# COMMISSION OF THE EUROPEAN COMMUNITIES



Brussels, 7.4.2006 SEC(2006) 445

# COMMISSION STAFF WORKING DOCUMENT

# Annex to the

COMMUNICATION FROM THE COMMISSION TO THE COUNCIL, THE EUROPEAN PARLIAMENT, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

Report regarding the outcome of the Review of the Scope of Universal Service in accordance with Article 15(2) of Directive 2002/22/EC

IMPACT ASSESSMENT REPORT

{COM(2006) 163 final}

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#### Lead DG

DG Information Society and Media

# Other involved services

See below. Relevant services have been consulted in the process of preparation of the Communications. An inter-service impact assessment steering group has not been required.

#### Commission Legislative Work Programme reference

2005/INFSO/017

# **Executive summary**

Universal service refers to a basic set of telecommunications services which ensure a public 'safety net'. Services within the scope of universal service must be available to all users in the territory of a Member State and be affordable in the light of national circumstances. Typically this implies an obligation to provide coverage to 100% of the population and some form of retail price control.

Article 15 of the Universal Service Directive requires that the Commission periodically review the scope of universal service, with the first such review falling due in 2005. The Commission issued a Communication in May 2005 which initiated a public consultation on whether mobile or broadband should now be included in the scope. Under the Directive, any proposed change in the scope is subject to strict assessment criteria whose questions include:

- Are specific services available to and used by a majority of consumers and does the lack of availability or non-use by a minority of consumers result in social exclusion?
- Does the availability and use of specific services convey a general net benefit to all consumers such that public intervention is warranted in circumstances where the specific services are not provided to the public under normal commercial circumstances?

The Commission's conclusions, based on detailed analysis and empirical evidence presented in the Communication, were that extension of the scope was not warranted. Stakeholders broadly agreed. The detailed analysis of their response to the consultation is set out in a report to the European Parliament and the Council in a second Communication. This second Communication is the subject of this impact assessment.

It is a limited and 'proportionate' exercise but none the less, the impact assessment aims to promote constructive debate which may inform the more substantial review of the whole eCommunications Regulatory package (of which Universal Service Directive is one part) in 2006. It will continue to follow the principles of Better Regulation, namely that regulation should be kept to the minimum necessary for the public interest and also encourage competition and innovation.

In examining the options for altering the scope of the universal service ('include mobile communications', 'include broadband internet access' and 'status quo') the impact assessment extends beyond the Directive's questions governing review of the scope of universal service in its presentation of the impacts on regulatory burdens, on the public, on economic and labour factors. Although a few positive impacts can be identified if the scope were extended to broadband (improved opportunities for teleworking, temporary job increases) and to mobile (increased competition between operators delivering universal service, possibility of cheaper services in remote regions) on balance these are heavily outweighed by negative or neutral impacts as set out in table 1 (such as potential for reducing competition in broadband services, likelihood of more expensive fixed line costs if scope extended to mobile). In comparing the options, it is clear that the status quo presently offers the best trade-offs among opportunities and risks and offers overall the best option. Given the current rapid developments in technologies and markets, this preferred option may not hold over time. The impact assessment therefore considers longer term issues and assesses possible future options that may be considered during the 2006 eCommunications Package review. In doing so it also serves to identify key monitoring and evaluation parameters and data needs and sources.

#### 1. PROCEDURAL ISSUES AND CONSULTATION OF INTERESTED PARTIES

# 1.1. The review of the scope of the universal service

Universal service refers to a basic set of telecommunications services available to all regardless of geographical location and (in the context of economic conditions of Member State) at an affordable price. Its key role is to ensure a safety net for access to key electronic communications services. The current scope of universal service covers (1) a connection to the public telephone network at a fixed location and (2) access to publicly available telephone services where the connection enables voice and data communications services - at narrowband speeds – with functional access to the Internet. In addition, it incorporates the provision of directories and directory enquiry services, public pay telephones and special measures for disabled users. The Universal Service covers also provisions on costing and financing of universal service schemes and designation of universal service providers.

The Commission has reviewed the scope of universal service in accordance of Article 15 of the Universal Service Directive<sup>1</sup>. The first stage involved issuing Communication *On the Review of the Scope of Universal Service* on 24 May 2005, which included analyses of the data and the preliminary assessment initiating the debate on whether mobile or broadband communications merit inclusion within the scope of universal. The accompanied Commission Staff Working paper provided detailed analysis and

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European Parliament and Council Directive 2002/22/EC on universal service and user's rights relating to electronic communications networks and services, OJ L 108, 24.4.2002, p. 51, also available at:

 $<sup>\</sup>frac{http://europa.eu.int/information\ society/policy/ecomm/info\ centre/documentation/legislation/inde}{x\_en.htm}$ 

information including statistical data.<sup>2</sup> The Commission invited public comments<sup>3</sup> on the analysis and initial conclusions.

In a second Communication, the Commission provided a report to the European Parliament and the Council on the review, setting out the results and analysis of that consultation. This Communication is the subject of this impact assessment. Its required focus is upon the scope of the Universal Service and not the broader provisions of the Directive. Moreover, as the Communication is of itself an evaluative document and proposes no new regulatory provisions, it is clearly sensible to restrict the discussion of options and impacts to a degree that is 'proportionate'.

