ETNO Reflection Document (RD248)

Position on the Commission Communication on a Review of the EU Regulatory Framework for electronic communications networks and services

Executive Summary [I] [II]

The technology and market context

- The current proposals for the review of the regulatory framework will be in force in the years **2010/11 – 2015/16**.
- The e-communications sector is faced with unprecedented challenges, requiring firms to rapidly innovate and adapt. In the relevant timeframe, the **focus will shift from traditional telecoms regulation** such as access to (incumbents') networks **to competition issues familiar in other innovative sectors**.
- By 2012, the transition to all IP-networks will be largely concluded - the **'legacy' telephone network will no longer exist** in many places. Multi-play services, competition by internet and media companies on IP-based applications, full convergence of networks and services, wide availability of wireless LAN and high bandwidth 3G services will, amongst others, fundamentally alter competition.

Regulatory approach, investment and innovation

- **The application of the NRF is delaying large-scale private investment in advanced broadband networks and services needed in Europe**, depriving EU citizens of the potential benefits of innovative broadband services.
- The **Commission's claim that the current framework is favourable to investments is not backed by convincing evidence**. The regulatory indices used by the Commission to demonstrate a positive relation between investment and regulation are not suited for measuring the effects of the NRF.
- The **NRF has failed to achieve a gradual transition to competition law** that was envisaged by the Commission in 2001. Instead, the NRF covers almost all new market areas and has reinforced dependence on regulatory intervention.
- ETNO calls for a thorough change in the regulatory approach in line with a changing sector. The review should provide a **credible exit-scenario from ex-ante regulation** to ensure the transition to harmonised competition rules, **in order to align the electronic communications regulatory regime to that of all other innovative sectors of the economy**.

Structural and functional separation

- **Any forced -** as opposed to a voluntary, market-driven - **separation of networks and services in the form of functional or structural separation risks discouraging investment** in the e-communications sector. ETNO supports the findings of the Commission' impact assessment in this respect.
- **Giving NRAs the tool of functional or structural separation risks to damaging harmonisation and innovation in the single market.** Separation imposed by regulators 'freezes' a snapshot of competition and technological development

[I] BT does not support part 1 and 2 of this contribution.
[II] TDC does not support part 1 of this contribution.

on individual markets[1] and can lead to permanently diverging outcomes across the EU.

- **Discussing new** and potentially disruptive **remedies is counterproductive in an increasingly competitive and multi-platform environment** which requires de-regulation. Mandated functional or structural separation would put Europe's main investing companies at a massive competitive disadvantage.

Approach to spectrum

- The **regulatory framework for radio spectrum** should inter alia:
    - be stable enough to **allow operators to develop their strategies and facilitate return on investment** and **avoid harmful interference**, cross border problems and loss of quality of service
    - **provide the right balance between harmonization and flexibility** in the use of the spectrum, allowing the development of innovative interoperable technologies and services and fostering investments.
- **Harmonising frequencies facilitates the best use of this scarce resource** and is a sound basis for the implementation of a European market.
- The opportunities (e.g. quicker access to spectrum) and drawbacks (potential risk of interference, reduced interoperability…) of **technology neutrality** should be carefully evaluated before this approach is introduced.
- **ETNO supports the coordinated approach** as proposed by the Commission **regarding spectrum trading**.

Streamlining market reviews

- **Quality requirements for market analyses should be maintained**. ETNO does not support a simplified procedure when remedies remain unchanged. It could lead to a further decrease in quality and scrutiny of regulatory decisions.
- National **markets which were found to be effectively competitive** in a previous analysis **should no longer be analysed** in an ex-ante context. This would significantly reduce the bureaucratic burden for market participants and regulators.
- ETNO sees **no need for introducing a regulation on procedural issues** in view of better regulation principles and the transitional character of Art.-7 procedures.

'Consolidating the internal market'

- The review should
    - keep ensuring the application of **harmonised regulatory objectives and principles**,
    - **introduce accountability** for regulatory decisions and positions taken by institutions at EU level, including effective appeals and
    - **not create a new bureaucratic regulatory structure** at EU level that would be difficult to dismantle when ex-ante regulation is phased out.

- An **effective appeals process is essential** for market players. Before amending national appeals by means of EU law, it should be evaluated if problems can be tackled under the current Directives in those Member States where they exist.
- **ETNO welcomes** the Commission's **proposals regarding the review and justification of must-carry obligations** existing at national-level. In addition, the relevant article in the Directives should be limited to what is absolutely necessary.

Changes proposed in relation to numbering

- The **Commission's proposals related to numbering** issues seem to be based on mere assumptions and **raise many questions in view of their necessity, feasibility and objective**:
- The proposal **to include a general provision regarding users' rights to access non-geographic numbers cannot remove technical** or economical **limitations.**
- An **extension of** the **number portability obligation to include subscriber's personal directory** such as identifiers or Internet names and addresses **is outside the responsibility of NRA's and the EU**, but remains solely under the internationally established procedures of the relevant internet organisations.

Consumer protection and user's rights

- ETNO supports the Commission's proposal to have an **open debate about the need for a universal service regime** in the future.
- Decisions that would pre-empt this debate such as the proposed **separation of networks and services** for the purpose of universal service **should not be included in the review**.
- ETNO supports the Commission's conclusion that there is **no need for specific rules** at EU level **in view of the 'net neutrality' debate**.
- To allow NRAs to mandate **minimum quality parameters** for all services at all times **could lead to a significant price increase for the end-user** in view of increasing IP traffic and could seriously damage the attractiveness of the internet

Security issues

- **ETNO Members have a strong own interest to strengthen network security** in order to increase user confidence in new e-communications services. ETNO Member companies are continuously working to improve security, considering it a key competitive element of differentiation in the market.
- Therefore, **ETNO doubts that the** multiple and overly simplistic **regulatory measures proposed by the Commission would achieve the ultimate goal of improving security.** They could partly even be detrimental to consumer trust and e-confidence.

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Editorial Note: Given the rich expertise which ETNO Members have contributed to the positioning in all fields of the review, ranging from SMP regulatory issues to numbering, security etc., and in view of the substantial number of Commission proposals, it was decided to not shorten the comments to arrive at a fixed number of pages.

Introduction

ETNO welcomes the possibility to comment on the Commission Communication on the review of the EU Regulatory Framework for electronic communications networks and services and its accompanying documents.

ETNO represents the voice of 40 of Europe's largest telecommunications operators from 34 countries, providing services ranging from traditional fixed line telecommunication to mobile telecommunications, content provision, broadcasting and internet services. In 2005, ETNO members have invested 35 billion € in networks and services, including services for people with special needs. This investment accounted for 70% of total investment in the sector, making ETNO members the single largest contributor to the EU information society.

ETNO encourages the Commission and the EU legislator to seize the opportunity of the review to not only address the current system of spectrum management in the EU but also to remedy the shortcomings of the ex-ante regime of the New Regulatory Framework that currently delay or impede large scale private investment such as in new generation access networks in Europe. In the medium term, the next framework can achieve the transition of the e-communications sector to an industry controlled by general competition law as it is the case for the neighbouring IT and content industry. It can thereby help to create a level playing field between EU telecommunications companies and companies active at European and global level in those sectors which increasingly converge with electronic communications.

Our comments will address the need for a thorough review of the ex-ante regulatory regime and in the following comment in detail on the Commission proposals and the related working documents. In addition, the issue of structural separation will be discussed.

ETNO notes that the Commissioner has expressed her support for considering the functional or structural separation of EU telecommunications operators and the possible creation a European regulator. These issues are not mentioned in the review Communication and the related working document. Moreover, they are assessed unfavourably in the Commission's own impact assessment.

The focus on these two issues has raised concerns among policy makers and market participants over the Commission's policy approach. Trust in sound and consistent policy making by the Commission is infinitely more valuable for the sector than the success of individual short-term communication strategies.

ETNO invites the Commission to engage in an open dialogue on the substance of the future regulatory environment with all investing telecoms companies in Europe. ETNO shares the Commission's ambitions for the future of our sector and is prepared to take its responsibility for the industry's development to the benefit of the European citizen.

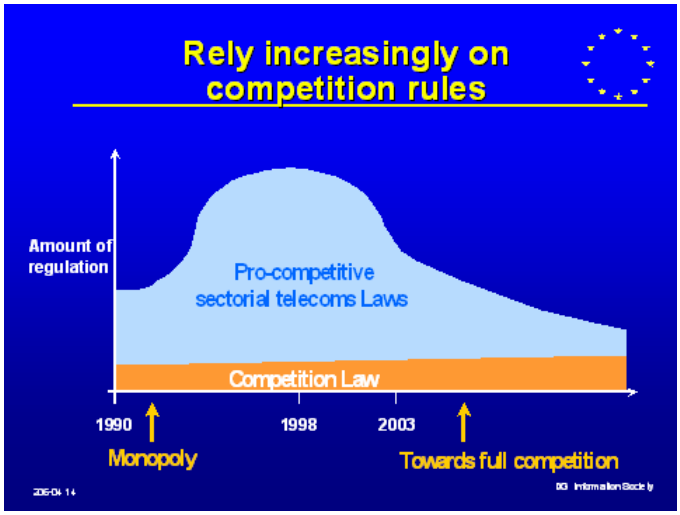
Part 1 - Economic regulation[2] of electronic communications [III]

I. The New Regulatory Framework – expectations in 2000

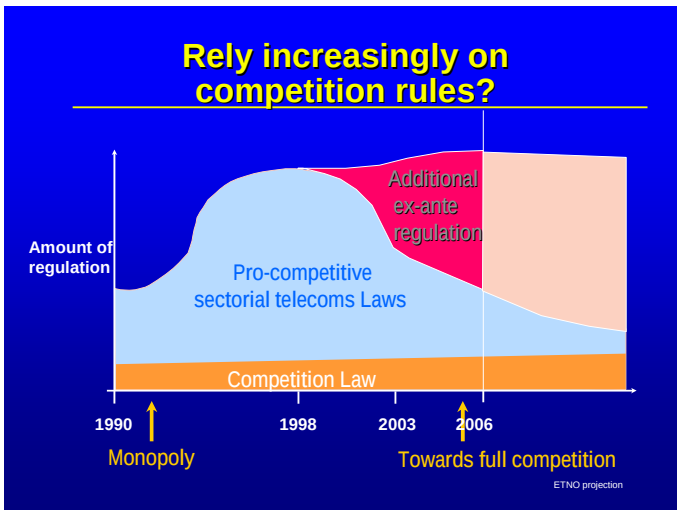
When EU policy makers decide on the rules that will govern competition in the electronic communications sector in the next decade it is worth briefly recalling the creation of the current, 'New Regulatory Framework' (NRF) in the years 1999 - 2002.

The Commission, European Parliament and other EU institutions at that time all declared their commitment to a transition of the telecoms sector towards a sector increasingly governed by competition law and marked by decreasing state intervention and increased reliance on market forces.[3] This commitment has been recently renewed by the Parliament.[4]

To promote the NRF, the Commission in 2001 *inter alia* presented the following slide[5]:



How the actual development of regulation in the past years would relate to this graph is of course open to interpretation. Considering the increase in scope of ex-ante regulation (covering new market areas, e.g. in the mobile area), very limited deregulation[6] and the imposition of multiple remedies on regulated markets, there is in any case a large discrepancy between the expectations created by the NRF to move to a sector increasingly driven by market forces and the actual results of the actions of regulatory authorities under the NRF:



[III] TDC and BT do not support this part of the contribution.

It is crucial to understand the reasons for this development. Was competition so slow to develop forcing regulators to keep existing regulation in place? Did technological change fail to take place? The contrary seems to be the case. Following an initial crisis of the internet economy at the beginning of the decade that also affected telecoms, worldwide technological progress and competitive developments have been breathtaking. Recent years have seen the breakthrough for VoIP and other IP-based applications, converged 'triple-play' offers by cable and telecoms operators and the emergence of new wireless access technologies, etc. [7]

In parallel, regulators have extended their activity to cover all of these developments: new 3G mobile services, hyper-fast broadband connections and VoIP services of established operators are all subject to ex-ante regulation in the form of price controls and mandated network access to different degrees in different Member States, while at the same time competing platforms exist in a number of markets which now provide the same set of services.

