



## REPLY TO COMMISSION'S QUESTIONNAIRE FOR THE PUBLIC CONSULTATION ON UNIVERSAL SERVICE PRINCIPLES IN E-COMMUNICATIONS

### **Basic concept of universal service**

**Question 1:** *In today's competitive environment, can the market be relied on to meet demand for basic e-communications services from all sections of society, thereby ensuring social inclusiveness?*

Directive 2002/22/EC defines the 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 specific national conditions, without distorting competition." According to the directive this minimum set of services includes access at a fixed location and provision of telephone services, access to public pay telephones, telephone directory enquiry services, access to the emergency services through the single European emergency call number (112), access to harmonised numbers for harmonised services of social value etc. It also includes measures for disabled end-users, the affordability of tariffs, the quality and availability of service and a series of controls and end-user rights (covering contracts, transparency and publication of information, etc.). It is evident that these services, especially access to emergency services through the 112 and the provision of a general alert system for citizens necessitate important development and operational costs and cannot be provided solely through a market oriented approach in today's competitive environment.

When the telecommunications operators that provided those services were publicly owned monopolies, provision of the universal service was considered a public service par excellence and was inscribed in the mission statement of these publicly owned operators. In a competitive market the provision of these services, especially to «disabled consumers, those on low incomes and those living in geographically remote or isolated areas» are included in the definition of universal service, the cost of which has to be covered either directly by the Member State concerned or in the context of the provision of the licence to the operator by the Member State. In the first case a complete breakdown of the costs incurred by the operators should be provided.

EENA believes that the market cannot be relied on to meet these demands and a minimum set of requirements should be established. Within the EU-15, the implementation of the 112 emergency number established in 1991 was completed only in 2000 after several delays and the threat of legal proceedings against Member States. The implementation of localisation according to the Universal Service Directive necessitated the opening of a dozen legal proceedings as well. While traditional networks and telephony could provide the means to enable all citizens to access 112, the Commission reported that in 2007 only seven countries had implemented an accessible 112 for people with disabilities<sup>1</sup>. Meanwhile, market players did not provide basic emergency services with basic data such as caller-ID and location until the Commission took legislative actions to enable citizens to benefit from a minimum quality of service. EENA invites the Commission to continue regulating universal service, in particular since broadband (see responses to question 3 to 6) carries new opportunities but also new and important challenges.

**Question 2:** *If not, what is the best policy to allow disabled consumers, those on low incomes and those living in geographically remote or isolated areas to access and use basic e-communications services?*

As explained above, EENA believes that regulation is needed in order to allow all citizens, including disabled ones (also consumers and taxpayers), to access basic services such as 112. Today's access to the 112 number has been insufficiently regulated concerning this aspect and excludes a large majority of people with disabilities from accessing emergency services. The right to access emergency services is invoked in the Charter of Fundamental Rights of the European Union

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<sup>1</sup> [www.tiresias.org/cost219ter/vision\\_action/timmers.ppt](http://www.tiresias.org/cost219ter/vision_action/timmers.ppt)

especially articles 2 (Right to life), 3 (Right to the integrity of the person), 6 (Right to liberty and security), 26 (Integration of persons with disabilities), 35 (Right to health care). This is especially true given the available data concerning:

1. The annual burden of disease in the EU. On the basis of statistical data available from the WHO<sup>2</sup> for the EU-27, the main causes of death and disease are (by order of importance): Cardiovascular diseases, Neoplasms, Respiratory diseases, Injuries, Digestive diseases and Neuropsychiatric conditions (reference year 2004). For the EU-27<sup>3</sup>, injuries amount for 252.000 fatalities, 7.000.000 hospital admissions and 3.000.000 permanent disabilities every year. Injuries are the fourth most common cause of death in the EU, while in children, adolescents and young adults, injuries due to accidents and violence are the leading cause of death. All the above require the use of emergency medical services (ambulances) available by calling 112.
2. Fire. Data available by insurance companies<sup>4</sup> show that fire is currently costing countries of the EU approximately 1% of their GDP, something that shows the importance of the timely intervention of fire-fighting services, available by calling 112.
3. Crime. According to available research<sup>5</sup> almost 15% of the population of 18 EU countries has been a victim of any crime in 2004.