The Directive sets strict criteria and methodology for the review of scope exercise, and it was not deemed necessary to set up an inter-service steering group for the impact assessment. The consultation with other Commission Directorate-Generals was conducted through the inter-service consultations that involved 13 Commission services (Secretary-General, Legal Service, Internal Market and Services, Competition, Enterprise and Industry, Trade, Energy and Transport, Economic and Financial Affairs, Health and Consumer Protection, Regional Policy, Employment, Social Affairs and Equal Opportunities, Enlargement and Eurostat).

Before the public consultation was launched, both the representatives of the industry at the European level as well as the consumer representatives in the European Consumers Consultative Group were informed on the process. The analyses of the first Review Communication were presented in the Communications Committee, in which the Member States (as well as the EFTA and the EU candidate countries) are represented, and in the eEurope Advisory Committee meeting.

In the stakeholder consultation, 76 contributions were received from a wide range of interests.<sup>4</sup> The contributors included governments, regulatory authorities, non-governmental organisations (in particular associations representing consumer/user interests as well as people with special needs), operators, service providers, manufacturers and other businesses and organisations, as well as private citizens. While many respondents commented all or most issues covered by the Communication, several focused solely on the long-term questions.

There was a broad consensus in favour of the Communication's assessment and conclusions. The majority of the contributors emphasised that the ever increasing use of

See the Communication, COM(2005) 203 final: <a href="http://europa.eu.int/information\_society/policy/ecomm/info\_centre/documentation/communic\_rep">http://europa.eu.int/information\_society/policy/ecomm/info\_centre/documentation/communic\_rep</a> orts/index en.htm

The public consultation was launched by posting the above documents to the website of the DG Information Society and Media as well as "Your Voice" in Europa website, with a deadline of 15 July 2005 for contributions to be sent by e-mail. See:

<a href="http://europa.eu.int/information\_society/policy/ecomm/info\_centre/documentation/public\_consult/index\_en.htm">http://europa.eu.int/information\_society/policy/ecomm/info\_centre/documentation/public\_consult/index\_en.htm</a>

The largest amount of contributions came from the United Kingdom (16), followed by Germany (9) France (8), Spain (5), Portugal (4), Austria (3) and Belgium (3). One to two contributions were received from nine other Member States (Czech Republic, Greece, Finland, Italy, Ireland, Lithuania, the Netherlands, Slovakia and Slovenia), one from an EU acceding country (Romania) and one from an EFTA country (Norway). In addition, 14 European or international associations and organisations responded.

mobile and broadband communications is a result of both the competitive policies in the EU and the business models and technological strategies adopted by the industry. Many contributors were concerned that any extension of the scope of universal service and its financing would deter competition, hinder investments and stifle innovation.

80% of the respondents were in support of the Communication's assessment on broadband, while this figure was over 70% in the case of mobile communications.<sup>5</sup> All the eight national governments or national regulatory authorities who sent comments agreed with the Commission's conclusions.

On the other hand, several consumer associations as well as other non-governmental organisations considered that the review criteria in the Directive or the Commission's assessment were too restrictive or lacking ambition, and called for extending the scope to mobile and/or broadband services. However, those organisations specialised in consumer or user issues in the communications sector supported the Communication's conclusions.

Therefore, the Commission's final position to maintain the scope of universal service as currently defined in the Universal Service Directive was supported by the large majority of the stakeholders that responded to the consultation.

# 1.2. The longer term issues

In the Communication of May 2005, the Commission invited public comment on a number of longer-term questions designed to encourage a forward-looking policy discussion on universal service provision The longer-term issues provoked a wide range of different reactions but there was a general agreement that the communications environment is in flux warranting further detailed discussion on the whole universal service provision.

These issues are outside the mandate and the timeframe of the current review under Article 15 of the Universal Service Directive but may need to be examined in future reviews, particularly in the general review of the EU regulatory framework for electronic communications in 2006. An inter-service group for impact assessment will be set up for this general review. Specific studies have been commissioned from the external experts that will be conducted in 2005 – 2006. Nevertheless, this impact assessment covers also the long term issues and thus aims at providing a constructive basis for the debate on future requirements and options. In this way its objective is to provide a valuable resource to the major, in-depth review of the regulatory framework in 2006.

#### 2. PROBLEM DEFINITION

Along with the other EU policies, the e-communications policy and regulation aim to ensure that all citizens are able to participate in the information society and thus reap its

<sup>57</sup> respondents commented the assessment and conclusion on mobile communications and 59 on broadband communications.

benefits.<sup>6</sup> The main policy tools are the creation of competitive markets and the safety net of universal service for those whose financial resources or geographical location do not allow them to access the basic services that are already available to the great majority of citizens.

The Universal Service Directive defines universal service as the "minimum set of services, of specified quality to which all end-users have access, at an affordable price in the light of national conditions, without distorting competition" (Art. 1.2).

The Directive lays down the basic principles on universal service that cover (1) the scope, (2) costing and financing of universal service schemes, and (3) designation of universal service providers.<sup>7</sup>

Just like the services to which it is applied, universal service will evolve over time in response to technological change, market developments and changes in user demand. Therefore Article 15 of the Directive requires that the scope of universal service be periodically reviewed by the European Commission in 2005 (and every 3 years thereafter):

"The review shall be undertaken in the light of social, economic and technological developments, taking into account, inter alia, mobility and data rates in the light of the prevailing technologies used by the majority of subscribers. The review process shall be undertaken in accordance with Annex V."

