien Hounghonon (2015), analyses the impact of the arrival of a new operator in France and the merger of operators in Austria on the unit price per Mbyte. It shows that the static models of industrial organization can be challenged in innovation-driven industries like the mobile telecommunications markets, concluding that an increase in competition leads to a decrease in prices. The empirical evidence relies on the change in competition intensity initiated by the entry of a fourth mobile operator in France and the merger between the third and the fourth mobile operators in Austria. Using a double-difference matching identification strategy, it turns out that the entry in the French market increased the unit price of mobile data services by 0.4 USD cents per Megabyte; contrary to the merger in the Austrian market which lowered the unit price of mobile data by 0.6 USD cents per Megabyte. These results stem from a fall in the investment in new technologies following the entry in the French market, unlike in Austria...

### 3 – The necessity of adapting the regulatory framework to the market and the substantial investment needs, benefiting from past experience and focussing on the unsolved issues

#### ***3.1 In its evaluation of the Telecom Package of 2009, the Commission should include the drawbacks of the current framework, in the way it could distort competition or investment.***

**- Unbalanced financial transfers between European countries due to interconnection fees.** A drawback of the interconnection regulation is the unbalanced financial transfer generated by non-symmetric termination rates throughout Europe and outside Europe<sup>4</sup>. This phenomenon has been identified by the French Competition Authority as well as the

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<sup>4</sup> For example, the mobile termination rates in Europe go from 0.450 in Malta to 6.275 in Luxembourg – July 2014. Bercet Termination Rates Benchmark Snapshot BoR (14) 173

European Commission. The French Competition Authority commented on this situation in its Opinion issued on 14 October 2013<sup>5</sup> to Arcep about the analysis of French terminations. It mentions the non-homogeneous application of the Recommendation to the detriment of French operators (penalised more than non-European countries and that the consequential unbalanced financial transfers at European and International levels are not justified by technical or economic reasons). The French Competition Authority concluded that a reinforced harmonisation at the European level and a framework allowing the European operators to be on an equal footing with non-European ones must be actively looked for and deployed.

**- The fragile position of Mobile Network Operators in the area of convergence.** Wholesale infrastructure access activities for wirelines are still, in a large part of Europe, in monopolistic or duopolistic market structures. The outcome may be deemed inefficient mainly in cases when fixed infrastructure owners operate in fixed mobile convergent markets and threaten the activities of pure Mobile Network Operators (MNOs) due to the growing complementarity between fixed and mobile activities. The regulatory framework can in theory address this issue in case of a fixed network monopoly. When a telecom operator and a cable-operator are competing on the fixed market, the regulatory framework's provisions to deliver fair and efficient access to wireline infrastructure to pure MNOs are not entirely efficient. As they are based on the asymmetrical obligations of one market player, they generate both regulatory distortion between the telecom operator and the cable-operator and inefficient access for the MNOs if the market player operating the unregulated infrastructure has a competitive edge over the market players who operate the regulated infrastructure. Furthermore, the concept of joint dominance has proved to be almost unfeasible, being too complex to prove.

**- The questionable "ladder of investment" concept.** The concept underlying access regulation, the "ladder of investment", if appropriate in the past, seems irrelevant in the NGA environment. In 2012, Grajek and Roller were already analysing the relationship between access regulation and infrastructure investment in the telecommunications sector using data covering more than 70 fixed-line telecom operators in 20 EU member states from 1997 to 2006. In terms of magnitude, they estimate the overall effect of access regulation on total industry investment in Europe to be a loss of some €16.4 billion, which corresponds to almost 23 percent of the infrastructure stock over the past 10 years, as stated in Jérôme Mathis and Wilfried Sand-Zantman (February 2014). Also in 2012, Garrone and Zaccagnino, with an empirical study, suggested that service-based entry does not lead entrants to subsequent facility based entry, casting some doubts on the validity of the ladder of investment theory. They also found that an increasing local loop price is not found to stimulate entrants' investment in alternative broadband networks. One of the conclusions of an empirical study run in 2013 (Maya Bacche, Marc Bourreau, Germain Gaudin) is that "the ladder of investment" approach seems to work for the migration from bitstream access to local loop unbundling, but does not work for the migration from local loop unbundling to a full access infrastructure. "If the objective of the ladder-of-investment approach is to

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<sup>5</sup> [http://www.autoritedelaconurrence.fr/user/standard.php?id\\_rub=483&id\\_article=2260](http://www.autoritedelaconurrence.fr/user/standard.php?id_rub=483&id_article=2260)

encourage entrants to build their own local access networks, [our] analysis casts some doubts on whether it is efficient in this respect.”