On the basis of the above the current concept of Universal Service which covers the communication of citizens in distress with authorities through the European emergency number 112 should be extended as follows.

First, it should be extended to cover the quality of services (or services' standards) offered through the single emergency call number (112) in the context of broadband access. The current implementation of the 112 is still very uneven. 19 years after the introduction of 112, there are at the time no quality standards pertaining to the whole 112 chain<sup>6</sup> (knowledge, devices, networks, call-taking aspects, interoperability, intervention, etc...) and citizens may not enjoy the same level of service on the territory of the Union. More importantly, no evaluation of the quality of service has been conducted, although requested by the European Parliament<sup>7</sup>. In parallel with implementing the access to the 112 number through broadband, the EU needs to do much more on implementation especially in coordination with other EU policies (security, internal affairs, health). Most of the above issues can be considered as falling within the scope of the universal service definition as provided for in the relevant directive in force. The rest concern the implementation of the Charter of Fundamental Rights of the European Union (see above) in conjunction with article 168 of the Treaty on the Functioning of the European Union (concerning Public Health). While the EENA believes that the emergency services organisation should remain under the national competence, it is obvious that the existence of 112 should enable the EU authorities to ensure that the 112 services' outcomes are similar all over the EU.

Secondly, universal service should be extended to cover the communication of authorities with citizens in case of imminent and/or developing major emergencies or disasters (i.e. the early warning or alert of citizens) through the use of broadband. Early warning/alert of citizens is provided for in several existing directives<sup>8</sup> and has been repeatedly requested by the European Parliament (see Written declaration 0100/2007, the EP reports on the Civil Protection Mechanism and the Civil Protection Financial Instrument<sup>9</sup>, as well as numerous resolutions<sup>10</sup>). When it was

<sup>2</sup> Global Burden of Disease see [http://www.who.int/healthinfo/global\\_burden\\_disease/en/index.html](http://www.who.int/healthinfo/global_burden_disease/en/index.html)

<sup>3</sup> Injuries in the European Union, see [https://webgate.ec.europa.eu/idb/documents/2009-IDB-Report\\_screen.pdf](https://webgate.ec.europa.eu/idb/documents/2009-IDB-Report_screen.pdf)

<sup>4</sup> World Fire Statistics Newsletter, see [http://www.genevaassociation.org/Affiliated\\_Organizations/WFSC.aspx](http://www.genevaassociation.org/Affiliated_Organizations/WFSC.aspx)

<sup>5</sup> The Burden of Crime in the EU, see <http://www.europeansafetyobservatory.eu/downloads/EUICS%20-%20The%20Burden%20of%20Crime%20in%20the%20EU.pdf>

<sup>6</sup> [http://www.eena.org/ressource/static/files/112models\\_Machado2.pdf](http://www.eena.org/ressource/static/files/112models_Machado2.pdf)

<sup>7</sup> <http://www.eena.org/view/en/AboutEENA/Advocacy/WD112.html>

<sup>8</sup> See for example: Directive on the Safety and health signs at work (92/58/EEC); Directive on Major chemical installations (96/82/EC; Seveso Directive); Directive on Radiological Emergencies (89/618/Euratom); Authorization Directive (2002/20/EC); Directive on the assessment and management of floods (2007/60/EC); directives dealing with the transport of dangerous goods; Directive (2008/114/EC) on European Critical Infrastructure.

<sup>9</sup> Doc. A6-0286/2006, adopted on 24.10.2006 and A6-0027/2006 adopted on 14.03.2006.