The Directive sets out the process, methodology and criteria – as described in Section 3 - for deciding whether specific (new) electronic services merit inclusion within the scope.

On i2010 see: http://europa.eu.int/information\_society/eeurope/i2010/i2010/index\_en.htm

The aim of developing and implementing an inclusive information society, in which citizens would not only have access but also ability to use technologies and services, is of relevance both for the Commission's i2010 initiative and for the Information Society Technologies priority of the 6<sup>th</sup> Research Framework Programme. The policy tools of the i2010 initiative include: policy guidance on *e*Accessability and coverage of broadband, a European Initiative on e-Inclusion, an Action Plan on e-Government and strategic orientations on ICT-enabled public services and setting-up three 'quality of life' ICT flagship initiatives (technologies for an ageing society, intelligent vehicles that are smarter, safer and cleaner, and digital libraries making multimedia and multilingual European culture available to all).

In the Communication on *e*Accessability of 13 September 2005, COM(2005) 425, the Commission proposes a set of policy actions to foster *e*Accessability and calls on Member States and stakeholders to support voluntary positive actions to make accessible ICT products and services far more widely available in Europe. See:

http://europa.eu.int/information\_society/policy/accessibility/com\_ea\_2005/index\_en.htm

Besides universal service, the Directive addressed other consumer and user rights (such as simple dispute resolution procedures, and access to clear tariff information) and corresponding obligations on undertakings, thereby seeking to safeguard the provision of good quality publicly available electronic communications services throughout the EU. The whole regulatory framework for e-communication protects the interests of European citizens also in several other respects that include a high level of protection in respect of the processing of personal data and right to privacy.

# The current scope of universal service includes:

#### Connection to the public telephone network at a fixed location

"All reasonable requests for connection at a fixed location to the public telephone network and for access to publicly available telephone services at a fixed location must be met by at least one undertaking." (Article 4.1)

The connection to the network is limited to a single narrowband connection to the end-user's primary location/residence. There is no requirement for a specific data or bit rate but the connection must be capable of supplying "functional Internet access, taking into account prevailing technologies used by majority of subscribers and technological feasibility" (Article 4.2). The principle of technological neutrality allows universal service providers to use any technology, whether wired or wireless, which is capable of delivering that service at fixed location (Recital 8).

### Access to publicly available telephone services

According to Article 4.2, end-users must be able to make and receive local, national and international telephone calls, facsimile communications and data communications.

In addition, the Directive incorporates a number of services that are closely associated with basic telephony, as they are necessary for users to be able to make full use of the publicly available telephone services. These are: the provision of directories and directory enquiry services (Article 5), public pay telephones (Article 6) and special measures for disabled users (Article 7).

Member States must ensure that the defined set of services is made available to all users in their territory, independently of geographical location, upon reasonable request. They are also required to find the most efficient means of guaranteeing universal service obligations, including giving all undertakings an opportunity to fulfil them. Only if the market fails to deliver the defined services may obligations be imposed on undertakings to provide services at specified conditions (Articles 3, 4 and 8).

In addition to this mandatory requirement for the review of the *scope* of universal service, the overall assessment of the whole regulatory framework for electronic communications, including review of the Universal Service Directive in its *entirety*, will be undertaken in 2006.<sup>8</sup> As such, the current review is of itself evaluative and aims to effect an impact assessment of the options for redefining the Directive, which will also provide for the 2006 review.

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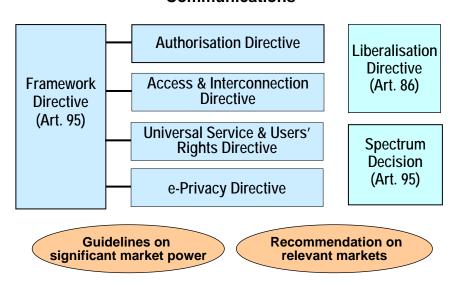
The Access (2002/19/EC), Authorisation (2002/20/EC), Framework (2002/21/EC), Universal Service (2002/22/EC) and e-Privacy (2002/58/EC) Directives include provisions concerning the obligation for the Commission to review periodically the functioning of these Directives and report to the European Parliament and the Council on the first occasion no later than 25 July 2005 (31 October 2006 as regards the e-Privacy Directive).

#### 3. OBJECTIVES

Liberalisation of European telecommunications markets in 1998 delivered higher quality services and lower prices for consumers.

However, technology and markets evolved, and the rules applicable in 1998 were modernised and updated in 2002 to deal with today's landscape of converging networks and services. Building on a technology neutral approach, the current regulatory framework reflects trends in convergence, i.e. for similar services to be delivered over different types of networks. It comprises a series of legal texts and associated measures – as showed in the figure below - that cover both commercial dealings between operators and with their customers, under the supervision of the national regulatory authorities. <sup>9</sup>

# The Regulatory Framework for Electronic Communications



The goals of the framework are to encourage competition in the electronic communications markets, to improve the functioning of the internal market and to protect the interests of European citizens. Its legal basis is therefore Article 95 of the EC Treaty (with the exception of the 'liberalisation' Directive which is based on Article 86).