In the NGA environment, Mr. Cave himself, promotor of this concept, questions the relevance of the ladder in a discussion paper with Martin Peitz (2013).

- **The challenge of defining a network access fee level to promote investment.** The efficiency of certain regulatory remedies has been questioned in a large body of literature on the effects of copper unbundling, its long term negative effect on household broadband penetration rates with a possible similar effect of mandated fibre unbundling on NGAs<sup>6</sup>. The remedies related to wholesale price regulation have been seriously debated, especially during the consultation on the Commission’s recommendation project on cost methodologies and non-discrimination<sup>7</sup> in 2012. What is the optimal level of copper unbundling fees? The issue is even more complex when new networks like fibre develop. It places the related investment and the migration of the copper customer base to the fibre customer base at the heart of the debate. Another element of the debate was that the copper network will remain active for many years alongside the fibre deployment as it is very useful. Consequently, the impact of under evaluating the legacy network could be highly detrimental for the overall market. Mandating an access fee for the copper network that is too low reduces the value of the overall market, by reducing the price of the copper network’s services, and as a consequence depreciating the services on fibre and cable.<sup>8</sup> As a result, potential investors might leave this market for others with a higher profitability expectation, usually less - or un-regulated (and incentives to deploy NGAs can be hindered due to a sharp cut in the financing abilities of legacy network owners). The Recommendation of December 2013 has been a progress in that it stabilises the copper access fee which is positive for investments. On the other hand the use of an Economic Replicability Test in certain competitive circumstances remains potentially problematic for NGAs and the related profitability as described in Laure Jaunaux and Marc Lebourges (October 2014).

- **The relationship between the investment, the financial market and the regulation.** The regulation and its outcomes are important parameters taken into account by the financial community and that condition its comments and recommendations. In a recent HSBC report dated January 2015, the link is clearly evidenced between the Commission’s regulatory decisions and the level of capex of European incumbents, with “domestic capex swinging upward simultaneous with improving regulation.” This is for several reasons: the non-discrimination and cost methodology recommendation set to continue its work of re-inflating the fixed-line subsector and provides certainty until at least 2020, the consolidation of mobile markets, EC Commissioner Günther Oettinger’s statement that the sector needs to generate fair returns so as to be able to justify network investment, etc.. that HSBC declares

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<sup>6</sup> The long-run effects of copper-loop unbundling and the implications for fiber, Robert W. Crandall a,b, Jeffrey A. Eisenach b,c,n, Allan T. Ingraham b - 2013

<sup>7</sup> <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013H0466&from=EN>

<sup>8</sup> “Forecasting the Fiber penetration based on copper access regulation” François Jeanjean - June 28, 2013

to be “positive on the prospect of the European telecom sector.” Such a comment illustrates how the regulation also has an indirect impact on market value and investment.

### ***3.2 A necessary forward looking view of the market***

In the next review of the telecom framework the regulator will have to consider the changes that occurred on the market since the previous review and adopt a forward looking view of this same market, essentially because the new framework, if it follows the traditional EU legislative process, is expected to come into force, at the earliest, in 2019.

Without entering into a deep market prospective analysis, when the new framework will be implemented, one could legitimately consider that the market would have evolved, following the current trends, at least in terms of platforms and retail market competition. Important investment needs will remain in a fierce service competition environment from players in the entire value chain. Despite a trend towards market consolidation, we can reasonably consider that the number of players will not change drastically and that the copper network will remain active for some time. Regarding termination fees, except strong measures taken by the European Commission shortly, non-harmonization will stay the rule.

This could nourish the Commission’s work program for 2015 that announces “Where the rules are outdated or out of line with our priorities, we will review and improve them. Where there is unnecessary red tape, we will cut it. Where the rules we have make sense and serve our objectives, we will work actively to ensure they are properly applied, implemented and enforced so they deliver real benefits to citizens. ...”

## **4 – The need for the regulation to evolve and the advent of an efficient regulatory framework to monitor the development of NGAs: moving towards a symmetric regulation of fixed networks access and interconnection to promote investment**

### **4.1 The objectives of the framework: investment as the first priority**

“My first priority as Commission President will be to strengthen Europe’s competitiveness and to stimulate investment for the purpose of job creation.” “Jobs, growth and investment will only return to Europe if we create the right regulatory environment and promote a climate of entrepreneurship and job creation. We must not stifle innovation and competitiveness with too prescriptive and too detailed regulations.”... “The focus of this additional investment should be in infrastructure, notably broadband”<sup>9</sup>.