<sup>10</sup> See for example resolutions A5-0381/2000 (Priorities in EU road safety); A6-0390/2006 (Management of Terrorism); A6-0286/2006 (Community civil protection mechanism); A6-0149/2006 (Natural Disasters); A6-0027/2006 (Rapid response and preparedness instrument for major emergencies); P6\_TA(2005)0334 (Natural disasters - fires and floods); P6\_TA(2005)0006

clearly proposed in the context of the recasting of the Civil Protection Mechanism it was not retained by the Commission and the Council because it was considered as falling within the scope of telecommunications. A similar proposal was then made in the context of the revision of the Universal Service Directive (amendment by MEP Valean) but was not retained because it was considered as falling under the scope of Civil Protection! The use of broadband internet services for public warning is discussed in the response to question 3.

## **Broadband**

**Question 3:** *Broadband for all is a widely-stated policy objective at national and European level. What role if any should universal service play in meeting this objective?*

The introduction of broadband access will facilitate access to the 112 and as well the establishment of a general warning / alert system for citizens in case of imminent of developing emergencies. At the same time access to these services of prime importance for citizens will be possible at lower prices especially for people with disabilities because broadband offers many more opportunities for integrating advanced information technologies (e.g. Total Conversation, Real-Time Text, video supporting sign language). Extending the current concept of universal service as described above (see questions 1 & 2) will offer a strategic advantage to broadband expansion.

More specifically, universal service should support the objectives of national policies and accelerate the development of broadband for all by defining a minimum set of requirements. It is important that the Commission and the Member States fully comprehend that citizens excluded from accessing broadband will finally be excluded from telephony and therefore from accessing emergency services (112). Citizens living in some areas may also have only a partial access to emergency services (not more advanced than e112) while others may enjoy the Next-Generation 112 services enabling the use of text, video and pictures (among other services).

The universal service should also establish the relevant requirements so that different types of VOIP services can provide a reliable access to 112. While fixed VOIP services already encounter problems (see examples provided in question 5), nomadic and mobile VOIP services present new challenges. The use of brand new networks such as LTE and Wimax and the development of new base stations will require an entirely new regulatory framework so that citizens can continue using mobile devices to access 112 in the near future. Regulation will be even more important than for GSM telephony because the number of stakeholders involved will increase (network owners, internet providers, application/voice providers, device manufacturers, etc...).

These citizens would also be excluded from reliable modern public warning information in case of major disasters, while IP services such as social networks (e.g. Facebook and Twitter) have already been (dangerously) utilising unregulated sources of information during disasters.

**Question 4:** *What impacts could an extension of the role of universal service to advance broadband development have in relation to other EU and national policies and measures to achieve full broadband coverage in the EU? What other impacts would be likely to arise regarding competition, the single market, competitiveness, investment, innovation, employment and the environment?*

An extension of the universal service to broadband could ensure that the 112 services can still be provided under certain minimum conditions, such as the obligations defined in the Universal Service Directive applying mainly to traditional networks and GSM telephony. In fact, clear regulatory guidance on 112 access - such as routing and caller location requirements - for broadband service would solidify consumer confidence in adopting new applications such as VoIP. Universal service requirements imposed on voice communications should apply in next generation networks such as broadband. The fact that voice communications becomes an application over a broadband network should not lessen the need for universal service requirements to continue. Today, VOIP services of very different nature can be provided over broadband networks but no appropriate regulation pertaining to emergency services access is in place. EU citizens enjoy

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(Tidal wave in the Indian Ocean), P6\_TA(2008)0304 (Stepping up the Union's disaster response capacity), P6\_TA(2006)0584 (Prevention, Preparedness and Consequence Management of Terrorism).

different quality of service according to where they are located in the Union. Thanks to the OFCOM regulation<sup>11</sup>, they can use Skype to access 112 in the UK but cannot do so in any other Member State. An extension of the role of the universal service to broadband services could therefore reduce the number of discrepancies existing between EU countries.