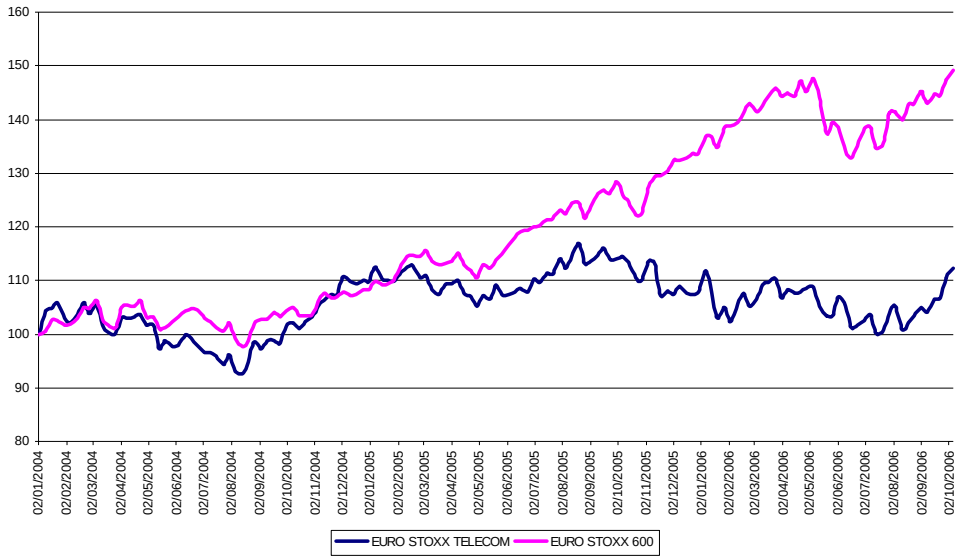
As an example, the principle of technological neutrality illustrates the failure of NRF in its everyday implementation. It was introduced to take into account existing equivalent technologies when NRAs assess the competitive situation on a market and thereby foster flexible deregulation. The Commission ensured markets in 2000 that:

> *"the principle of technological neutrality should not be used as a means to introduce more restrictive rules in any market".* [8]

Implemented by NRAs, the principle has become a means for an extension of intervention to new market segments, since a technologically neutral and at the same time static approach to market definition makes it relatively easy for NRAs to group new service, for instance retail VoB, into existing, regulated markets. ETNO's submission to the call for input in January 2006 has highlighted how other principles of the NRF have been used to similar effect.[9]

As a result,

- No new technology has escaped detailed scrutiny and intervention by NRAs.
- Cases of removal of regulation after a market analysis have been rare.
- No other innovative sector affords a similarly heavy asymmetric regulatory regime imposing such burdens on undertakings and public authorities / taxpayers alike.
- No other innovative sector has seen a comparable devaluation of the shares of its leading European companies on financial markets and an according reduction of their capacity to invest since the beginning of 2005:



II. Ensuring the transition with the next regulatory framework

This discrepancy between the expectations towards and the effects of the NRF is relevant for the review of the Directives for the years 2010 onwards.

In its Communication, the Commission proposes to keep all basic principles of sector-specific price- and access regulation of the NRF unchanged. At the same time, the responsible Commissioner has recently repeated that she sees regulation as "limited in time".[10]

However, a transition to competition law will not follow from the current system and methodology contrary to the expectations raised when it was introduced. This is evident from the described development of regulation under the NRF.

ETNO therefore encourages the Commission and EU policy makers to adopt a credible exit-scenario with strict time limits to for the future ensure the transition to a regime in which e-communications markets are controlled solely by the universally applicable and harmonised body of competition law. This would align the regulatory regime in electronic communications to that of all other innovative sectors of the economy.

ETNO has laid out a three-step approach for this transition in its contribution to the Commission call for input in January 2006[11], proposing an end to the present sector-specific price- and access regime by 2012. The fixed time-line would create certainty and provide positive incentives for all market players to position themselves in the market in view of a regime without regulatory assistance. Control over the sector would not cease but be transferred to the European Commission and national competition authorities (or NRAs where they fulfil the role of national competition authorities for the sector) applying harmonised competition rules. By 2012, on every market at least three market analyses based on the current and two revised Recommendations on relevant markets will have been carried out. This will provide competition authorities with an in-depth track record on remaining markets, where competition problems would still occur.

Certain specific obligations such as to negotiate any-to-any interconnection under commercial conditions could remain and be applied by competition authorities or NRAs. NRAs would moreover continue to carry out tasks such as overseeing technical infrastructure, implementing consumer protection rules etc.

The transition of economic ex-ante regulation to competition law could be accompanied by transitional periods for countries currently aspiring to join the EU and entering after 2008. During these periods the sector-specific price- and access regulation could still be applied. Such safeguards may prove necessary in countries where liberalisation has yet to take place. Transition periods should, however, not last longer than 2015 in order not to perpetuate a 'two-speed' regulatory regime and should only be invoked where this is still required.

ETNO would be happy to provide the Commission with a concrete draft set of rules which would ensure a smooth transition from the current ex-ante regulated regime to a regime based on competition law and solve transitional issues, e.g. possible concerns over premature removal of existing wholesale products from the market, upon request.

III. The influence of market and technology trends - meeting the consumer challenge in 2010

When analysing the current framework and elaborating proposals for its review, there is a danger of losing sight of the time horizon for which the review proposals are made: the years **2010/11 – 2015/16**.

The Commission's impact assessment gives a very general, sometimes simplified outlook on the technological development in the sector.[12]. These observations are not specifically linked to the proposals for the review of the framework. Yet an attempt to understand likely technological and market developments is indispensable for shaping the next framework.

The electronic communications sector is faced with unprecedented challenges globally, requiring firms to innovate and adapt to these changes at an ever accelerating speed. Already in the first half of the time period relevant for the review, the PSTN network will no longer exist in most places! Consumers will be served by all-IP networks and subscribe to different packages of multi-service offers.

The following **overview of disruptive technologies and their effects in view of the relevant timeline for the framework (2010)**[13] highlights some of the main technology trends and may help to put the task of the framework review in perspective:

Expansion in available bandwidth on fixed line	By 2010, there will be significantly higher bandwidths available, initially prioritizing downstream capacity. This is due to technological advancements on copper (ADSL 2+), coax and WiMax at the last mile as well as moving fiber closer to the end user. Pace and scope of this development, e.g. the availability in smaller regional towns, will also depend on market and policy conditions for private investment.
Unlicensed mobile access, e.g., Wireless LANs	By 2010, we would expect to see wireless LAN access widely in people homes, in businesses and in public places. Newer devices (including mobile phones) will be able to roam on and off wireless LANs. This trend will be backed by manufacturers, e.g., Intel suggests that by 2010 every microprocessor that they make will come with some wireless capability. [14]
3G-3.5G	By 2010, 3G will be well established. Higher bandwidth 3G data services will be used, but may still have a relatively high cost compared to the alternative (virtual free charge from wireless LANs). The use of data services will primarily come from businesses.
New form of broadcasting: mobility and move from broadcasting to egocasting	Much of the focus will be on upcoming closure of analogue TV channels and the debate on how the released spectrum will be reused (i.e digital dividend).Transition to HDTV will have started as well as use of MPEG4 for DTV. New forms of nomadic TV will appear, mobile video will become pervasive: mobile ("TV on the go") and portable allowed by various standards (3G; Wimax, DVB-H, DVB-T…). Development of portable media player (music, video, games…). Interactivity becomes a standard feature of the new broadcasting world and new services are deployed: My TV, my program, my schedule: from community TV (contributory participation for *Worldmadechannel,* videobloggers, Alcatel/ Microsoft's *Amigo TV* introduced early 2006 to share programs/ events within a community) to personal TV (to create on line contents: *My own TV*: Alcatel/ Microsoft end of 2006); increasing role of PtoP as a distribution platform and an enabler of on-line content markets: toward peercasting.
Alternative access mechanisms (e.g., power line commu-	By 2010, alternative access mechanisms (e.g., power line, high altitude platforms, and low orbiting satellites) to the main access forms of DSL/fibre, cable and wireless access will be used in isolated instances.

nications)	The challenges in deploying these technologies relate to commercial viability (sufficient scale and customer base) as well as technical issues (e.g., interference). Of these, power line communications could be used as an alternative to wireless home networks due to the existing cabling.
IP enabled services	By 2010 the majority of services will be migrated and delivered via IP, including many voice and analogue content services. This will provide increased flexibility and cost savings to large-scale operations. The main issue will be to control and operate the services in a way that enables consistent and high-quality provisioning and delivery independent of terminal, location and time.
RFiD	By 2010 RFiD will be used extensively, particularly in the Business-to-Business market as a means to track pallets and larger items. Smaller item tagging is likely to be starting. Furthermore, second generation RFiD tags with sensing capabilities will start to be deployed.
Home gateways and related terminals	By 2010, a large part of residential homes and small businesses will have a central gateway device as access point to different IP based services. This will be driven by advanced content services and the desire to have easy access to the content from multiple terminals. A significant number of terminals will be integrated, both on the supply side (e.g., PCs with a multimode server connected to a network competing with consumer electronics) and the demand side (ranging from specialized, dedicated terminals such as video console or general devices such as PCs). As many of these terminals will be connected to a home gateway and local network, two possible models can be used: PC centric or various terminals integrated through a gateway.
Smart devices	By 2010, the majority of microprocessors will have radio capability, making it possible for these devices to communicate and enable ambient intelligence applications. This will support the continued convergence of terminals for both business and private life.

Some of these developments directly relate to the NRF review and will shift the focus from traditional telecoms regulation such as access to (incumbents') networks to competition issues familiar in other innovative sector such as the IT and software industry which are best addressed by ex-post competition law.

- The advance of wireless access via LANs, WiMax and 3 – 3.5G, can increase choice for the consumer in broadband access provision and supplements the convergence of different delivery platforms for communications and media services.
- The full transition to all-IP core network increases flexibility and creates cost savings, positively influencing the incentives for the roll-out of alternative NGN core networks of which some already exist today.
- The development of terminal devices remains a potentially disruptive source of new competition by software firms and equipment vendors.

IV. Innovation, investment and competition [IV]

The Commission has rightly identified the effect of the current regulatory framework on investment, innovation activity and growth as a core measurement for the need for reform of the current regulatory regime.

ETNO's primary concern with the existing framework is that its current implementation tends to delay or even impede the major large-scale private investment in new networks and services needed in Europe, in particular in next generation access networks, thereby depriving the European consumer of tangible benefits of the information society such as new and innovative high-speed broadband services.

The Commission comes to a different conclusion, namely that "[…] *the principles and flexible tools in the regulatory framework, when applied in a full and effective manner, offer the most appropriate means of encouraging investment and innovation leading to growth."*

ETNO has constantly backed an effective and timely implementation of the framework. Yet the Commission's consultation documents and accompanying studies do not provide sound evidence for the Commission's conclusion. Both the figures for investment in comparison to other economic areas and their analysis on the relation between investment and regulatory indices lack robustness and/or relevance.

1. Investment in Europe

Throughout the last year, the Commission has repeatedly pointed to the lack of investment in ICT in the EU compared to the US. For example, the Commissioner stated that

> "[..] weak*er and later investment in ICT by the European economy has widened the productivity gap with the US. Their much larger ICT sector delivers benefits to their economy, yielding as much as 60% of their productivity growth*."[15]

This widely acknowledged investment gap is not mentioned in the Commission documents on the review. Instead, the Commission relies on estimate figures by a US study to find that Europe invests equally, if not more, than other economic regions.[16]

The absolute investment figures cited by the Commission based on service provider capex give no indication of the more relevant investment per head of population. The estimates are moreover counter-indicative compared to other available investment data such as OECD figures and data on telecommunications investment by the Groningen Growth and Development centre which saw e-communications investment in Europe at only slightly more than half the level of the US in 2004.[17] London Economics and PWC in their analysis of investment figures carried out for the Commission do not count the cited estimates among the 4 most relevant data sets of investment data.[18]

It remains unclear why the Commission bases itself solely on these estimates and does not analyse other sources such as OECD figures on investment. For a more detailed discussion of the investment gap in ICT and communications investment separating the EU and the US, see the recent report by Indepen "Restoring European economic and social progress: Unleashing the potential of ICT".[19]

[IV] In the following, ETNO will react in detail to the Commission review Communication and the accompanying documents on the issue of economic ex-ante regulation. ETNO's proposals in this section are relevant for the period of 2009/10 - 2012 in case the review of the regulatory framework achieves the final transition from the sector-specific ex-ante regime by 2012.