For purposes of market entry rules, for access and inter-connection of networks, and for *ex ante* regulation that temporarily substitutes for real competition, the regulatory framework covers all transmission infrastructures (such as cable networks, satellite transmission networks, wireless networks and telecoms networks) in the same or similar ways. <sup>10</sup>

More information on the framework can be found at:

http://europa.eu.int/information\_society/policy/ecomm/todays\_framework/index\_en.htm

Regulation of commercial content services – such as Information Society Services and broadcasting – that may be offered over transmission infrastructures are covered by other Community instruments (such as the e-Commerce Directive and the TV Without Frontiers Directive).

Because there are many electronic communications markets where competition has not yet developed, the EU framework continues to provide for regulation in markets where there is effectively no real competition. National authorities may therefore impose, subject to Commission powers of review, *ex ante* obligations on companies with 'significant market power', which is equated with the concept of dominance as interpreted under EU competition law.<sup>11</sup>

This set of rules seeks to establish a stable and predictable regulatory environment in Europe that encourages innovation and stimulates new investment in communications networks and services, by both new entrants and existing operators. It requires regulation to be lifted when effective competition is in place. Broadband and other new technologies will be rolled out more quickly under competitive market conditions, making a substantial contribution both to consumer choice and to the economic growth of the sector.

Achieving better regulation is a common challenge for Member States and EU institutions as well as for businesses. It means finding a balance between the protection of the public interest and the burden of regulations, which may damage the prospects for competitiveness, sustainable growth, employment and trade.

The regulatory framework for e-communications is based on five fundamental principles of regulation:

- (1) Regulation should be kept to a minimum.
- (2) Regulation should be based on clearly defined policy objectives of:
  - (a) fostering economic growth and competitiveness; and
  - (b) ensuring that objectives of general interest are met where they are not satisfied by market forces alone.
- (3) Regulation should strike the right balance between flexibility and legal certainty.
- (4) Regulation should be technologically neutral or objectively justifiable if it is not.
- (5) Regulation may be agreed globally, regionally or nationally, but should be enforced as closely as is practicable to the activities being regulated.

The Universal Service Directive (USD), which deals with circumstances in which the basic needs of citizens are not satisfactorily met by the market, is also based on these principles.

In essence, universal service obligation constitutes a requirement that (telecommunications) operators provide basic telephony services to all who request it at an affordable price even though there may be significant differences in the costs of supply. Ensuring affordability may entail geographically averaged prices for telephone connections and/or other schemes to help lower income, disabled and remotely located

The markets in which companies may be subject to such *ex ante* regulation have been identified by the Commission according to criteria that are intended to capture only those markets that would tend not to become competitive over time, for example, where there are persistent structural barriers to entering the market, as is the case when radio spectrum is required for service deployment. Any markets proposed for regulation that do not appear in the Commission's list must be agreed with the Commission.

customers. Universal service regime usually involves a cross-subsidy from one group of (profitable) customers to another group of (unprofitable) customers (e.g. low usage subscribers in high-cost locations). As the cost of communications services and the incomes of subscribers differ from one region to another (as well as between the different social groups), the specific definition and interpretation of affordability is left to Member States. Therefore, for the purpose of the current review, it has not been necessary to quantify the affordability of access at EU level. Further discussion of the affordability of mobile communications can be found at section 5.2.

Therefore, in the liberalised and generally competitive European communications markets, regulation must achieve a balancing act between the economic and social goals. A well-defined concept and scope of universal service protects against the risk that market forces on their own might exclude certain groups of users or users in certain regions from being able to access basic communication services. At the same time, where the market can, and is delivering such access or where demand is still uncertain, universal service rules are not appropriate. Universal service provision is not a mechanism for financing the roll-out of new services by increasing the costs of other existing services for consumers. Rather, it is to the safety net that allows a minority of consumers to catch up with the majority who already enjoy basic services. However, it should be noted that the EU's universal service rules do not prevent Member States to support the rollout of broadband infrastructures, in conformity with the applicable state aid rules. <sup>14</sup>

For that reason the Universal Service Directive sets out criteria and a methodology for the (periodic) review of the scope of universal service. In particular, it identifies the key criteria for extending the scope of universal service that combines a market-based analysis of demand for and availability of a specific electronic communications service with a political assessment of its social and economic desirability.<sup>15</sup>

The <u>methodology and criteria for reviewing the scope</u> are set in Recital 25 and Annex V of the Directive. According to Recital 25:

http://europa.eu.int/comm/information\_society/policy/telecom/review99/pdf/review\_en.pdf

For that reason, national regulatory authorities are entrusted to monitor the evolution and level of retail tariffs of them, in particular in relation to national consumer prices and income. In order to ensure the access to the publicly available telephone services for those with special social needs or on low incomes, Member States may require designated undertakings to provide tariff options or packages that depart from those normally offered to consumers on a commercial basis. Member States are allowed to provide direct support to consumers with low incomes or special social needs. (Art. 9 USD)

See section 2 in the Review Communication of May and the Annex on measurement issues in the associated Staff Working Document (links to these documents can be found in footnote 2 above).