It is also obvious that a minimum set of requirements would drive innovation in the field of emergency services access. The Commission is already co-financing a major project in this field named REACH112. One objective of this project is to deploy the Next-Generation 112 and therefore support the take-up of the many innovative technologies available that can reduce the gap between EU citizens and improve the quality of the access to the 112 number, in particular for people with disabilities. The regulation of broadband will drive the innovation in the security and safety sector, enabling network providers and application developers to put on the market solutions that will also contribute to the protection of EU citizens and visitors. Regulatory certainty is necessary to drive innovation. Thus, it is imperative that the Commission make universal service requirement known so that next generation networks can avoid retrofitting obligations imposed later. This suggests urgency to the Commission in determining the specific 112 requirements necessary for all citizens.

The NG112 system will support emergency services in providing a more efficient service - reduction of intervention times, improvement of the quality of rescue, general public safety in case of major emergencies - at a lower cost with a very positive side-impact on safety of first responders, traffic congestion, environment (reduction of energy consumption), etc. as already demonstrated in studies conducted by the US Department of Transportation<sup>12</sup>.

Regarding competition law, it would be necessary to harmonise the legislation regulating the access to 112. Today, the market is distorted since UK VOIP providers are obliged to provide access to 112 and to support the necessary investments while VOIP providers in other Member States are outside the UK regulation's scope. This may hamper some compliant VOIP providers from engaging the necessary resources to extend to other markets, even within the EU while it may consolidate some local market leaders that are not providing access to 112. The absence of broadband regulation is therefore offering a "bonus" to the non compliant VOIP providers.

**Question 5:** *If universal service obligations should prove necessary to achieve the policy objective of broadband for all, at what level (EU or national) should such obligations be defined, taking into account the different levels of market development across the current Union of 27 Member States?*

While traditional networks and means of communication could be regulated at local or national level, the internet works as a worldwide engine, hence more difficult to control. Emergency communications are therefore becoming more and more standardised at the global level (see IETF-ECRIT<sup>13</sup> for instance). Whereas technical solutions are standardised and solution providers are available in the market to provide a reliable access, examples reported that VOIP emergency calls were often responded on the other side of the world. One 911 VOIP call in the US was for instance responded in South-Korea<sup>14</sup> while a Canadian child died because the ambulance was sent to the wrong address due to inappropriate VOIP caller-location<sup>15</sup>. To avoid a large increase of these cases, the EU should therefore set guidelines and recommendations in accordance with the international standards available (IETF-ECRIT/NG112<sup>16</sup>/NG911<sup>17</sup>/ETSI-EMTEL<sup>18</sup>) and promote intensive international agreement, cooperation and arrangements for the call to be routed to the right country and the right emergency centre, as indicated by the ITU since 2005<sup>19</sup>. It is therefore of particular importance that routing and caller location requirements, including specific performance standards, are imposed on broadband service for locating 112 calls. Some broadband services –

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<sup>11</sup> <http://www.ofcom.org.uk/consult/condocs/voip/voipstatement/>

<sup>12</sup> [http://www.its.dot.gov/ng911/pdf/USDOT\\_NG911\\_4-A2\\_FINAL\\_FinalCostValueRiskAnalysis\\_v1-0.pdf](http://www.its.dot.gov/ng911/pdf/USDOT_NG911_4-A2_FINAL_FinalCostValueRiskAnalysis_v1-0.pdf)

<sup>13</sup> <https://datatracker.ietf.org/wg/ecrit/charter/>

<sup>14</sup> <http://www.offbeatnough.com/2007/03/30/911-operator-responds-to-emergency-call-from-south-korea/>

<sup>15</sup> [http://www.theregister.co.uk/2008/05/06/crtc\\_investigates\\_failed\\_911\\_call/](http://www.theregister.co.uk/2008/05/06/crtc_investigates_failed_911_call/)

<sup>16</sup> <http://www.ng112.eu/>

<sup>17</sup> <http://www.nena.org/ng-partner-program>

<sup>18</sup> <http://www.emtel.etsi.org/>

<sup>19</sup> [www.afridigital.net/downloads/ITUVoIPfinaldft.doc](http://www.afridigital.net/downloads/ITUVoIPfinaldft.doc)

such as nomadic VoIP services – pose unique caller location challenges and it is imperative at this time that the EU makes these requirements known and implemented.