2. Regulation and investment – the Commission interpretation

The Commission has commissioned a study by London Economics and Pricewaterhouse-Coopers to investigate the relation between regulation and investment. It refers to the study to support the claim that those countries that have implemented the EU Regulatory Framework in an "open and pro-competitive" manner have attracted most investment and that the EU framework overall supports investment. The concept of an "open and pro-competitive" manner of implementation is rather vague. If, as implied in the study, it describes an 'easy-access policy' based on the ladder of investment as advocated by eth ERG, the study provides no empirical basis for this conclusion.

We found in particular that both regulatory indexes used to establish an empirical relationship to the investment data gathered are inapt to measure the success of the EU regulatory framework.

The one primarily referred to, the OECD regulatory reform index, does not provide a measure of NRF implementation. It does in fact not provide a measure of sector-specific ex-ante regulation in the first place, as it refers only to factors which are not covered by the NRF provisions governing economic ex-ante regulation (state ownership, removal of legal barriers to market entry (such as licensing requirements etc.) and market structure). The other index used by London Economics, the so-called ECTA regulatory scorecard, is called into question by London Economics themselves in view of its lack of quality and soundness:

> *"It* [the analysis by LE] *is also dependent on the quality of the inputs, particularly the ECTA scorecard. In the case of the ECTA scorecard, it should be borne in mind that the underlying data is based on the opinions of ECTA members. In addition, better scores sometimes appear to be allocated on the basis of more regulation rather than better regulation necessarily. As the regulatory framework makes clear, sometimes (generally where there is competition) the best regulation is no regulation, or less regulation.*"

The consultancy Indepen carried out a study for ETNO which found that the ECTA scorecard is no basis for an evidence-based policy in view of basic shortcomings in measurement, methodology and robustness.[20]

Due to the lack of a robust regulatory index, a number of the conclusions in the LE/ PWC study including the view that the current framework is considered positive and sound and can promote investment are not supported by the data but are drawn on the basis of interviews conducted by the consultants.

3. Regulation and investment – effects of the NRF

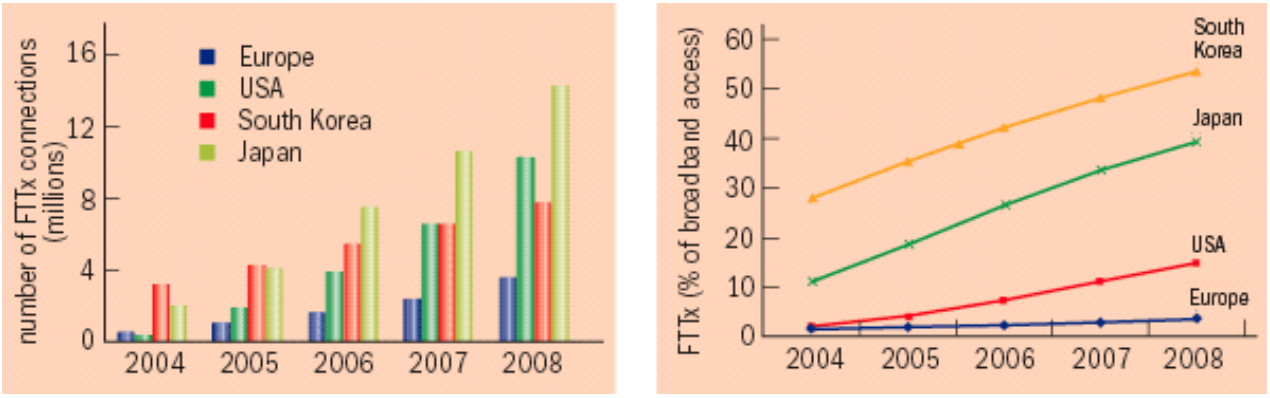
While the Commission Communication does not back its claim on an alleged positive relationship between investment and the NRF, recent studies support that there is a positive link between deregulation and investment and that access regulation negatively affects investment in local access networks.[21] A study by Mc Kinsey & Company draws the conclusion that deregulation has several benefits relative to solutions that focus on more extensive regulatory management of the sector. It finds that it would be better in dealing with uncertainty about the appropriate incentives for innovation, provide clarity about the future regulatory regime which would improve clarity on future returns and finally reduce opportunities for strategic gaming by key stakeholders.[22]

3.1 Review analysis does not take account of other economic regions

ETNO notes that the Commission does not analyse the effects of different regulatory approaches on investment on other economic areas such as the US or Asian economies.

In the US, a deregulation of new fibre infrastructure and subsequently of DSL services contributed to unleashing major investment in fibre networks by telephone network providers, allowing the US customer to profit from residential offers of regularly more than 25Mbit/s down- and 3-5MB upstream and HDTV services at a large scale. [23] Different approaches apply in Japan and Korea.

All of these countries, however, are rolling out the infrastructures of the 21st century while the EU is not. And the task to upgrade the telecommunications networks in order to cope with a rapid increase in IP traffic is becoming more pressing. The following graph highlights how the EU constantly loses ground in this field.



[Source: IDATE]

The Commission rejects the applicability of the American deregulatory practice in the EU on the grounds that, contrary to the US, DSL plays the dominant role in the European market. This argument does first of all not take into account that the US market has been fully deregulated, i.e. not even the dominant cable service providers are subject to ex-ante regulation. It moreover gives no answer on how the Commission wants to change the regulatory framework to increase the chances for a comparable situation of 'several pipes to the home' in Europe. At the very least, the lessons from the US call for a distinct regulatory treatment of national or regional markets already characterised by competing networks, a field on which the Commission does not provide new ideas in its review proposals.

3.2. The EU regulatory model as barrier to investment and sustainable competition

In Europe, a major obstacle to investment for the large network operators is the unpredictable application of the NRF to new networks and services, which are developed as a result of technological and market change and the modernisation of networks. Under the current regulatory regime, regardless of the technologies used, the regulation will be upheld with respect to the relevant product and services market up to the moment when the investments made create a state of effective competition. The current method of applying the NRF favours the growth of competition in services in the short term at the expense of more sustainable competition in infrastructure, which could be achieved in the longer term.[24] It supports the distribution effects between suppliers and users of services and between operators with significant market power and alternative service providers. An environment of administrative competition is being formed, which will require continuous maintenance and assistance with regulatory measures.

As a result, the current application of the NRF is resulting in a more intensive dependence on existing infrastructure platforms and is holding back the creation or upgrade of new and alternative infrastructure where it would be possible, thereby consolidating the existing barriers to the development of competition (and perpetuating a perceived 'natural monopoly' situation). Such an approach disregards the fact that infrastructure-based competition may bring overcapacity (and even overbuilding in some cases) which is however compensated by a highly positive impact on innovation in technology and services.

The perspective of withdrawing - in particular wholesale - regulation is therefore becoming very distant. This is exemplary in countries that are presented by the Commission as models for full and effective implementation of the NRF in the field of broadband.[25]

Against this background, the Commission's conclusion that 'competition drives investment' remains true. But the current regulatory framework overall does not.

4. New and emerging markets

The concept of new and emerging markets has not been applied in regulatory practices so far.

In potential fields of application such as VoIP or new ADSL2+ technology NRAs and Commission defined newly emerging services into a regulated market. The Commission has recently expressed its opinion that services based on VDSL technology - some of which are still unknown today – would not form a new market in its view.[26] [27]

Where technological neutrality in a market definition leads to the immediate inclusion of new networks and services in the scope of ex-ante regulation the concept of newly emerging markets is rendered largely meaningless. Commission and ERG require an NRA to first define a separate product and services market, clearly distinguished from existing, regulated markets by an assessment of demand and supply side substitution criteria under general competition law, before they can identify a new and emerging market as a separate market. This is a very high hurdle as in the early stages of the development of a new infrastructure or service, precisely this market definition will be difficult to undertake.[28]

The current approach to newly emerging markets does not take account of the dynamic, qualitative changes in competition in e-communications markets, for instance illustrated by the role of new and powerful players which are now active in e-communications markets (cf. the actors in the 'net neutrality' in the US). Even an "old" service like voice included in a bundle can become a different/ new one as the customer experience is changing.

The Commission does not discuss alternative concepts in substance and rules one out explicitly as a policy option for the current review.[29] A way to operationalise the new and emerging market provision in order to foster investment and avoid the difficulties in market definition inherent in the current interpretation has been developed by academics already in 2005.[30]

5. Dealing with investment risk – the market ensures an adequate return on investment

The Commission implicitly recognises that the problem of providing incentives for investment in a high-risk environment such as next generation network will remain if the new and emerging market concept is effectively ruled out as an approach to balance risk and long-term competition concerns.

ETNO welcomes the Commission's finding that regulators are unable to "know the true ex-ante project risks" of network investment.[31] The consultation documents, however, do not give any indication of how the review of the framework can tackle this problem if it does not revise the current system of ex-ante access regulation. Instead of the almost unconstructive conclusion that this is an area for "*regulatory cooperation*" where the "development *of Community practice could prove useful*" the Commission should actively go forward on this issue to address this perhaps biggest challenge for the e-communications sector as a whole.

There is a consensus among economists and regulatory experts that the calculation of cost-based access charges is an extremely complex undertaking – especially for networks that are still to be rolled-out -, and one where the regulator seldom gets it "right". This complexity which has led to hugely differing decisions for access prices and endless legal disputes for a 'simple' network element in a rather static market context such as the copper local loop after liberalisation, is multiplied in a multi-platform environment characterised by rapid technological change and uncertain development of market demand.

This is the situation that most network operators are facing when undertaking investments in next generation local access networks today and in the future. Attempts by regulators to further differentiate the level of risks and accordingly the cost of capital according to different operations of the same company have only increased this complexity. ETNO doubts that any variation of the cost of capital by the regulator – an option also mentioned by the Commission - is able to capture the true ex-ante risk of such an enterprise.

Moreover, investment decisions by undertakings and ultimately the decisions on financial markets which allocate capital for these investments are determined by expectations. Reports by financial analysts regularly assume that under the current EU regulatory regime , they expect first mover's above-normal profits to be 'regulated away' by NRAs and the Commission. This is the most important drawback of the current regulatory framework for investment and it deprives the EU citizen of possible benefits resulting from more and more timely investment in networks and service innovation.

To compensate the investor for investing now and not waiting for its investment (for example until market demand is more certain in view of experience in other markets), economists have developed the theory of so-called real options which would be added to a calculated cost-based access price. However, regulators seem to regard the modelling required for this approach as "*prohibitively problematic*". [32] Recent regulatory practise by NRAs and related guidance by the European Regulators Group (ERG) on the subject[33] do not provide an accepted and adequate solution to the problem either, but focus on traditional cost-based regulation.[34]

Accordingly, network operators faced with the threat of access regulation in a high-risk environment such as next generation access networks have argued for forbearance as the best way to ensure that the project risk is taken into account.[35] In those cases, market risks will determine the right return on investment. Network operators will grant access to their networks on voluntary terms to render their offer more attractive for consumers. And long-term competition concerns, if any, will be dealt with by competition authorities in the context of an ex-post control of communications markets. This might increase the risk of so-called 'type 1'-errors in the hypothetical case of a new, but permanently non-replicable network asset, but appears far superior to any ex-ante access regime for new networks administered by regulatory authorities.

6. The Commission's study approach to regulation of FTTx- networks

In the context of investment risks, we would like to specifically address the theses on FTTx regulation in a study by Hogan & Hartson and Analysys published by the Commission two month after the Review Communication.[36]

Independent of the recommendations on specific regulation, we note that the study acknowledges in line with ETNO's understanding that differences in competition, for instance due to population density, existence of alternative infrastructure etc., require differences in the regulatory approach on sub-national (regional) markets defined according to competition law principles.[37]

Regulatory treatment of FTTx in an ex-ante access regime

- The study contains a sweeping recommendation for cost-based access to FTTx networks. ETNO holds the view that the study's proposals are not a suitable basis of an analysis of the Commission on the subject.