See for example state aid decisions N126/04 "Broadband for SMEs in Lincolnshire (UK)" of 14.12.2004, N199/04 "Broadband business fund (UK)" of 16.11.2004, N267/2005 "Rural Broadband Access Project (UK)" of 05.10.2005, N583/04 "Broadband in rural and remote areas (ESP)" of 06.04.2005 and N381/04 "Pyrénées-Atlantiques (F)" of 16.11.2004: http://europa.eu.int/comm/secretariat\_general/sgb/state\_aids/

The criteria for future development of universal service in the liberalised market are extensively discussed in the Commission Communication of 12 March 1996, COM(96) 73, available at: <a href="http://europa.eu.int/ISPO/infosoc/legreg/9673.html">http://europa.eu.int/ISPO/infosoc/legreg/9673.html</a>. The Commission already applied these criteria in the 1999 Communications Review, COM(1999) 539, which analysed whether broadband services should be included within the scope of universal service under the then proposed universal service provision. See in particular section 4.4.1:

(...) "Such a review should take account of evolving social, commercial and technological conditions and the fact that any change of scope should be subject to the twin test of services that become available to a substantial majority of the population, with a consequent risk of social exclusion for those who can not afford them. Care should be taken in any change of the scope of universal service obligations to ensure that certain technological choices are not artificially promoted above others, that a disproportionate financial burden is not imposed on sector undertakings (thereby endangering market developments and innovation) and that any financing burden does not fall unfairly on consumers with lower incomes. Any change of scope automatically means that any net cost can be financed via the methods permitted in this Directive. Member States are not permitted to impose on market players financial contributions which relate to measures which are not part of universal service obligations. Individual Member States remain free to impose special measures (outside the scope of universal service obligations) and finance them in conformity with Community law but not by means of contributions from market players."

# Annex V sets out the following methodology for the review:

"In considering whether a review of the scope of universal service obligations should be undertaken, the Commission is to take into consideration the following elements:

- social and market developments in terms of the services used by consumers,
- social and market developments in terms of the availability and choice of services to consumers,
- technological developments in terms of the way services are provided to consumers.
- In considering whether the scope of universal service obligations be changed or redefined, the Commission is to take into consideration the following elements:
- are specific services available to and used by a majority of consumers and does the lack of availability or non-use by a minority of consumers result in social exclusion, and
- does the availability and use of specific services convey a general net benefit to all consumers such that public intervention is warranted in circumstances where the specific services are not provided to the public under normal commercial circumstances?"

The purpose of the periodic review of the scope of universal service is therefore to collect, analyse and present the evidence according the criteria set out by the Universal Service Directive. This is based upon empirical analyses and stakeholder consultation. By applying the assessment criteria set out in the Directive, the Commission can then determine whether it is justified to adapt the scope of universal service to reflect market,

technological and social developments that have taken place since the Directive was adopted.

# 4. POLICY OPTIONS

The Directive requires the Commission to examine in particular whether the scope should be extended to mobile and/or broadband communications services. The policy options are provided by the Universal Service Directive along with the criteria for assessment. The options are to revise or maintain the scope of the universal service obligation.

The Commission is required to report to the European Parliament and the Council of Ministers, and if changes to the scope were proposed, to draft an appropriate legislative proposal.

Three policy options are identified: Include mobile communications within the scope of universal service; Include broadband Internet access within the scope; and 'Status quo' option, i.e. to keep the scope unchanged.

The two Communications on the scope of universal service and the accompanied Commission Staff Working Document provide the basis for proportionate impact analysis.

#### 5. ANALYSIS OF IMPACTS

# 5.1 Categories affected

Any change - or non-change - of the scope of universal service may affect the following categories of population and/or aggregates:

**Individuals and households**: Any change to the scope – or non-change in a context of evolving communications environment – must be assessed against the increasing market capacity to provide, in a liberalised environment, quality services to all at an affordable price with a particular attention being given to an evaluation of the risks of social exclusion to certain demographic groups, for geographic, economic or any other reasons, and which currently benefit from universal service obligations.

**Society as a whole**: The capacity of electronic communications services to convey social benefits to all consumers must be assessed against the underlying costs which would result from any public intervention to deliver these services based on sector funding mechanisms. Any policy in this area must ensure that any financial burden resulting from a change in the scope of universal service would not fall unfairly on consumers with lower income (Rec. 25 USD).

**Industry**: Any decision on the scope of universal service obligations must ensure that certain technological choices are not artificially promoted above other, and that a disproportionate financial burden is not imposed on sector undertakings, thereby endangering market developments and innovation (Rec. 25 USD).

**Economy as a whole**: e-communications services reduce the transaction costs of economic activities and contribute to enhance productivity and competitiveness. In addition, they have the capacity to contribute to the development of the local and regional economic fabric. A change – or non-change - to the scope of universal service can thus have an impact on the economy as a whole, taking into account the existence of network effects.

**Environment**: It is anticipated at this stage that impacts are most likely to be social and economic (e.g. competition, markets, households, rural versus urban areas, labour market access and consumer rights). In general, the development of e-communications services can have positive effects on the environment, for instance by providing an alternative to the physical transportation of goods and persons (e.g. teleworking), as well as negative effects caused, for example, by laying cables, installing radio masts etc.

The table 1 below sets out the main likely impacts arising from each of the three policy options.