This vision is supported by market leaders such as Skype: “Works such as NG112 to develop robust and reliable standards are therefore of crucial importance, before the 112 functionality is fully enabled for this type of providers”.<sup>20</sup> Obligations defined only at national level may induce unbearable costs for the stakeholders involved who would have to adapt their solutions to several non interoperable standards. This may prevent the industry from complying with the necessary requirements.

**Question 6:** *If a common harmonised universal service needs to be defined at EU level, should a mechanism be put in place to balance the need for national flexibility and a coherent and coordinated approach in the EU?*

Emergency calls on IP will continue being handled by inappropriate PSAPs if the guidelines indicated above are not set. This is in opposition with the right of Member States to determine their national centres in charge of responding to specific incidents on their territory. The recommendations should be established with full respect to national cultures and emergency services organisations, for instance concerning the Member State right to decide about the number of PSAPs and the missions of EMS, Police and Fire services.

Today, communication between 112 emergency call centres in Europe is impossible, apart from some initiatives such as the EENA International Emergency Numbers Database recently developed (only voice connection). Regulated broadband access will actually enable emergency organisations responsible for answering and handling calls to 112 to communicate between each other and to become more interoperable at the national, EU and world level. 112 calls in country X reporting an incident in country Y could be managed and handled appropriately, which is not the case today even though these calls are frequent<sup>21</sup>.

All these requirements should be defined with regular consultation of the appropriate national authorities so that broadband access to emergency services can be adapted to every national emergency service’s organisation, as it is done today for traditional and mobile telephony through the COCOM group and EGEA subgroup<sup>22</sup>.

### **Financing of universal service**

**Question 7:** *Irrespective of the scope of universal service, are mechanisms whereby funding is provided by the sector appropriate in the context of a regulatory environment that seeks to eliminate distortions of competition and promote market entry?*

Some level of subsidy may be necessary to ensure universal access. Also, with respect to supporting specific technology solutions that ensure a reliable 112 access, Member States could consider cost-recovery mechanisms. In some areas, direct support to PSAPs to adopt the technology of their choice may be necessary. Funding from the EU for testing innovative NG112 solutions would help ensure uniform adoption of next-generation technologies, as recommended by the European Parliament<sup>23</sup>.

**Question 8:** *In the context of the roll-out of broadband in Europe, is it still appropriate to limit the financial arrangements of universal service to market players in the e-communications sector, while this provision would have wide-ranging benefits outside the sector, for instance, the delivery of information society services and digital content? Are other means of financing more appropriate?*

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<sup>20</sup> Draft ECC Report On Practical Improvements In Handling 112 Emergency Calls, Skype’s response

<sup>21</sup> [http://www.eena.org/ressource/static/files/2009\\_06\\_22\\_international\\_numbers.pdf](http://www.eena.org/ressource/static/files/2009_06_22_international_numbers.pdf)

<sup>22</sup> [http://ec.europa.eu/information\\_society/activities/112/glossary/index\\_en.htm](http://ec.europa.eu/information_society/activities/112/glossary/index_en.htm)

<sup>23</sup> [www.europarl.europa.eu/document/activities/.../20091208ATT66213EN.doc](http://www.europarl.europa.eu/document/activities/.../20091208ATT66213EN.doc)



Traditional financing of universal service linked with access to emergency services can be done on the basis of two models, i.e.

1. Public financing (through the budget at EU, national, regional or local level). This is the case today in all the Member States. However, different States apply different priorities the result being the uneven implementation we are facing today all over the EU. Users have limited influence on the quality of services provided and in fact cannot put the financing of access to the 112 and/or warning /alert higher on the priority list. When considering public financing, one should not forget the attribution of the licences to the broadband providers that may be offered under certain obligations' fulfilment such as reliable access to 112 and the provision of location data that is also used for commercial purposes.
2. Financing on the basis of «the user pays» model which is extensively used for financing developments in other types of networks (e.g. electricity, gas, oil). In the context of such a model financing would be ensured through the telephone/telecommunications bill (as is the case in most of North America<sup>24</sup>). This could be done through a very small monthly charge (less than 0,5 € per line per month) which can be limited in time (to help modernise the services provided) or permanent and could be managed jointly by representatives of operators, service providers and final users (i.e. emergency services and consumer associations).