- In particular the study presents cost-based access regulation of new fibre networks as a foregone conclusion without evaluating alternative policy approaches. In doing so, it disregards the principles of the current regulatory framework which allows access regulation, and even more if it is cost-based, only when a number of different criteria are fulfilled. In limiting itself to one single options, the study does not provide a full analysis of the issue in view of a possible revision of the framework. This applies to the option of not regulating access but equally to the modalities of potential access obligations (even for current broadband services, in many Member States bitstream services are not regulated on the basis of cost-orientation but retail minus). Cost-orientation is, as the study recognises earlier, the most intrusive remedy available for NRAs under the Directives and can only be applied if proportionate, *inter alia* in view of the economic viability of using or installing competing facilities, Art. 12 (2) a) Access Directive.[38]

- The recommendation on FTTx regulation are based on assumptions about the economic characteristics of fibre investment that are theoretical, untested and already in contrast to market developments in Europe, as illustrated by first market entries in several European countries:

  At the basis of the study's far-reaching recommendations lies the assumption that the 'passive layer' of FTTx deployment will in all likelihood constitute a non-replicable monopoly and therefore be characterised by less risk-prone profit margins. ETNO would like to point to the fact that where fibre investment by fixed incumbent network operators[39] takes place in the current regulatory environment in Europe, it is usually triggered by current and prospective competition from alternative infrastructures, in most cases cable, in some cases announcement of alternative fibre investment and possibly in the future also high-bandwidth wireless access technologies.

  Cable and future (V-)DSL- or FTTH-providers are fiercely competing for customers for interactive triple or other multi-play services with a highly uncertain outcome. Demand for high-speed broadband services is also largely uncertain, affecting take-up and the value per customer that can be generated over fibre access lines. This makes the investment in the "passive layer" and active layer of fibre networks a high-risk endeavour. It is worth recalling the US approach to broadband as discussed above in this context: cable competition was deemed sufficient to fully deregulate broadband. Cable competition is a reality also in a number of areas in the EU.

V. Commission proposals on consolidating the internal market - institutions and procedures for SMP-regulation

1. Art. 7 procedure

1.1. Simplification of notification procedures - proposals by the Commission

ETNO would like to underline that the administrative burden that the NRF imposes on operators and NRAs is not caused by the need for NRAs to notify their measures for 1 or, in case of serious doubts expressed by the Commission, 3 months to the Commission. This impression has been created in some of the contributions to the call for input, notably by the European Regulators Group. The proposals by the Commission for a "simplified procedure" may be a reaction to these complaints.

Rather than from the notification requirement, the bureaucratic burden placed on the sector stems from the excessive scope of application of ex-ante regulation, e.g., by 'double regulation' at the wholesale and retail level, extension of regulation to new services and formerly unregulated areas such as the mobile sector etc. The most effective and urgent measure to reduce the administrative burden caused by ex-ante regulation is to revise the list of relevant markets and reduce it to a core set of wholesale markets as ETNO proposes.[40]

The Commission Communication and accompanying documents do not fully clarify the scope of the proposals for a 'simplified procedure', namely whether they only concern the *notification* of market analyses at EU level or whether changes are also proposed with regard to the *national market analyses* and consultation process.

In the first case, the simplification would be of limited scope and not produce a major reduction of the administrative burden for NRAs, Commission or market players.

If the proposal concerns the national market analyses procedures *and* the notification procedure under Art.-7 FWD, ETNO is particularly concerned with the proposal to reduce the quality of those market analyses where "*only minor changes to previously notified measures are proposed*". This could create adverse incentives for NRAs, namely to leave regulation unchanged also in cases where an accelerated deregulation, removal of remedies and the transition of markets to competition law are warranted.

As regards the Commission's proposal on simplified procedure in case of notifications of markets which were found competitive in the previous review, ETNO believes that there is no need to further analyse such markets. This is a real option for the Commission to reduce the bureaucratic burden placed on participants of the market analysis and notification procedure.

ETNO equally opposes the notion that regular market analyses except after the change of the market Recommendation are no longer required and market participants should themselves provide evidence of material changes that require a renewed market analysis (pt. 4.5 of the working document). It is the responsibility of regulators to lift regulation whenever possible in view of market developments as otherwise regulatory obligations would become disproportionate. The proposal to partly transfer this task to the undertakings active in the market including the regulated operator that is subject to public intervention into his fundamental rights reveals a peculiar understanding of the rule of law and the role of public authorities. It would also imply that undertakings would continuously attempt to modify the regulator's agenda and priorities, which is not their role and limits regulatory certainty.

1.2. ETNO's proposals for more transparency of the Art.-7 notification process

ETNO Members have had mixed experience with the Art.-7-procedure so far. Overall, attempts by the Task Force to act as a counterweight in case of NRA decisions that are not backed by facts is welcomed by ETNO Members. In many cases, however, ETNO Members have felt that intervention against unjustified regulation has not taken place despite strong doubts in the Commission services over the justification of a national measure and in some cases that the Commission has proposed additional regulation where this was not warranted by national circumstances.

Moreover, access to information from the Task Force and access to the Task Force to deliver input has been problematic for some market players, as the procedure is formally limited to the Commission and NRAs. The latter fact also allows both Commission and NRAs to comprise and maintain their positions publicly, which may not serve the market in all cases.

From an industry perspective, therefore, some hands-on changes to the Art.-7 notification process could be envisaged for the transitional phase during which ex-ante regulation will still apply, resulting in greater transparency of the process:

- Limit pre-notification meetings to first round of market analysis

Pre-notification meetings played an important role in explaining the system of the NRF to NRAs. They have served their purpose and should be replaced with a transparent exchange of notifications and replies by the Commission to avoid an early agreement on outcomes which may not correspond to the prospective market developments which only become apparent as a result of national consultation processes.

- Limit or remove the possibility of withdrawal of notifications

A notification and a subsequent comment by the Commission should be - and stay - transparent in order for market participants and other NRAs to learn from the process. The Art.7-procedure should be fact-driven and therefore not be concerned with 'face-saving' of regulatory actors. If the possibility of removal is maintained, the Commission should publish the reasons for the withdrawal, clearly outlining the points of dissent.

- Modalities for expression of 'serious doubts'

In order to allow a more open-minded assessment by the Art.-7 Task Force and more effective control in cases of over-regulation, ETNO could imagine that the modalities of an expression of serious doubts at the end of the 4 weeks period are changed. For example, the Commission could state that it wishes to enter into the second phase, clearly signalling the area of its concern, however without highlighting its interpretation of the Framework and thereby binding itself in view of the final outcome of the proceeding, as it is *de facto* the case today. This would allow for a more open second phase deliberation where the Commission should obligatorily hear the views of the stakeholders directly concerned.

- In the context of achieving more transparency of Art. 7-procedures, ETNO supports the Commission proposals for a minimum standard for Art. 7 notifications.

1.3. Re-notification after vetoes – proposal by the Commission

ETNO agrees that following a Commission veto, an NRA should not stop the market review process altogether – which would already be problematic in the light of Art. 16 (1) Framework Directive - but adopt a revised decision and inform the Commission thereof.

2. Institutional framework for remedies and for policy guidance on remedies

The European Commission has proposed an extension of its veto powers in the Art- 7-procedure to remedies. At the same time, the ERG is promising to develop into a 'more effective' regulatory actor at EU level which would deliver more binding guidance on the application of remedies by NRAs.

2.1 Requirements to an institutional setting for EU communications policy

ETNO members feel that the institutional setting within the EU communications framework is an important element for enabling better regulation in the sector and improve the performance of Europe's telecoms industry. However, the discussion about competencies is in itself not sufficient. It should be guided by a clear policy perspective of how the current regulatory framework can improve in order to create better conditions for investment and innovation in Europe.

Against this background, ETNO wishes to underline its priorities with regard to the regulatory institutions under a future EU regulatory framework. In ETNO's view, any institutional setting for regulation of electronic communications networks and services in the EU should fulfil at least 4 conditions:

- Support the application of harmonised regulatory principles and objectives, i.e. effectively support the functioning of the internal market without striving for a harmonisation of regulatory outcomes in the face of differing market conditions. No one-size-fits-all approach should apply.
- Address the existing bi-polar institutional structure under the NRF which tends to perpetuate regulatory intervention: under the current regime, ETNO is concerned with the incentives for regulatory actors at EU level both in the field of application of remedies and of regulatory guidance. In NRF implementation, one could observe that once new market developments become apparent, ERG and Commission risk to enter into a race for devising a regulatory 'solution'. The option not to intervene - that should be part of any impact assessment under better regulation principles - is thereby effectively excluded.
- Be accountable, i.e ensure that regulatory institutions (Commission, NRAs and ERG) are accountable for their actions vis-à-vis citizens and market participants, including an effective right of appeal on the merits of regulatory decisions and guidance by all regulatory actors.
- Be limited in time, i.e. no permanent additional layer of bureaucracy should be created which would be harder to dismantle than the current institutional structure once ex-ante regulation is no longer needed. The Commissioner herself has stressed that regulation was eventually to come to an end. In deciding on the institutional setting, policy makers should take care that there are positive incentives for the responsible authorities to implement this step once the conditions are fulfilled.

2.2 Guidance on EU regulatory policy should be the prerogative of the Commission

ETNO would like to underline that the issues of regulatory policy guidance on the one hand and a veto on individual remedy notification procedures on the other can be clearly distinguished.

The responsibility for giving policy recommendations and guidelines on regulatory policy such as remedies under the EU Directives should lie with the EU Commission as the guardian of the Treaty. The Commission can be held accountable for its regulatory policy - politically by the European Parliament and legally when its legal acts are challenged before

Courts. To assign these tasks to the ERG as it is *de facto* done today creates an institutional imbalance at the heart of EU telecommunications policy.

ETNO has observed that, given its current structure, the ERG is not sufficiently equipped to find a proper balance between intervention and deregulation. Any deregulatory step would require an agreement by all or at least most of the 25 regulators which tend to defend their different national regulatory regimes and practices. Indeed, the ERG is advocating lower hurdles for regulatory intervention on oligopolistic markets in the context of the review and has been issuing common positions *inter alia* on remedies (and a revision thereof) which risk to result in regulatory micro-management and multiplication of remedies if applied in practice.[41].

According to the NRF, the role of the ERG was initially to assist the Commission in the implementation of the NRF and coordinate the exchange between NRAs, not to act itself as a policy making body. The review of the framework should clarify that it is the task of the Commission to issue guidance on regulatory policy including the application of remedies and the treatment of newly arising regulatory issues such as, currently, NGNs. The current practice under the NRF should be changed accordingly in order to contribute to a consistent and proportionate implementation of the NRF.

3. Changes to the appeals mechanism

An effective appeal on the merits of the case as currently foreseen in Art. 4 Framework Directive is indispensable to ensure the proper functioning of the framework and safeguard the rights of parties affected by decisions taken by the NRA and at European level.

The Commission proposes that the right to suspend the performance of the regulatory decisions is limited to cases where 'irreparable harm' to the appellant can be shown in line with the legislation of the European Court of Justice (ECJ) on suspension of EU decision. At the origin of the proposal lies the observation that some national courts routinely suspend regulatory decisions following a legal challenge, thereby delaying the implementation of regulatory measures in these Member States.

In the Communication documents, the Commission has not evaluated ways under the current regulatory framework to address the issue - including the use of infringement procedures. Such paths should be explored before proposing wide-ranging changes to the appeals process. We support to tackle problems related to appeals first and foremost in the countries where they exist and in as far as they are in conflict with the objectives of the framework or the requirement of an effective appeals procedure including on the merits of the cases as stipulated in Art. 4 FWD, instead of changing the tried and tested provision of Art. 4 FWD itself.

In any case, care should be taken that any proposed alignment of the criteria for suspension (such as "irreparable harm") is not overly restrictive. Compliance with regulatory decisions involves substantial costs and efforts by the affected operator which has a legitimate interest in an effective appeals process including a suspension of a regulatory decision where justified. For example, the imposition of mandated access, accompanied by accounting separation and cost accounting, creates direct regulatory costs and irreparably shapes the market. If the regulatory decision is later overturned in Court, both the compliance costs and the dynamic effects of a regulatory measure cannot be reversed.

VI. Article 5 (1) a) Access Directive: non-SMP Interconnection

ETNO questions the need for the possibility for NRAs provided in Art. 5 1(a) to impose Interconnection obligations on non-SMP operators. The Commission should consider a deletion of the Article, accompanied by an impact assessment taking into account the cases where Art. 5 has been used so far.

Such streamlining of the Access Directive would take away the need for the Commission's proposal to extend the procedure of Art. 8 (3) Access Directive to measures imposed on non-SMP operators under Art. 5 Access Directive.

In any case, Art. 5 Access Directive has been formulated overly widely in the last review process. As a minimum change, ETNO urges the Commission to reduce the uncertainty surrounding the Article by deleting the words "in particular" in para 1, 2nd sentence and thereby limit its scope to ensuring end-to-end connectivity as originally intended by the Commission in their proposals for the Review '99.