Table 1 - Main likely impacts arising from the three policy options  $^{16}$ 

OPTIONS IMPACTS	1) no change to scope	2) include mobile	3) include broadband
Overall legislative burden	(=) No impact; no need to adjust the existing rules, therefore no additional legislative burden is created.	(-) Increase in regulation.	(-) Increase in regulation.
Administrative load for National Regulatory Authorities and Ministries	(-) As competition increases and the market share of US provider is eroded, industry's claims for US funding might increase.	(-) Increased burden arising from the need for costing and auditing the USO burden, and implementation of a USO cost sharing scheme.	(-) Increased burden arising from the need for costing and auditing the USO burden, and implementation of a USO cost sharing scheme.
Social inclusion	(=) Current regime as a safety net provides for social inclusion.	(=) Given the already widespread use and affordable access to mobile communications, inclusion of these services within the scope of US would have little impact on social inclusion.	(+/-) Making broadband access more affordable under a US obligation would have limited impact on the digital divide. Other factors such as the need for household to have a PC and the level of education are more significant obstacles.

The following abbreviations are used: US = universal service, USO = universal service obligation, USF = universal service fund, MS = Member State(s), LL = leased lines, PPP = private-public partnership, SMP = Significant Market Power.

OPTIONS IMPACTS	1) no change to scope	2) include mobile	3) include broadband
Consumers & Households	(=) Keep benefiting from a safety net for connection to the public telephone network and access to the basic telephone service.	<ul> <li>(+) An obligation on 100% coverage would benefit the very small percentage of the population in areas currently not served by mobile.</li> <li>(+) Targeted subsidies could help the small number of consumers for whom cost is a genuine obstacle.</li> <li>(-) The above advantages that could be made available to a minority of consumers would increase the bills for the majority of existing customers.</li> <li>See also section 5.2 below</li> </ul>	<ul> <li>(+) It could increase the affordability of the broadband services and could ease access to information society services for households already equipped with PCs.</li> <li>(-) At current penetration levels only a minority of consumers has access to broadband services. Including broadband services within the scope of universal service would be subsidising broadband service provision for new users via a cross-subsidy from consumers of basis telephony service. This would increase telephone bills for the rest of the population.</li> </ul>
Compliance costs for market players	(=)All operators with US obligations have to calculate the costs of those obligations. Where an NRA considers these to be an unfair burden, it may set up a US funding scheme whereby all market players contribute to the cost of US provision.	<ul> <li>(-) Mobile operators with US obligations would have to calculate the costs of those obligations. Where an NRA considers these to be an unfair burden, it may set up a US funding scheme whereby all market players contribute to the cost of such universal mobile provision.</li> <li>(-) In case compensated low income customers disappear from the fixed network and opt for mobile US, the incumbent would experience a decrease in revenues and difficulty to recover the (sunk) network investment costs made to meet the current US obligations (e.g. in remote areas). In this case, subscribers of the fixed network would have to pay a higher line rental.</li> </ul>	(-) Operators with US obligations to provide full affordable broadband coverage would have to calculate the costs of those obligations. Where an NRA considers these to be an unfair burden, it may set up a US funding scheme whereby all market players contribute to the cost of such universal broadband provision.
Cost of US provision	(=) In those countries that have US funding schemes, the cost of US provision ranges from 10 to 297 Million Euro (in 2002)	(-) Including mobile within the scope of universal service would significantly increase the overall cost of universal service provision within each MS.	(-) Including broadband within the scope of universal service would significantly increase the overall cost of universal service provision within each MS.

OPTIONS	1) no change to scope	2) include mobile	3) include broadband
IMPACTS			
Competition	(=) The current US schemes when properly implemented have no distortive effects on competition.	(+)Inclusion of mobile could lead to competition in the provision of universal service (between fixed and mobile operators). In many cases however the former monopolist may be the supplier of both services.	(-) A designated US provider for broadband would strengthen its competitive position. The costs involved in such a provision would be significant and raise barriers to entry for new operators. This could have the effect of reducing competition and consumer choice
Impact on innovation	(=) Maintaining the current scope has no impact on innovation.	(+) A legal obligation on mobile operators to provide 100 % coverage could lead to cheaper ways to serve remote areas.	(+) Price caps on broadband operators under a US obligation (in order to ensure affordability) could lead to innovative low cost solutions to serve remote areas.
Underdeveloped regions	(=) Maintaining the current scope has no impact on underdeveloped regions	<ul> <li>(+) Many underdeveloped regions already have adequate mobile coverage. Extending the scope of US to include 100% mobile coverage would help the few underdeveloped regions that are not currently served by mobile services.</li> <li>(-) Using US obligations to fund underdeveloped regions implies higher social costs than for other types of initiatives e.g. the use of structural funds, general taxation.</li> </ul>	<ul> <li>(+) An obligation for 100% broadband coverage would help those underdeveloped regions that do not currently have broadband.</li> <li>(-) Using US obligations to fund underdeveloped regions implies higher social costs than for other types of initiatives e.g. the use of structural funds, general taxation.</li> </ul>
Employment	(=) No change	(+) Small temporary increase in jobs (to install the infrastructures) if 100% mobile coverage is imposed.  Little long term impact in view of the already high penetration of mobile.	<ul> <li>(+) Small temporary increase in jobs (to install the infrastructures) if 100% broadband overage is imposed.</li> <li>(+) Mandating broadband access in remote areas could favour teleworking and help to maintain employments in these areas.</li> </ul>

# 5.2 Affordability of mobile communications

Provision of a fixed telephone service is part of the universal service obligation in the EU, and national regulatory authorities regulate retail prices of the fixed telephone network and/or require operators to offer special 'social' tariffs as a way of ensuring affordability for low income consumers or with special social needs. In the public consultation, consumer organisations raised concerns about costs of mobile services and especially questioned their affordability to low income consumers. The question is whether extending the universal service obligation to mobile networks would make them more affordable.