As far as Europe’s competitiveness is concerned, the competitiveness of the European digital economy must be specifically included in the new framework to redress growth in the EU and its international position.

In 2009, the Framework Directive already stated that “The current regulatory framework for telecommunications has been successful in creating the conditions for effective competition in the telecommunications sector during the transition from monopoly to full competition.” The primary objective was to promote effective competition. Now, and in line with the new Commission objectives, investment needs to become the digital sector’s priority, especially

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<sup>9</sup> [http://ec.europa.eu/priorities/docs/pg\\_en.pdf](http://ec.europa.eu/priorities/docs/pg_en.pdf).

in very high broadband areas, to permanently incorporate successive generations of technologies to always provide European consumers and businesses with the most efficient digital infrastructure. To accomplish that, an efficient level of competition intensity, allowing the necessary margin leading to the necessary investment, must be preserved as well as competitive pricing for massive adoption of efficient technologies by end users.

The regulatory regime should be lightened, focusing on the real remaining bottlenecks. The regulation needs to be simplified, to make it less intrusive, more focused, more proportionate and to rely more on competition law. Such a new regime would help attract investment from the private sector.

In addition, cooperation between network operators is crucial for the development of end to end services, as this kind of cooperation leads to massive positive network effects for the benefit of end-users. This cooperation should also be supported and not distorted by the regulatory framework.

It is necessary to adapt the regulatory tools to the new market trends and characteristics and to introduce an intermediate step before fully relying on ex post competition law.

## **4.2 Ad hoc measures for network access and interconnection**

### **4.2.1 Symmetric termination for network interconnection:**

The principle of symmetry for termination has already been adopted by the Commission: “the Commission has for a long time recognised that setting a common approach based on an efficient cost standard and the application of symmetrical termination rates would promote efficiency, sustainable competition and maximise consumer benefits in terms of price and service offerings.”<sup>10</sup>

The ERG (now called BEREC)<sup>11</sup> recognised in its Common Position that termination rates should normally be symmetric and asymmetry requires an adequate justification. More recently, in its commentary on the Relevant Market Recommendation review, BEREC states “Termination markets typically feature the same competitive conditions across different Member States and ex ante regulatory intervention is pretty much standard”. Given that this situation is unlikely to change in the foreseeable future, BEREC considers that a more simplified regulatory approach can be formulated, on the basis of guidance provided by the European Commission.

BEREC believes that the Recommendation on relevant markets is not the appropriate vehicle to implement this change to the regulatory approach. However, BEREC recommends that the European Commission considers the disproportionate burden of undertaking a whole market analysis every three years when next reviewing the Framework.”<sup>12</sup>

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<sup>10</sup> [http://ec.europa.eu/smart-regulation/impact/ia\\_carried\\_out/docs/ia\\_2009/c\\_2009\\_3359\\_en.pdf](http://ec.europa.eu/smart-regulation/impact/ia_carried_out/docs/ia_2009/c_2009_3359_en.pdf)

<sup>11</sup> The Body of European Regulators for Electronic Communications (BEREC) was established by Regulation (EC) No 1211/2009 of the European Parliament and of the Council of 25 November 2009, as part of the Telecom Reform package. It replaced the European Regulators Group for electronic communications networks and services which was established as an advisory group to the Commission in 2002.

<sup>12</sup> Commission recommendation on relevant product and service markets susceptible to ex ante regulation – BEREC’S opinion - BoR (14) 71

To avoid the problem of unbalanced financial transfers between countries a unique pan European voice termination rate should be imposed by the Commission using a Regulation<sup>13</sup> as the legal vehicle. Furthermore, reciprocity could also be the rule for the termination between European countries and countries outside Europe.

The framework, and in particular the Access Directive, should support the virtue of the symmetric regulation of interconnection in general, under the foundation that it would positively influence interconnection cooperation of the network operators for the benefit of the market and the consumers, with innovative and interoperable end to end services.

#### **4.2.2 Mobile market is no longer a candidate for regulation**

The framework should definitely acknowledge the fact that the mobile market is highly competitive, the disappearance of wholesale access from the list of relevant markets for nearly a decade is already an important indicator. Furthermore, mobile operators are also under constraints in the framework of license obligations that has proven to be efficient in term of competition deployment. The interconnection, notably the call termination issue is structurally manageable in a symmetric manner. However, mobile operators' access to fixed infrastructure is crucial for pure MNOs to survive, in a market where mobile and fixed data services are complementary for customers and fixed and mobile access is increasingly converging.