We note that this is the only paragraph in the entire Communication working document where the possible risk of overregulation is mentioned.

VII. Improving enforcement mechanisms under the framework

Rules on enforcement of regulatory decisions should be seen in the context of the individual national legal systems and respect the proportionate relation between an alleged breach of regulatory decisions and possible sanctions. At least as far as ETNO Members are concerned, compliance with regulatory decisions is not perceived as a dispensable factor to be weighed against potential commercial gains of non-compliance as the Commission staff working paper seems to suggest, but as a legal obligation.

The biggest threat to a "culture of compliance" by SMP operators would be a restriction of the possibility to obtain effective legal protection against illegal regulatory decisions, e.g. by restricting the possibility to obtain preliminary injunctions against NRA decisions or unduly restricting the possibility to be granted a suspensory effect of legal appeals (s. above).

Against this background, ETNO does not subscribe to the view that implementation of the framework improves if more draconian sanctions are put at the disposal of the regulator.

Part 2 - Structural and functional separation [V]

We address the issue of a separation of networks and services in the forms of structural or functional separation as it has both been prominently raised by the responsible Commissioner[42] and has been - not in depth but with a generally positive attitude - discussed in a study by Hogan & Hartson and Analysys for the Commission.

As the notion of structural remedies has been rejected in the Commission's own consultation documents, it is not clear which changes could be envisaged in the Directives if separation would be 'added as a remedy'. Because of this lack of a proposal it is difficult for stakeholders to comprehensively react on this topic in the current round of consultation. ETNO would like to highlight that in view of this lack of proper consultation it would be inadmissible to add this aspect to Commission proposals for the Directives without further consultation.

[V] BT does not support this part of the contribution

I. Need for introducing functional or structural separation is not demonstrated

In ETNO's view, the stricter separation of networks and services should not be discussed for a review which takes effect in the years 2010-2015/16. New, yet more severe remedies provide no solution in an increasingly competitive and multi-platform environment which calls for deregulation (s. above, I and II).

It is important to understand that the discussion in the UK, leading to the eventual 'settlement' between Ofcom and BT and focusing on equivalence of access was triggered by specific problems of enforcing (in particular non-price) non-discrimination under the UK legal system. As put in a recent report on the issue, "scores of complaints from competitors were investigated and inquiries by the regulator undertaken, not one of which led to a formal finding adverse to BT".[43]

In other countries, issues of non-price discrimination have also occurred but have been successfully dealt with by NRAs. The current framework does include remedies that allow the imposition of an effective non-discrimination obligation (Art. 9ff. Access Directive). No substantial shortcomings in price or non-price non-discrimination have been reported in Member States that could not be tackled with these remedies.

Therefore, before any EU action is taken on the subject, the insufficiency of existing remedies to ensure non-discrimination must be demonstrated.

1. Regulatory separation risks hampering investment to the detriment of consumers

A stricter separation between networks and services leading to a further 'commoditisation' of the fixed network would run contrary to the goal of the current regulatory framework to achieve sustainable, infrastructure-based competition where ever this is feasible. This is underlined by financial market analysts that expect reduced investment by competitors and a turn-around on the promotion of network-based competition from functional or structural separation.[44] Just as competition is increasingly emerging from alternative infrastructures and platforms and cable competition is a reality in many EU markets, it would put certain players – and markets – in Europe at a major competitive disadvantage.

Forced separation between networks and services reduces incentives for network investment as it makes coordination of investment incentives inextricably difficult. This would further reduce EU competitiveness at a time when massive investments are needed for the roll out of more performing access networks.

ETNO supports the Commission's findings on the negative effects of an "open access model" on EU competitiveness:

> "..*Overall, the costs of structural separation appear to be greater than the expected benefits, in particular due to the fact that even after structural separation, regulation of the independent local loop operator remains necessary to prevent monopoly pricing. Other disadvantages concern the adequate level of investment in network infrastructure when providers do not receive the revenues and consequent incentives that flow from vertical integration. Experience in other sectors (e.g. railways) has shown the problems of co-ordinating investment when infrastructure and services are separated. This problem is more acute in the communications industry, where technological change is rapid and where investment demands are pressing*".

The development of an increasingly multi-platform environment and the different conditions of competition in different geographical markets within the EU and within national boundaries

would make any splitting up of a national incumbent operator an inapt measure to address potential future competition concerns. It would eventually leave public authorities to trigger the "right" levels of investment in telecommunications networks in different markets. This would already be highly problematic in an utility market and appears like an irresponsible proposition in an innovate and fast-moving sector as electronic communications.

2. Regulatory separation endangers harmonisation and innovation

The Commission assumes in its impact assessment that structural remedies could serve the internal market since there would be the "same model in all Member States". This disregards that in view of the different level of platform competition and market development in the EU, the introduction of functional and structural separation as remedies in the Framework could lead to different outcomes and therefore a further fragmentation of the internal market.

Separation is inappropriate for a fast-moving sector such as e-communications. In the transition from PSTN to NGN, the dividing lines between access and core networks will shift on all European markets. A separation along determined lines would freeze a snapshot of competition and technological development on a market and freeze innovation at the same time.

Already the negotiations leading to the UK settlement between BT and Ofcom, involving a 'functional separation' of parts of the network and the rest of the company, have produced very specific results concerning which services are placed in the access or in the network unit, determined by the state of competition and network development in the UK. Every attempt to separate national network operators would trigger individual outcomes cementing the state of competition in the given national and possibly sub-national markets.

Finally, fragmentation could be increased by legal challenges which look more likely to be successful the more the internal organisation of the regulated operator is affected.

II. Structural separation is not a possible remedy under the NRF

ETNO contests the view expressed in the Hogan Hartson and Analysys study that structural separation would "arguably" be possible under the current framework.[45] Unlike, for instance, EU competition law under the merger regulation, the New Regulatory Framework does not provide a basis for structural remedies to be applied by NRAs.

Art. 8(3) Access Directive foresees that under exceptional circumstances, an NRA can impose remedies going beyond those included in Art. 9 – 13 Access Directive, however limited to the field of "*access and Interconnection*". Recital 14 explains that:

> *"Directive 97/33/EC laid down a range of obligations to be imposed on undertakings with significant market power, namely transparency, non-discrimination, accounting separation, access, and price control including cost orientation. This range of possible obligations should be maintained but, in addition, they should be established as a set of maximum obligations that can be applied to undertakings, in order to avoid over-regulation."*

The Access Directive thereby establishes an upper limit to regulation to create legal certainty for operators. A structural remedy which by nature does not limit itself to modalities of access and Interconnection but addresses the ownership structure and organisation of the regulated operator would go beyond these limits.

This applies notwithstanding the powers of competition authorities under general competition law. In other words, it is arguably possible for the competition authority to apply structural remedies also in the electronic communications sector where the legal system in a country or

EU competition law foresees this possibility and conditions under competition law for such intervention are met. Yet, an NRA acting on the basis of sector-specific rules created to implement the NRF is not entitled to impose a structural remedy.

Part 3 – Other proposals not limited to ex-ante regulation

I. Approach to spectrum [46]

1. General Remarks

In ETNO's view the radio spectrum regulatory framework needs to:

- Be stable enough to allow the actors of the domain to develop their strategies and facilitate return on investment
- Provide the right balance between harmonization and flexibility in the use of the spectrum, allowing the development of innovative interoperable technologies and services and fostering investments
- Avoid harmful interference, cross border problems, loss of quality of services
- Avoid jeopardising the economies of scale (impacting on the number of end users)
- Establish the conditions for a fair competition
- Suppress unnecessary administrative and regulatory barriers

- Harmonisation and flexibility

ETNO considers that harmonising frequencies facilitates the best use of this scarce resource and constitutes a sound basis for the implementation of a European market relying on a powerful industry. Enhanced flexibility in the conditions of use would permit the evolution of the existing technologies towards innovative or improved technologies while preserving harmonisation. Flexibility could also allow the introduction of new technologies provided that they do not create compatibility problems with existing technologies and systems.

- Licensing and general authorisation

General authorisation for the use of radio spectrum is already covered by the current regulatory framework. It has to be noted that coexistence of radio equipment within bands used in this way is only possible with precisely defined technical parameters (constraints), and even then service availability and quality of service cannot be ensured. Furthermore, general authorisation of spectrum use is usually not suitable for high QoS, high power radio transmissions. For the offering of public high QoS radio applications, ETNO sees the necessity for individual authorization. General authorization could be reconsidered when innovative technologies (e.g. cognitive radio) become generally available.

- Efficient use of spectrum versus spectrum scarcity

Commission initiatives regard radio spectrum address so far only commercial radio services. It has to be noted that public radio operators, although not the main users – in quantity - of radio spectrum below 3 GHz, already use "their" spectrum most efficiently compared to other users (e.g. governmental or military). Recent studies have confirmed that there is an increasing spectrum demand for radio communication services, in particular mobile applications. ETNO is of the opinion that the obligation to use assigned spectrum efficiently should not be restricted to commercial utilisations, but apply to all spectrum users. Therefore ETNO en-

courages the Commission to try to influence Administrations to ensure the availability of the radio spectrum needed for the benefit of the European society.

2. Section 3.1: Introducing the freedom to use any technology in a spectrum band (technology neutrality)

The idea of introducing technology neutrality, i.e. to allow the use of any technology in every frequency band, sounds very liberal and flexible. However, the existing situation regarding competition, running licences, customers' expectations in quality of service, investments taken by manufacturers and operators, etc. have to be taken into account, i.e. current radio operations have to be protected from harmful interference and unfair competition.

Furthermore, opportunities (faster access to spectrum, greater choice of equipment for customers and operators, possible incentive for innovation, …) and drawbacks (potential of harmful interference, reduced interoperability, cross border problems, loss of quality of service, smaller markets with less economies of scale, …) of this approach needs to be considered carefully.

The economies of scale are of special importance for the mass marked systems like mobile phone and broadcasting. The standardized technology and frequency bands, not only in Europe but in large part of the world, allows for low priced user terminals.

The introduction of technology neutrality will require comprehensive studies and hence would take some time to roll out. This may be easier to introduce in unoccupied frequency bands, provided that services in adjacent bands are protected. This seems applicable in principle also to currently licensed bands; however such introduction requires further deep considerations including compatibility studies.

In particular the existing spectrum users have the expectations that their assignments should retain the same degree of protection from interference unless they are willing to negotiate some lower level of protection. This must be done via the definition of an appropriate regulatory environment.

3. Section 3.2: Introducing the freedom to use spectrum to offer any electronic communications service (service neutrality)

Evolutions in radio technologies allow increasingly for the provision of various services via one technology platform. This trend is considered positive as it facilitates innovation. However, coherent authorisation and charging conditions are necessary to guarantee a level playing field and fair competition between market actors. Although this is merely subject to national regulations (e.g. licensing conditions, fees, etc.), the Commission should give clear guidance on these issues.

It has to be noted that convergence of services is merely subject to innovations at network and terminal level and does not necessarily mean that different radio technology platforms are suitable for the introduction within the same frequency band.

4. Section 3.3: Facilitating access to radio resources: coordinated introduction of trading in rights of use

The possibility to transfer spectrum usage rights is already laid down in Article 9 of the Framework Directive, but the implementation of spectrum trading is varying enormously between Member States.

Therefore, ETNO supports the coordinated approach as proposed by the Commission regarding spectrum trading.

Noting the statement that “existing spectrum rights should not automatically become tradable to avoid competition distortions”, ETNO stresses that trading should normally be permitted without any artificial constraints, with exceptions where it may distort competition. Furthermore the act of trade has to be voluntary between market actors and regulations have to prevent negative effects on competition.

Concerning the “change of use” connected with spectrum trading our remarks on “technology neutrality” apply (see Comments on 3.1).

5. Section 3.4: Establish transparent and participative procedures for allocation

Global allocations for radio services take place at World Radio Conferences, and European industry is actively involved through the ECC preparation process. That the allocation to the current service categories might become obsolete to some extent is a matter for one of the future Conferences.

The designation of frequencies to an application and/or (a group of) specific technologies in Europe is done by CEPT ECC, usually in close cooperation with ETSI. The procedure guarantees a sufficient participation of all interested parties in the decision making process which is considered objective, transparent, non-discriminatory and proportionate, taking into account the different interests with the final objective for an efficient, interference-free spectrum utilisation.