In any assessment of affordability<sup>17</sup>, it is important to take into account the total cost of ownership, and not simply the cost of call charges. In this regard, the cost of a basic mobile phone is less that the cost of installation of a fixed line and purchase of a fixed telephone handset; for low usage customers, the cost of using a mobile phone is less than the cost of using a fixed phone, mainly because costs of owning a fixed phone line includes the monthly line rental (the EU average was over €15.30 in 2005).In contrast, pre-paid mobile services entail a low entry price and the possibility to make and receive calls without paying fixed charges, as well as greater possibility to control telephone expenditure thereby increasing their attractiveness to low income consumers. These cost advantages of mobile phones apply even when compared to the special 'social' tariffs that are in place in many Member States to ensure affordability of the fixed telephone network for low income customers.<sup>18</sup>

The residential survey on availability and use of e-communications in the EU, "Telecoms Services Indicators 2004" (covering over 44,000 households in the 15 pre-accession

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18

The concept of affordability in the context of universal service provision was examined in detail in a study commissioned by the Commission in the view of the 1999 Communications Review. As far as the causes of phonelessness of households are concerned, it concluded as follows: "There is mounting evidence that in relatively high income countries the monthly subscription charge is not the reason some households do not subscribe to the telephone. It is a combination of:

<sup>-</sup> Inability to control the size of the phone bill .

<sup>-</sup> High up-front payments (deposits and connection charges )

<sup>-</sup> Many people do not value having a telephone in the home very highly. Indeed, amongst low-income households there is strong evidence that shows that most of them value a TV more than the telephone. [...]" "Study on the re-examination of the scope of universal service in the telecommunication sector of the European Union, in the context of the 1999 Review", Wissenschafliches Institut für Kommunikationsdienste (WIK), April 2000, available at: http://europa.eu.int/ISPO/infosoc/telecompolicy/en/Study-en.htm

The discussion in section 3.2.2 of the Review Communication of May 2005 (see footnote 2 above) provides more information why the cost structure of mobile networks makes it generally a cheaper method of subscribing to basic telephone services than fixed networks. This can be demonstrated by taking an example of the EU Member State where the mobile costs of low-traffic users are amongst highest compared to the cost of fixed line rental. The lowest fixed line rentals are currently in the new Member States who have not yet fully rebalanced their tariffs. Among these countries, Latvia has one of the highest costs for low usage mobile basket. Nevertheless, even in Latvia, which offers a special social tariff of around €0 for the annual fixed line rental, the argument holds.

On low usage mobile baskets and monthly fixed line rentals charges in the EU in 2004 and 2005, see figures 50 and 80 in Annex 2 of the 11th implementation report of 2005 on the European communications regulation and markets, available at: <a href="http://europa.eu.int/information-society/policy/ecomm/implementation-enforcement/index-en.ht">http://europa.eu.int/information-society/policy/ecomm/implementation-enforcement/index-en.ht</a>

Member States)<sup>19</sup> showed that 7% of households considered that fixed line costs (installation/connection and usage costs) were too high to have it at home, despite the fact that the fixed line network is subject to universal service provisions. Thus even where schemes are in place to ensure affordability, there is still a small percentage of households who find these services too expensive.

In the case of mobile, the survey revealed that 3% of the households were not actually using mobile communications due to affordability concerns, which is less than half the figure for the fixed telephone network.<sup>20</sup>

Thus, the evidence demonstrates that mobile communications as competitive services are already more affordable than fixed line phone services. More work is needed to ensure that we have adequate information on prices of all forms of telephony so that we can better monitor internal market developments.

#### **6.** COMPARING THE OPTIONS

The table above presents the main positive and negative impacts likely to arise from each of the options. For the present, the balance of risks and opportunities suggests that no change to the scope of universal service is appropriate at this stage. However, the current rapid developments in technologies and markets will require close monitoring.

The present review and assessments in this impact assessment have provided an opportunity to stimulate debate and analysis of possible scenarios for more fundamental change in the concept of universal service in the near or medium term future. Some of these options and their potential impacts are set out in table 2 below.

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The study is available at:
<a href="http://europa.eu.int/information\_society/policy/ecomm/info\_centre/documentation/studies\_ext\_consult/index\_en.htm#2005">http://europa.eu.int/information\_society/policy/ecomm/info\_centre/documentation/studies\_ext\_consult/index\_en.htm#2005</a>

The three main reasons why 19% of the households did not have mobile phone were: 48% - "there is no currently wish to have mobile phone"; 31% - "fixed telephone line is sufficient to current needs"; and 16% - "cannot afford to have a mobile phone". The main reason why 18% of the households did not own fixed telephones were: 41% - has at least one mobile subscription; 20% – "cost of using the service is too high"; 18% - "cost of getting the service is too high".