Consequently, the framework should explicitly forgo regulation of access to the wireline access infrastructure.

#### **4.2. 3 Symmetric regulation of fixed access networks:**

The framework should state that the primary principle to apply is symmetry. It could be inspired by at least two concrete examples: 1) the Directive on cost reduction to deploy very high broadband networks<sup>14</sup> and 2) the French example of the symmetrical regulation of the fibre network's terminal segment, that fits in with the current framework, article 5 "Access Directive" and article 12 "Framework Directive", as well as the NGA recommendation<sup>15</sup> that already permits the NRA to impose symmetric regulation in certain cases. It is now time to make this symmetric regulation more systematic and less of an exception.

The 2012 NGA recommendation stipulates that "where it is justified on the grounds that duplication of infrastructure is economically inefficient or physically impracticable, Member States may also impose obligations of reciprocal sharing of facilities on undertakings operating an electronic communications network in accordance with Article 12 of that Directive which would be appropriate to overcome bottlenecks in the civil engineering infrastructure and terminating segments."

In respect to the investment objective pursued by public authorities, fixed access infrastructure reproducibility is likely to be inefficient in many cases, particularly in the terminating segment of the fibre network, without mentioning the copper network which is the most obvious example. If access to this terminating segment had to be regulated, a

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<sup>13</sup> A regulation enters into force directly without any national transposition, which is different from a Directive.

<sup>14</sup> <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0061&from=EN>

<sup>15</sup> [http://www.arcep.fr/uploads/tx\\_gsavis/09-1106.pdf](http://www.arcep.fr/uploads/tx_gsavis/09-1106.pdf)  
[http://www.arcep.fr/uploads/tx\\_gsavis/10-1312.pdf](http://www.arcep.fr/uploads/tx_gsavis/10-1312.pdf)

symmetrical policy would reduce deployment costs, facilitate the deployment in private domains, and reduce the risk of indoor monopoly. Access through co-investment on the terminal part for instance has less distortive effects than an asymmetric rule not complying with the fact that multiple operators can have access to the customer. In the end, customers will benefit from symmetric arrangements between the providers.

The authorities must also consider the virtue of commitments and commercial agreements between operators when economically sound and open a window of opportunity, instead of imposing unbalanced remedies to the detriment of future investments.

As a result, especially where it is not economically rational to duplicate an infrastructure or part of it and where regulation is necessary to fulfil the revised objectives of the framework, the regulator should impose proportionate symmetrical obligations in application of Art.12 of the Framework Directive. These obligations could be, as it is the case today, differentiated geographically to better adapt to regional contexts. Article 12 of the Framework Directive should be complemented to guarantee that the process by which symmetrical obligations imposed to wireline access infrastructure should be regularly reviewed to account for market development and also notify the European Commission as it is the case today through the article 7 of the Framework Directive. Symmetrical obligations should stay relatively relaxed such as mandatory access, non-excessive prices or the absence of abusive discrimination.

Asymmetric regulation following Article 7 FWD market analysis procedure may remain as a complementary tool of wireline infrastructure symmetrical regulation. Market analysis will have to take into account provisions already deriving from symmetrical regulation before imposing asymmetric remedies. They might only reinforce remedies on access levels created by symmetric regulation. For instance, imposing additional asymmetric remedies of non-discrimination, publication of reference offerings or in very specific cases cost orientation. But asymmetric regulation should no longer have the possibility to add an access level to the one already prescribed by symmetric regulation. In the end, only one access level per fixed network and geography would be possibly imposed. To focus on the remaining bottlenecks, lightens the cost of regulation – direct and indirect.

Only the one access product that is effective and sufficient to remedy a competition problem at the retail level should be imposed in view of an identified retail market failure in a given geographic area. Any mandated access points beyond this appropriate access remedy increases regulatory costs and undermines pricing flexibility and innovation.

Conclusion: The deployment of new networks along with the increase of players and service offerings on the retail market call for a substantial modification of the regulatory framework. Substantial does not mean a rupture but a different approach more adapted to the context. If regulation is necessary, a fair, proportionate and symmetric regulation for fixed access networks and interconnection better suits the current competition landscape and is more investment friendly for the benefit of consumers and the digital economy in general.

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