The implementation of CEPT ECC Decisions at national level or Commission Decisions is also generally accommodated with a comprehensive consultation with interested stakeholders. This results finally in frequency assignments in those countries where the Decisions are implemented.

In summary, ETNO considers that the current practice of allocation, designation and assignment of radio spectrum is already transparent and participative. Further extension of the consultation procedure as described in Article 6 of the framework directive to spectrum allocation at national level is supported.

6. Comments on 3.5: Decision mechanism for coordinated spectrum management

ETNO notices the current institutional organization based on RSCOM and RSPG working in collaboration with CEPT and ETSI which has proved to allow appropriate evolution of the European regulation.

ETNO agrees with the proposal to implement coordinated spectrum management conditions through Committee procedures based on RSCOM and COCOM decisions, underlining what has been already expressed in the previous sections. Concerning “general authorisations” and “technology neutrality” our remarks made earlier (see “General Remarks” and Comments on 3.1”) also apply. Considering the various areas proposed for coordination, ETNO believes that the debates should be open and transparent, and as such, should take advantage from the inputs of industry and communication operator representatives.

In general, ETNO would like again to underline benefits of a possible participation of the industry within the RSCOM and RSPG.

ETNO is thus of the opinion that no significant changes in the current spectrum regulations described in the "Radio Spectrum Decision" are necessary. Comprehensive consultation of stakeholders should take place prior to the decision making process.

II. Commission proposals on 'consolidating the internal market' - non-SMP related issues

1. Common approach to authorisation of services with pan-European or internal market dimension

The scope of this proposal is unclear. The Commission evokes problems related to services and equipment without clarifying how the one or the other would be affected by the proposal. In the case of equipment, it is questionable whether this is an issue for the review of the e-communications framework at all. ETNO invites the Commission to clarify its ideas and provide further reasoning and examples that would justify the proposed change.

The proposal seems closely related to the policy on numbering and frequency management since access to scarce resources is mentioned as a concrete field of application for the proposed new EU authorisation regime. We address the issue specifically in view of numbering and frequencies under part 3 chapter III of these comments.

2. Standardisation - procedure to agree common requirements related to networks or services

The Commission proposes to Introduce a procedure for Member States to agree common requirements related to networks or services. The exact role and purpose of this procedure are not clear from the consultation documents.

ETNO would disadvise against any procedure which is governed by unclear criteria and without a limited and clearly defined purpose. The wording used in the Commission staff working paper that the procedure could be used for a "common set of requirements for certain features or certain forms of interoperability needed to support regulation in critical areas" is not at all sufficient to provide this clarification.

The Commission should set out clearly which types of tasks it believes are not sufficiently carried out by standardisation bodies today, possibly starting from the examples it gives in the staff working document. On that basis it should draw up alternatives for dealing with these problems, including options which tackle perceived problems in the standardisation process directly to support ongoing and future work in standardisation bodies. An additional procedure involving only NRAs and the EU committees will in all likelihood create less, not more efficient outcomes and decrease transparency for the industry.

3. Must Carry Obligations

In an environment characterised by the effective disappearance of spectrum capacity constraints on distribution of audiovisual content and the associated multiplication of distribution platforms, the relevance of the "must carry" obligations defined in Article 31 of the Universal Service Directive is rapidly diminishing. ETNO therefore welcomes the Communication's proposals regarding review and justification of existing national-level obligations. In addition, Article 31 itself should be limited to what is absolutely necessary

in order to provide greater legal certainty, needs to be redrafted so that its scope is clearly. Particular consideration should be given the following points:

- "Must Carry" rights need to be balanced by a form of "Must Offer" obligation. The award of rights without obligations to a particular subset of actors in the same market has clear competition-distortion effects. Experience in several markets has shown that must carry obligations cannot be easily fulfilled on the basis of commercially-negotiated contractual arrangements.
- Must carry regulations should only relate to individual broadcast programme streams. Under no circumstances should they relate to specific transmission capacity or channel bouquets.
- Selection of technical standards must remain a matter for decision of the platform operator so that there is no interference with the operators' right to manage capacity in an economically efficient manner.

4. Art. 5 (1) b) and 6 Access Directive - Interoperability and access requirements for Digital TV

The current Framework contains a number of provisions covering access and interoperability requirements for digital broadcast TV:

- Article 2 of the Framework Directive sets out definitions for "conditional access system", "enhanced digital television equipment", and "application program interface".
- Articles 5(1)b and 6 of the Access and Interconnection Directive defines potential obligations for providers of conditional access systems, APIs and EPGs.
- Article 24 of the Universal Service Directive specifies interoperability requirements for consumer digital TV equipment.

For the most part, these provisions have been "copied and pasted" from legislation formulated in the first half of the 1990's. They are strongly linked to the state of technology and market development in the EU at this time. Technologies and markets for distribution of audiovisual content are now being overtaken by massive changes. ETNO therefore regrets that the Commission's Communication does not discuss the continued relevance of these provisions, or their scope for unintended consequences in the new environment.

Article 5.1(b) obligations have never been invoked in regulatory practice. Moreover, taking account of the fact that the revised framework will not enter into force before 2010, we see two challenges in particular:

- The Directives provide a basis for the mandating of outdated and inappropriate technological solutions which will hinder new service development. In particular, the common scrambling system which has been standardised as a basis for conditional access in the context of "traditional" digital TV (a one-to-many service with limited interactivity) is unsuited to the requirements of new services, in order to ensure that content is transmitted only to those customers which have chosen and paid for it. It is also incompatible with a DRM-based approach to "conditional access" which provides better functionality and reduced cost.
- The above-mentioned provisions from the Access and Interconnection Directive provide for potential application of obligations for fair, reasonable and non-discriminatory access on providers of network elements without SMP. This represents an unnecessary constraint on the business models of new market entrants. In an environment characterised by multiplication of platforms for distribution of audiovisual content, competition should be sufficient to ensure media pluralism and cultural diversity.

In order to solve these problems:

- The continued need for the above-mentioned Access and Interconnection Directive provisions needs to be carefully considered. In the context, ETNO questions why Article 6

has not also been examined together with Article 5(1). As currently drafted, this Article represents an unhappy compromise between the objective of promoting competition, and a wish to guarantee media pluralism and cultural diversity. Insofar as any action at all is needed to deal with this latter objective, ETNO would argue this is a matter for the "must carry" provisions in the Universal Service Directive.

III. Changes proposed in relation to numbering

1. Section 5.3 – Numbering-aspects of authorisation of pan-European services

This part of the Working Document suggests a strengthening of measures related to authorisations and allocation of numbers by a Committee procedure and Commission decisions issued. This proposal raises two issues.

The first issue is associated with the justification for this approach, more precisely in that the Working Document does not identify what are the services that cannot be provided today due to the inadequacy of the current provisions e.g. regarding allocation of numbers. If such services cannot be identified to justify the proposal, then it may be seen as a transfer of power to the Committee procedure/Commission for its own sake.

The second issue is in understanding the impact of permitting authorisation in one Member State being valid in all Member States and how this does influence numbering national regulation in particular and national laws in general. There is no indication on the possible impacts of this proposal and whether these have been assessed in detail.

2. Section 5.6 – Technical implementing measures by the Commission

Reference is made to Pan European Services without attempting to differentiate such a concept from International Services. It is possible to deliver Pan European Services to-day using the current international services, by either allowing International Access to national services from abroad, or the use of International services. Nothing else is required.

The working document implies that the existence of Pan European Services, as yet to be defined, will remove the need for bi-lateral commercial negotiations and this is not the case. Any implementation of an International Non Geographic service needs to be agreed, bilaterally, based on commercial rules and known processes.

It is also not clear within how a centrally administered concept of Pan European Services will take account of various national regulations, e.g. with access to content based services. Further it is not explained in the document in what way the various national approach stands in the way of a common approach to certain specific numbers and the associated services? What is meant by a common approach, and what numbers and associated services are under consideration? Moreover having defined what is meant by a common approach, the benefit of this common approach should be identified.

Reference is made to "the same number" in order to access services, but it is not clear what is meant by the term "same number"? And it presupposes that consumers would wish to have the same number. The flexibility of the current International Access to services that allows for National Numbers to be dialled terminating in another country, is that consumers understand the relative charge that they will be applied.

In the second paragraph of section 5.6 reference is made to "more consistent... charging arrangements" but this should be better defined in order to clear how would actions in support of achieving a "more consistent... charging arrangements" be progressed, under what

directive and legislation would such progress occur and how is it intended that a "more consistent… charging arrangements" reflect commercial and competitive approaches that are currently in place.

The reference to having the EC undertake the "involvement through Committee procedure", also raises questions such as who would be involved in the committee procedure. How it would be run? How would stakeholders be involved? How would national variations in approaches to, for example, number, services and content, be addressed and how would there be a commercial basis for any such Committees' decisions be assured?

3. Section 5.7 – Non-geographic numbers

The proposal to amend article 28 of the Universal Service Directive raises a number of issues that need to be clarified. For an operator an end user is a subscriber to a service to whom a number is being assigned. This number is needed for third parties to be able to access the subscriber, even it this is an individual or a company etc. Not all services and numbers can be accessible internationally or even nationally and there are justifications for these limitations, both technical and commercial, i.e. short codes cannot be internationally accessed.

Therefore the proposal to amend Article 28 of the Universal Service, should clarify the term "end user", is it the calling or called party? If the term end-user in the text refers to the calling party, then the rights of the called party should also be taken into consideration. There has been a lot of debate, on relevant issues through consultations carried out by the CoCom during year 2005, on the way to overcome a number of restrictions to access non-geographic numbers, such as national and international Freephone. (Please see ETNO CP078 ETNO Common Position on Freephone services in Europe - follow up (CoCom05-23), EC071 ETNO Expert Contribution on 116 and Freephone Services, EC073 ETNO Expert Contribution on Cross-border access to non-geographic shared cost numbers (CoCom05-24), EC069 ETNO Expert Contribution - Response to Questions asked by EEC NNA PT HESC). This debate has reached a number of conclusions on what can be feasible and what cannot and the results of this work should be considered in the review process, which is not the case.

Information Society Services can be accessed either through the use of telephony services or internet services. Therefore the introduction of this more general provision cannot remove the technical or economic reasons that currently limit access to non-geographic numbers. Reference to technological restrictions that are no longer justified in the light of expected upgrading to Next Generation Networks is ambiguous. Technological restrictions exist independent of the "technology" used; each technology has different restrictions that cannot be overcome and this is the reason they are referred to as restrictions. In addition important parameters, which hinder the development of cross-border services, such as the different cultural, regulatory or economical environment across different countries, such as consumer rights, VAT, profit or non-profit character of services etc, have not been identified. ETNO believes that if these parameters can be overcome cross-border services can be developed and there are always the "right" numbers that can be used to provide access to these services.

The current provisions of the regulatory framework, which state that "Member States shall ensure that end-users from other Member States are able to access non-geographic numbers within their territory where technically and economically feasible, except where a called subscriber has chosen for commercial reasons to limit access by calling parties located in specific geographical areas" do not pose any restriction whatsoever to the development of new viable services and therefore should remain unchanged.

4. Section 6.3 – Number portability

Number Portability is a service introduced as a key facilitator of consumer choice and effective competition in the public telephone network. For this service, or any other service, to be introduced as an obligation three important parameters need to be satisfied. One is that it is technically feasible, the other that it is essential to facilitate competition and consumer choice and finally that, even if both parameters are satisfied, the cost of the introduction of such a service, does not outnumber the benefits. Therefore it is difficult to understand on what grounds the provision of number portability should be updated, in order to include the subscriber's personal directory, identifiers or even Internet names and addresses. It has been clearly defined by the international community, from the work carried out within WSIS that Internet naming and addressing issues remain under the responsibility of ICANN and cannot be included in the scope of the responsibilities of any NRA.

Therefore any reference that the provision of the current framework on Number Portability to be updated to include identifiers is out of the scope of this review of the regulatory framework, while Internet naming and addressing policies should be managed according the internationally established procedures that have fostered remarkable evolution in the introduction of new services and competition in electronic communications. Regulation should be made available in order to ensure the protection of user rights.

5. Section 8.2 - ETNS

In withdrawing the USD requirements for the ETNS, it should be noted that this is more due to the lack of it being based on a commercial need rather then any change in technical requirements meeting that need elsewhere.