**Table 2 - Possible future options** 

OPTIONS IMPACTS	Key areas for social impact analysis	Key areas for economic impact analysis	Additional impact analysis requirements including environmental aspects
No Universal Service obligation	US is a safety net and thus evidence of universal availability and access to services would be required before deregulating. Risks deepening social exclusion.  Evidence needs: consumer groups that might be excluded today, regions without coverage. Information about costumers who benefit from under cost provided subsidised packages. Sociodemographic data, price elasticity.  Sources: studies, Commission's annual implementation reports; NRA annual reports,	Main consequences in terms of economic impact on all consumers (prices, availability and affordability) and specifically on disadvantaged groups (availability and affordability of services for high-cost consumers, low-income and disabled).  Evidence needs: current data on penetration and coverage, enquiry of demand for specific services, data on access to services.  Sources: studies, Commission's annual implementation reports; NRA annual reports.	Legal/administrative – substantial lowering of administrative and legal burden for the industry and national authorities (lower transaction costs, compliance costs, etc.).  Evidence needs: specific data from the US providers on the cost of providing the US.  Sources: Information provided to NRAs operators; Commission's annual implementation reports; NRA annual reports.
Reduce the scope of USO by excluding provisions on public payphones	This kind of reduction of the scope would have to be accompanied by an analysis of the demand for public payphones and impacts particularly on the most vulnerable members of the society and public access to emergency authorities.  Differences between MS need to be considered.  Evidence needs: usage data for public phones from operators; impact on consumers.  Sources: NRAs, user/consumer groups.	Analysis of the economic costs and benefits of public payphones; impacts of this option on US providers, consumer choice and on the whole economy. Economic viability of alternatives to public payphones.  Evidence needs: data from US providers on cost of provision of public payphones.  Sources: Date available via NRAs.	Legal and administrative impacts: less administrative burden, no need to reimburse US providers for the provision of public payphones. If alternatives to public phones considered, then need to include an analysis of legal and administrative burdens related to the use of these alternatives.

OPTIONS IMPACTS	Key areas for social impact analysis	Key areas for economic impact analysis	Additional impact analysis requirements including environmental aspects
Reduce the scope of USO by excluding provisions on directories and directory enquiry services	Risk of not taking into account differences between MS as to the level of competition (in some MS, there still might be need to include these services in the USO).  Evidence needs: evidence from the telecom industry and providers of directory enquiry services  Sources: NRAs.	Explore to what extend these services are being provided by the market – in the light of market competition and technological developments – without being regulated.  Evidence needs: market data from the directory services industry and telecom operators.  Sources: NRAs.	Legal/administrative: excluding the provision of directories could result in reducing financial and administrative burden for the current US providers (in case directories are loss-making and funded from the USF – to be examined).  Evidence needs: implementation reports.
Change the provisions concerning universal service funding	Risks and opportunities of shifting the USO financing burden from individual groups of consumers to the whole society (through general taxation) and analysis of alternative funding methods (PPP, regional funds, etc.).  Evidence needs: study on alternative funding methods and their social impact.	The issue of economic efficiency of the USF vs. general taxation. Evidence on distorting effects of sector-specific financing and its, impact on the overall communications costs, evidence showing problems with functioning of the USF.  Evidence needs: economic analysis of the USF and general taxation systems.  Sources: Studies; implementation reports.	Legal/administrative impact: Examine the necessity of a change in national legislations to provide for funding from general taxation.
Change the scope to be only provision of broadband access	Risk of services being accessible only to PC equipped households, therefore a risk of social exclusion of some disadvantaged groups, but technological development may reduce this.  Evidence needs: broadband take-up; global comparative data.  Sources: NRAs, consumer groups, operators	Efficiency arguments stemming from more flexibility and technological neutrality.  Evidence needs: data on present coverage and penetration and accessibility of infrastructure in all MS plus future projections  Sources: NRAs.	Legal/administrative impacts: legal provisions and administrative rules in MS would have to change which may involve additional compliance cost; the scope of costs and benefits would have to be examined.

#### 7. MONITORING AND EVALUATION

The Communication of 24 May 2005 on the review of the scope was accompanied by a statistical annex which set out the key data on mobile and broadband penetration and uptake as well as data on fixed lines. This data is assembled from a variety of regularly available sources such as the annual implementation reports on European e-communication regulation and markets<sup>21</sup> and residential surveys based on face-to-face interviews<sup>22</sup>, which will continue to be analysed in order to monitor changes in use and availability of electronic communications services.

A number of studies are being launched to support empirical analysis required for the review of the electronic communications regulatory framework (including Universal Service Directive) in 2006. However, useful data on markets is often problematic: under conditions of fast changing technologies including new generation networks and convergence of services and platforms (e.g. transmission of voice and data and moving images on the same device), market developments are likely to be rapid but in many cases difficult to predict. Economic foresight data, cost benefit analyses and even econometric forecasts are likely to suffer in terms of robustness and fidelity. Despite these constraints available empirical evidence will be gathered and gaps commissioned.

The review of the scope of universal service has been informed by public consultation and by extensive empirical data. These data will continue to be gathered. The evaluative mechanisms in place for assessing future extension of the scope are already in place. The impact assessment however has looked also at future options for the review of the universal service directive as a whole.

21

See: http://europa.eu.int/information\_society/policy/ecomm/implementation\_enforcement/index\_en.htm

See "Telecoms Services Indicators" studies: <a href="http://europa.eu.int/information\_society/policy/ecomm/info\_centre/documentation/studies\_ext\_consult/index\_en.htm#2005">http://europa.eu.int/information\_society/policy/ecomm/info\_centre/documentation/studies\_ext\_consult/index\_en.htm#2005</a>