Since the number of stakeholders involved will increase (see response to question 3), new mechanisms will have to be implemented and consideration needs to be given to what contributions other organisations such as broadband providers/ISPs and VOIP providers could make concerning funding. This brings new additional challenges: for instance, VOIP providers (such as Google) may not be invoicing from the EU but from other countries such as the USA. In that case, how could a fee be charged and potentially redistributed equally between the Member States and organisations in charge of providing emergency services?

The Commission should deeply analyse the different cost elements and consult all the stakeholders involved in order to sustain the 112 service in Europe. The financing of the NG112 service should take into account the costs of the necessary investments but also the lower functioning costs (as described by the USDOT). This is why the US Federal Authorities have put in place a large series of grants to first deploy the NG911 service.

***Respondents are invited to raise any other issues they might want to address in this consultation.***

It is recognised that the weakness of the initial legislation (Directive 2002/22/EC) pertaining to e112 - 112 with caller-location data - was the source to the many problems encountered by emergency services during the last decade (17 infringement proceedings<sup>25</sup>).

EENA is therefore delighted that the Commission is seeking to regulate the extension of the universal service to broadband since it may replace the other means of communications. In this regard, EENA recalls that regulation is needed so that citizens can access emergency services and enjoy the safety they are entitled to. An appropriate and fair legislation considering all stakeholders' needs (citizens, emergency services as well as network providers, voice and application providers) is therefore crucial to ensure the sustainability of the 112 service in Europe. In particular, the Commission should establish specific requirements – such as on routing and caller location - that would apply to both current telephony as well as broadband service.

Broadband is also a major opportunity for the Commission to enable emergency services to benefit from innovative technologies and more data as well as to put innovation at the service of EU citizens (and taxpayers).

Finally, EENA would like to express its thanks to the previous Commissioner Ms. Viviane REDING for the progress accomplished during the last few years under her leadership, especially for giving visibility to the 112. Following the coming into force of the Lisbon Treaty, and as it was pointed above, the 112 and the warning / alert of citizens should now be considered as fundamental rights

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<sup>24</sup> See for example [http://www.911.state.mn.us/PDF/911\\_Financial\\_Analysis\\_5\\_16\\_08.pdf](http://www.911.state.mn.us/PDF/911_Financial_Analysis_5_16_08.pdf)

<sup>25</sup> [http://ec.europa.eu/information\\_society/activities/112/docs/table\\_infring.pdf](http://ec.europa.eu/information_society/activities/112/docs/table_infring.pdf)

of EU citizens. EENA expects the Commission to start considering the issues as not only a telecommunications from a security, internal affairs, health, civil protection (etc...) point of view and therefore to widen the approach, with respect to the national cultures and emergency services organisations. The necessary processes to be engaged by the Commission on this last topic will certainly ensure a better protection of EU citizens from accidents and disasters.

#### **About the EENA:**

The EENA - European Emergency Number Association - was set up in 1999 as a non-profit association registered in Belgium to serve as a neutral discussion platform for emergency services, industry and informed citizens with the aim of getting efficient, interoperable and harmonised emergency telecommunications in accordance with citizens' requirements. EENA has been advocating to authorities the issues related to the 112 as there are more and more EU citizens travelling for business or leisure. EENA is also promoting the establishment of a general, pan-European, multilingual, simplified and efficient system for alerting citizens about imminent or developing emergencies. The EENA memberships include more than 300 emergency services representatives from 32 European countries, 22 solution providers, 9 international associations/organisations as well as 20 Members of the European Parliament.

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