6. Section 9.1 – Fraud in premium rate services

It is incorrect to state that fraud only exists with Premium Rate Services, and the associated numbers. Evidence exists that fraud can also occur with "normal" geographic numbers in individual countries or numbering ranges. It would be more correct to state that fraud occurs when there is revenue share, or high calling rates that could permit such fraud opportunities, being associated with any numbering range.

IV. E-Inclusion

1. Facilitating the use of and access to e-communications by disabled consumers

ETNO acknowledges the concerns of users with disabilities on access to emergency services via '112'. In our view sufficient legislative measures (art. 26 of the USO directive) are already in force today but practical, financial and legal elements, some outside the operators influence, explain the current situation and shows that legal instruments are not always fulfilling their purpose. A preferable route is to resolve the situation within the European Forum on Public Safety and Emergency Communications that was set up in June 2006 by the European Commission for an initial duration of 3 years. In certain countries an emergency service based on a separate dedicated number for text phones is today a far more proportionate and safe solution than routing all emergency text calls via 112.

The existing legal framework provides sufficient coordination mechanisms – such as INCOM and its sub-groups – between Member States, industry and organisations representing users with special needs. Creating yet another committee with the purpose of adopting prescriptive measures for disabled users would decrease transparency, increase administrative burden and could hamper the further development of voluntary, market-driven solutions. The current

situation and progress on e-accessibility issues varies across Member States. In several Member States advanced set of products and services are provided for disabled users, showing that the current regulatory provisions and/or the market itself are sufficient conditions to enhance the situation for disabled users. It is recommended to assess the need to introduce specific procedural measures, within the overall USO consultation and in particular on the best instruments to progress eAccessibility issues, which the Commission is planning for 2007. Future technology developments, such as convergence of services and networks, should be taken fully into account in this consultation as they could take away several barriers in this area.

As service providers and corporate citizens, ETNO member companies' recognize and respond to the special needs of people with disabilities. Aging societies in the European Union will further promote the evolution of markets for services and products for consumers with special needs. In general, voluntary, market-driven solutions or national initiatives supported by industry have proven to be the most effective and flexible means for meeting the specific needs of individual user groups.

In general, ETNO supports the Commission's proposal to adapt the regulatory framework to cover telecommunications terminal equipment, though one would need to see and review the details of how this would be achieved. Concerning the specific proposal to relax the current R&TTE obligation on interface specification publication, we would support this proposal provided it is applicable to all communication providers and that the relaxation is related to the service or market into which the service is being provided. Publication of the interface specification to fulfil the R&TTE obligation has lead to delays and sometimes, prevention in offering the network-terminal interface requested by our customers, due to the proprietary nature and/or IPR associated with the interface specification,

Defining the criteria under which relaxation of the publication obligation will be applied is likely to be difficult. Just allowing the relaxation to be applied to eAccessibility issues will not achieve the desired innovation between manufacturers and network operators that the proposal is seeking to address. Perhaps, the relaxation could be applied if the terminal-network interface relates to an emerging market or where the expected volumes are small.

V. Universal Service

1. A thorough debate on the need for a universal service regime

As pointed out in earlier ETNO documents[47], ETNO Members believe that investment, innovation and rapid technological progress in the electronic communications sector deliver choice, quality and low prices for the consumer of electronic communications services across the EU in an unrivalled manner. Against the background of technological developments described in part 1 chapter III above such as the proliferation of different forms of wireless and mobile access, ETNO doubts that universal service obligations as a "safety net" will still be necessary at least at an EU level in the timeframe of the next framework (2010 – 2015/16).

ETNO therefore welcomes the debate announced by the Commission for 2007, in particular on role of this concept which has come upon the sector from the times of former state monopolies as such, and on the validity of requiring commercial firms to finance directly social obligations.

In parallel, ETNO acknowledges the challenge to tackle problems in the context of the "digital divide" and sees a strong role for the European institutions in doing so. This issue should be kept strictly apart from the universal service concept, however.

2. Separation of network and services

ETNO cautions against pre-determining the outcome of a wider debate on the Green paper in 2007. The revised Directives should not foresee a separation of access and services in the context of universal service. For a high-quality affordable provisioning of services which from a user's perspective is the objective of the universal service 'safety net', both network providers and service providers (where the two are distinct) have to contribute in their respective spheres of responsibility. This would hold true for an IP environment as well as far as universal service still exists in that environment.

A reform of the principles of provision and of addressees of obligations (service or network providers) is impossible to implement without a parallel reform of the scope, which is, as ETNO understands it, foreseen only for 2007. Otherwise a sensible assessment of the effects of such a measure is not possible - the Commission could for instance not present a proper impact assessment for such separation.

3. Removal of obligations – directories and public payphones

Existing universal service obligation should be consequently reduced in the medium term to reflect market and societal developments. ETNO supports the Commission's proposal to remove provisions on universal directories and directory inquiry services from the scope of universal service.

Also, the importance of public payphones has more and more decreased with the widespread use of mobile phones while the costs for the sector are increasing. In the next review of the EU Directives, the Commission and the EU legislator should consider to no longer foresee this universal service obligation.

4. Financing

ETNO welcomes the Commission's initiative to open a debate on the viability of current universal service financing. ETNO supports a move to a tax-based funding of Universal Service obligations, if any, in the context of the review of the EU Directives. Financing of universal service inside the sector inevitably creates market distortions and cross-subsidisation between different groups of consumers. In a fully liberalised market environment, social policy objectives should be pursued and financed by the public, not by individual groups of consumers.

VI. Improving Security

In its Staff Working Document, the Commission addresses the issue of Security (Chapter 7) proposing some regulatory measures, which will need detailed consideration, because of its interventionist nature and the increased costs involved.

The main points addressed by the Commission in Chapter 7 are:

7.1.- Obligations to take security measures, and powers for NRAs to determine and monitor technical implementation

7.2.- Notification of security breaches by network operators and Internet Service Providers (ISPs)

7.3.- Future-proof network integrity requirements

1. General Comments

First of all, ETNO wishes to briefly refer to the EC Communication on a strategy for a secure Information Society (COM 2006(251)), hereafter denominated the “Strategy Communication”. The Communication states that network and information security is a challenge for everybody. To tackle security challenges, policy makers have to achieve a holistic approach, which recognises the respective roles of various stakeholders.[48]

The Strategy Communication also refers to the "complementary roles of public and private sectors". Policy initiatives must be based on an open and inclusive multi-stakeholder dialogue.

Chapter 7 of the Communication on the Review 2006 (Staff Working Document) follows a different approach in which security is seen as the single responsibility of providers of electronic communications networks and services. It offers a short-sighted and unrealistic solution by stating that an adequate legal framework could "protect citizens and businesses and promote consumer trust and confidence". In reality, security is a much more complex issue that cannot be dealt with effectively by simply amending the legal framework.

The Strategy Communication promotes a range of solutions, thereby offering also less costly solutions that could be just as effective as costly technical or regulatory measures.

The impact assessment relating to the security chapter is flawed as it only considers a more regulation as a solution instead of considering all options in the wider context. ETNO wishes to stress the need for a more substantial impact assessment on the issue of security, which also would seriously consider non-regulatory options included in the Strategy Communication and make suggestions based on a cost-effectiveness analysis.

2. Specific Comments

2.1 Section 7.1.- Obligations to take security measures, and powers for NRAs to determine and monitor technical implementation

ETNO shares the aim of strengthening security as a means for increasing user trust and confidence in electronic communications. ETNO member companies are continuously working to improve security in their networks and services beyond current regulations. Not only is security a key competitive element of differentiation in the market. The impact of non secure networks is highly costly for operators.

ETNO supports any initiative designed to increase trust and confidence in the use of e-communications. We doubt however that the Commission’s initial proposals would have a positive influence in enhancing security.

Although the introductory remarks suggest that the Commission puts more emphasis on self-regulation, Chapter 7 proposes that the regulatory regime for network security and integrity be strengthened.

As the complexity of networks increases, ETNO acknowledges that the question of maintaining a sufficient level of network integrity and security becomes more complex. However, this does not necessarily need to lead to more regulation in this area. Many of the related issues can best be resolved via industry-lead self-regulation (e.g. standardisation issues).

ETNO believes that industry is better placed than Regulators (at the EU or at the national level) to know what technical measures are needed in the security field. For example, de-

signers of systems using IP networks predominantly look to standards bodies such as ETSI, ITU and IETF for best practice in the design and optimization of their networks. Against this background there are doubts concerning the relevance of EU or national guidelines as proposed by the Commission.

Imposing concrete security measures on industry would undermine the proportionality principle as to achieve the same objective (enhancing security) the solution imposed is the most burdensome (eg. regulatory obligations). Indeed, security measures should be chosen individually by each operator or should be sorted out via self-regulation and should not be imposed by the regulatory authorities.

Regulatory Authorities could play a key role in strengthening security by fostering the exchange of examples of market driven solutions and enhance international cooperation on issues with a clear international dimension (spam), rather than monitoring the technical implementation of security measures or in imposing fines. There is no evidence that the monitoring of the technical implementation of security measures or the imposing of fines would lead to improvements in the current environment.

More importantly, NRAs do not have the means or the expertise to carry out the tasks the Commission is proposing. The proposal risks to lead to unnecessary conflicts regarding competences (for instance with data protection authorities, national ministries and other institutions) which could lead to a reduction in security, rather than an increase.

2.2 Section 7.2. Notification of security breaches by network operators and Internet Service Providers (ISPs)

ETNO agrees with the principle that only secure Information Society services will make new services attractive to users. Indeed, services such as e-commerce, e-government will demand the processing of more and more personal data (user identification, traffic and location data…).

Against this background, ETNO does not support the EC proposals related to the notification of security breaches, mainly because this provision will have the contrary effect to that initially foreseen. Instead it will create a loss of trust and confidence instead of enhancing it amongst end-users.

Current legislation only requires that security risks be notified and not failures. Notification of failures involves very sensitive and confidential information that should be handled very carefully. Notification could well provide a powerful resource in the hands of hackers and other malicious parties. Notifying breaches can imply the release of very confidential information on the security of the networks, with the consequent risk that this information may be accessed by malicious parties.

In the Communication on a “Strategy for a secure Information Security” (COM(2006)251), the EC recognised the need to ensure the right balance between technological development, regulatory measures and self-regulation. In the area of security, self-regulation initiatives can have much more added value than pure regulatory provisions, because of the international dimension of networks and the consequent limitations of regulatory action at the national or the EU level.

The principle of “best efforts” should apply in this area, where operators are the most interested in having secure networks.

2.3 Section 7.3.- Future-proof network integrity requirements

The Commission wants to modernise some provisions on network integrity by extending integrity requirements beyond PSTN (based on the current Universal Service Directive) and GSM to mobile and IP networks to next generation networks, like UMTS and IP (future-proof network integrity requirements).

Article 23 of the Universal Service directive lays down obligations for guaranteeing the integrity of the public switched telephone network. The simple extension of this obligation, designed in a PSTN environment, to include other networks (IP, mobile) does not take into account the complexity of other network technologies (such as IP), where it might be to early to codify integrity requirements which are currently not established but intensively discussed. In this context ETNO would like to refer again to the acknowledged work of standards bodies and questions the relevance of proposed EU or national guidance.

As in the preceding proposals made by the EC, there is the important issue of increased costs that would fall on individual operators. These types of proposals should be subject to cost benefit analysis before they are taken any further.

2.4 Other issues.

- **Corporate Responsibility of operators "teaching" their customers how to use Internet in a secure way ("awareness raising campaigns").**

Indeed, educating end-users about basic security measures available on their PCs is a much more cost-effective solution than dictating specific technical measures to network and service providers. End-users must be sufficiently educated and aware of how to deal with online threats. Education and awareness raising activities contribute to the creation of a culture of security, and a responsible use of cyberspace.

ETNO wishes to stress the need for a public administration involvement in this endeavour.

- **Consolidating the internal market – Introducing a procedure for MS to agree common requirements (5.5.).**

ETNO supports the Commission's acknowledgement of standardisation in the EU being a voluntary industry-led process with stakeholders active in all respective standardisation bodies. Against this background the Commission proposal for a mechanism "whereby a common set of requirements for certain features or certain forms of interoperability needed to support regulation in critical areas could be agreed at EU level" (p.21 staff working document) raises concerns. The proposal is not at all specified as an absolutely "last resort" measure and thus risks to severely undermine the motivation and efforts regarding ongoing and future work in standardisation bodies.

- **Consolidating the internal market - Improving enforcement mechanisms (5.8.)**.

ETNO does not see the need for new rules providing for specific remedies like explicit right of action against spammers.

VII. Net neutrality

1. No need for ex-ante rules on 'net neutrality'

The Commission rightly sets out that there is no need for specific rules to ensure 'net neutrality'.

The market conditions that gave rise to the controversial discussions under the heading of 'net neutrality' in the US do not present themselves in a similar way in Europe.[49]

Worries about a possible blocking of certain applications by fixed network operators have been fuelled by isolated cases in the US which were effectively dealt with by the US Federal Communication Commission FCC. Already today, a dominant network operator in the US and Europe is not allowed to unduly discriminate against certain internet services or block access to them. For instance, Hogan Hartson and Anylysys in their study for the Commission estimate for the EU competition framework find that unjustified price-discrimination in the provision of connectivity at the IP service level would "*likely constitute an abuse of a dominant position that could be treated under ex post remedies*".[50]

Calls for a more far-reaching net neutrality regulation that "freezes" current mechanisms of traffic exchange in an IP-world are unfounded and unrealistic in view of the constantly changing market place. Internet traffic used to be dominated by services that are less affected by delays in the transmission of IP-packages such as downloading of websites of content. In the future the internet will increasingly be carrying traffic that is more sensitive to delay such as voice traffic (VoIP) and, to a lesser extent, video streaming which is provided by websites such as youtube.com and many other internet sites. At the same time, the convergence of networks and services results in the transmission of additional services such as TV over the internet which leads to a dramatic increase in traffic.

In the face of these developments, the quality of transmission in the internet must be maintained for it to retain its innovative potential. Otherwise, the quality of all services provided over the internet would suffer.

The question is therefore, how to manage and ensure quality in a differentiated way in a dynamic IP-environment. Market players are clearly best placed to ensure this efficiently. The question cannot be to freeze the status quo and thereby either thwart the development of new services or *de facto* restrict user behaviour.

2. No imposition of minimum QoS standards by NRAs

ETNO is concerned with the Commission's proposals to allow NRAs to set certain minimum standards of quality of service in an IP environment. The proposal is both vague and difficult to reconcile with the nature of data transmission in IP networks.

As far as requirements for basic quality standards for the infrastructure itself are concerned, these are developed in the competent standardisation bodies. Compliance with these requirements is in the best interest of network providers to provide functioning services. All other public intervention relating to specific quality of service parameters in this field should be avoided. Internet traffic is realised as "best effort"-transmission services without the guarantee of specific parameters – a system that has served the end-user well. To allow for mandated minimum quality parameters for *all* services at all times could lead to a dramatic price increase for the end-user and could seriously damage the attractiveness of the internet.

VIII. Adapt 'telephone specific' provisions to technology and market developments

We do not agree with the proposed procedure to change important provisions of the framework under a comitology procedure. The adaptation of the Directives including the Universal Service Directive to technological change is one of the natural tasks for this review. ETNO invites the Commission to present and discuss its proposals for this exercise in more detail. The shift from PSTN to all-IP networks is an important development in the context of

user rights and raises issues that go beyond a mere technical adaptations. It should be decided upon by the European legislator.

Obligations that do no longer make sense and are no longer required in an IP environment should be removed or phased out. An example would be the provision of carrier (pre-) selection which for a transition period could be kept in place on the PSTN to safeguard customers which have not yet migrated to IP if and where necessary.

IX. “Modernisation and updating”

We support the EC’s announcement to delete the minimum set of leased lines, withdraw Article 27(2) of the Universal Service Directive on ETNS, repeal Regulation 2887/2000 on unbundled access to the local loop and delete Annex I of the Framework Directive, Article 27 of the Framework Directive and Article 5(4) of the Access and Interconnection Directive.

ETNO would like to recall that a thorough modernisation and updating of the framework involves far more ambitious changes than the scrapping of outdated provisions, s. above, part 1 no. I and II.

Endnotes:

[1] The demarcation of access and core is quite different in a PSTN environment compared tot a full NGN environment. Economies of scope in innovation are therefore at stake if separation takes place in the transition phase.
[2] The term economic regulation is used here to describe those parts of the framework than that deal with obligations imposed ex-ante on market players with significant market power and with the regime protection rules, frequency and numbering management, security issues and the universal service for Interconnection between electronic communications networks. It can be separated from consumer regime, though close links may exist in some cases.
[3] The Commission Communication on the review '99 COM (1999) 539, para. 4.7. states that "*The aim is to create a regulatory regime which can be rolled back as competition strengthens, with the ultimate objective of controlling market power through the application of Community competition law*."; cf. also the opinion of the ESC, [2001] OJ C-123/13, p. 56, para. 3.2.
[4] European Parliament, Report on a European Information Society for growth and employment (2005/2167(INI)), "Paasilinna-Report", 23.2.2006, para. 40.
[5] "The new regulatory framework for Electronic Networks and Services**"**, Presentation by DG Information Society, November 2001, slide 14
[6] The Art. 7 overview presented by the Commission identifies few market areas where deregulation took place
[7] Cf. Annex 1 to ETNO Contribution to the 2006 Review, Markets and Technology Trends, available at http://europa.eu.int/information_society/policy/ecomm/info_centre/documentation/public_consult/review/index_en.htm
[8] COM (1999) 539, Communication from the Commission "Towards a new framework for Electronic Communications infrastructure and associated services - The 1999 Communications Review", p. 13
[9] ETNO RD 235; available at http://europa.eu.int/information_society/policy/ecomm/doc/info_centre/public_consult/review/comments/etno_rd235_%20ltrf_call_for_input.pdf
[10] Speech by V. Reding, Strengthening Competition and Completing the Internal Market, Annual Meeting of BITKOM, 27 June 2006
[11] ETNO RD 235, p. 7 Available at http://europa.eu.int/information_society/policy/ecomm/doc/info_centre/public_consult/review/comments/etno_rd235_%20ltrf_call_for_input.pdf
[12] SEC (2006)817, Commission impact assessment report on the review Communication, Annex 3, p. 38 ff.
[13] Excerpt from the Annex 1 to ETNO Contribution to the 2006 Review, "Markets and Technology Trends" op. cit.
[14] The exact form of wireless LAN capability used in 2010 is not yet clear. WiMax (802.13e) will be significant when it gets built into equipment. But ultra wideband technologies are also developing fast, and may become the dominant form of wireless access by 2010.
[15] Speech by V. Reding: "i2010 : new start for Lisbon and for European Information Society and Media policies", held at The i2010 Conference, London, 6 September 2005
[16] Infonetics, 2005 as reproduced in the Commission staff working document, p. 6.
[17] As cited in the Indepen report for the BRT, "Restoring European economic and social progress: Unleashing the potential of ICT", p. 20
[18] London Economics In association with PricewaterhouseCoopers, An Assessment of the Regulatory Framework for Electronic Communications – Growth and Investment in the EU e-Communications Sector, July 2006, s. graph on p. 24
[19] Indepen report for the BRT, "Restoring European economic and social progress: Unleashing the potential of ICT", p. 18 ff.
[20] A sound basis for evidence based policy? A critique of the ECTA regulatory scorecard and SPC Network papers on investment and broadband Dr Melvyn Weeks and Brian Williamson, Indepen, June 2006
[21] Mc Kinsey, Entry into the exit – The final showing for European regulation, January 2006; Mercer Management Consulting and Nera Economic Consulting, Deregulation on European broadband markets, 2005; The Brattle Group, Access pricing and investment in local exchange infrastructure, by William P. Zarakas, Glenn A. Woroch, Lisa V. Wood, Daniel L. McFadden, Nauman Ilias, Paul C. Liu, March 2003
[22] Mc Kinsey, Entry into the exit, - The final showing for European regulation, January 2006

[23] Cf. for example Verizon's HDTV offer at http://www22.verizon.com/content/fiostv
[24] The Brattle Group (s. above, endnote 18) highlighted this relation for mandated access policies in the US: "*UNEs that have been set by regulators have been: (i) effective in ensuring a larger number of competitors and lower retail prices than would be the case if UNE prices were higher than current levels, but (ii) ineffective in encouraging investment in local exchange infrastructure*." (idem, p. i)
[25] Such as the UK and France. In the latter, a new entrant has recently announced a substantial fibre investment which may make inter-platform competition in some regions a reality in the medium-term. The NRA's reaction to similar plans by the incumbent may prove decisive also for the success of the alternative investment.
[26] German market 12 remedies notification, SG-Greffe (2006) D/204686 http://forum.europa.eu.int/Public/irc/infso/ecctf/library?l=/germany/registeredsnotifications/de20050262/2005_206128_enpdf/_DE_1.0_&a=d
[27] ETNO has argued that highspeed-broadband services are likely to form a newly emerging market in view of changing consumer preferences, cf. ETNO Reflection Document 236 in reply to the European Commission call for input - Recommendation on relevant markets, January 2006
[28] The Commission does recognise that the assessment of the three criteria may be impossible at an early stage of market development. The same applies to an 'exact' market definition
[29] Cf. Speech by V. Reding, Strengthening Competition and Completing the Internal Market, Annual Meeting of BITKOM, 27 June 2006
[30] Baake, Kamecke, Wey; "Efficient Regulation of Dynamic Telecommunications Markets and the New Regulatory Framework in Europe", Berlin 2005
[31] Commission Staff Working document, p. 10
[32] So does Ofcom in "Ofcom's approach to risk in the assessment of the cost of capital, final statement", 18 August 2005, p. 102: *"Ofcom does not agree that practical difficulties are a reason for not attempting to understand the relevance of real options. It does, however, agree that the problems associated with a detailed modelling exercise to quantify the value of real options would be prohibitive. Ofcom's view is therefore that, for the foreseeable future, it will not be appropriate for it to attempt to develop a model with which to value real options* […]"
[33] ERG (06) 33 Revised ERG Common Position on the approach to appropriate remedies in the ECNS regulatory framework ("Remedies" document)
[34] Cf. ETNO RD 233 on ERG (06) 33 Revised ERG Common Position on the approach to appropriate remedies in the ECNS regulatory framework
[35] cf. Ofcom's approach to risk in the assessment of the cost of capital, final statement, 18 August 2005, p. 102
[36] Hogan Hartson, Analysys: "Preparing the next steps in regulation of electronic communications A contribution to the review of the electronic communications regulatory framework", July 2006
[37] Hogan Hartson, Analysys, cf. their reference to densely populated urban areas on p. 188, 191. The concept of regional market differentiation is also addressed in the study by Cave, Stumpf and Valetti in their Experts' report in relation with the Review of the Recommendation on markets subject to ex ante regulation from July 2006, p. 30 f.
[38] The existence of competing facilities as laid down in Art. 12 AID can prove an important criterion in relation to ducts for fibre access to the home. ETNO notes that the existence of multiple ducts leading to the home already (including for electricity, cable, water etc.) raises doubts whether any access obligation in relation to ducts could be justified in the light of the Directives. Moreover, where infrastructure competition exists, no market failure will be identified at the retail level that could justify such obligation.
[39] The issue the authors are most concerned about, cf. p. 190, pt. 7.3
[40] ETNO Reflection Document 236 in reply to the European Commission call for input - Recommendation on relevant markets, January 2006
[41] Cf. ETNO RD 233 on ERG (06) 33 Revised ERG Common Position on the approach to appropriate remedies in the ECNS regulatory framework
[42] Speech by V. Reding, "Strengthening Competition and Completing the Internal Market", Annual Meeting of BITKOM, 27 June 2006
[43] M. Cave, Six degrees of separation, 4th Q 2005, p. 11
[44] HSBC Global Research, Network Separation – War & Pieces, October 2006, p. 1, 10
[45] Hogan & Hartson, Analysys, p. 193
[46] We already responded to the call for input on the forthcoming review of the EU regulatory framework for electronic communications and services in January this year, thus, this Expert Contribution should be seen as a complement to our earlier Reflection Document RD234

[47] ETNO Reflection Document 235 in reply to the European Commission call for input, s. above fn 8, RD ETNO Reflection Document 219 on the Commission Communication on the review of the Scope of Universal Service, July 2005.
[48] A secure Information Society must be based on enhanced network and information security and a widespread culture of security. To this end, the EC proposes a dynamic and integrated approach that involves all stakeholders and is based on a dialogue, partnership and empowerment". COM 2006(251)
[49] ETNO has presented these differences and the reasons for the US debate in the ETNO Reflection Document 238 (2006/04) “Net neutrality » in the US - framing the debate”
[50] S. fn. , p. 187