Public consultation on the evaluation and the review of the regulatory framework for electronic communications networks and services

EENA welcomes the opportunity to respond to the public consultation. This response relates to the provisions made in the framework for 112 and the emergency services only.

Question 105: *To what extent do you consider the scope and requirements established in Article 26 of the Universal Service Directive still relevant in order to ensure an effective access to emergency services?*

> **EENA's view:** The current Article 26 of the Universal Service Directive is effectively concerned with access and was based on a limited view from many years ago. It is based on old technology and old legacy systems. The lack of clarity and ambiguity created the vacuum for many players to shirk their obligations and this was, by association, facilitated by a weak regulatory regime. For example, the definition of "Competent Regulatory Authorities" was never clear and in many countries, it is not clear who the obligations falls on, if anybody. While direct access to 112 from private networks is an obligation in the Universal Service Directive, no Member State has implemented it as the mandate was never clear. And when the legislation was clear, it was not enforced, for instance when Member States report more than 30 minutes to retrieve caller location information which should be provided "as soon as the call reaches the authority[1]".
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> In order to become more of a forward-looking instrument, the new Universal Service Directive should recognise the new communication services and networks and change the scope to ensure that any new obligations include the new providers (in particular OTT-0 providers, see response to question 128). But enforcement of current and future rules will in practice determine the effective access to emergency services.

Question 109: *As regards the current definition of electronic communications services (ECS):*

a)   Do you consider that the current definition of electronic communications services should be reviewed?

b)   If the current definition of ECS is reviewed, do you consider that the "conveyance of signals" should continue to remain a necessary element of the definition of electronic communications services subject to sector-specific regulation?

c)   If the current definition of ECS is reviewed, do you consider that "transmission services in networks used for broadcasting" should continue to be considered as ECS?

> **EENA's view:** With respect to the current definition of a "call" it is defined as a 2-way voice

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[1] Article 26.5

communication[2] and as such the obligations associated with caller location information is placed on ECS providers. Given the importance of and the requirement to provide access to the emergency services by other means such as SMS, data packets or eCall, the scope of the definition should be reviewed to include these and other such means of communications. This will become more pertinent in the coming years when access to the emergency services will be made available from all sorts of devices as alluded to later in section 3.5 of the Consultation.

Question 128: Should any obligations related to access to emergency services (112) or to quality of service requirements apply to all providers of communications services in the same way, irrespective of whether they are provided as managed services or subject to best-effort (Internet access services)?

EENA's view: Yes.

Obligations related to access to emergency services (112) should apply to all providers of communications services which enables originating national calls to a number or numbers in a national telephone numbering plan equally, irrespective of whether they are provided as a "managed service" or a "best-effort basis" (Internet access services). However, this should be managed in such a way as not to stifle innovation.

These obligations are defined in EENA's Next Generation 112 Long Term Definition (NG112 LTD) document, IETF ECRIT and ETSI's M493.

What type of providers of communication services should provide access to 112?

1. Undertakings providing end-users with an electronic communications service for originating national calls to a number or numbers in a national telephone numbering have to enable access to emergency services and emergency calls to 112 (and other national emergency numbers). This therefore applies to certain types of Over The Top providers (OTTs) which BEREC defines as OTT-0 (see "Public Consultation on the draft BEREC Report on Over The Top (OTT) services - BoR (15) 142). As an example, Skype Out provides access in the UK, Denmark and Finland, but other Member States have not yet enabled access from such services. However, these OTT's do not have control over the network and this needs to be considered. It should not remove any obligations however. This obligation is in place since 2009 but in only 3 Member States and with Skype Out only.

    Internet Access providers, including Mobile Network Operators (MNOs) and Internet Service Providers (ISPs), have to ensure that the emergency calls are routed to the appropriate end-points, i.e. the Public Safety Answering Points (PSAPs). The work being done inside ETSI M493 working group clearly defines the architecture.

    Additionally, emergency services should be able to call the caller back i.e. an E.164 number should be provided. This is a basic emergency services' requirement, which should be applied considering the lower quality of service provided by OTT-0s.

2. In relation to OTT-1 voice services (as defined by BEREC, see "Public Consultation on the draft BEREC Report on Over The Top (OTT) services - BoR (15) 142): In our opinion this option should only be considered when the OTT-1 provider's customer base has reached a critical mass. If the obligation was placed on all providers of OTT

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[2] "call" means a connection established by means of a publicly available electronic communications service allowing two-way voice communication.';

voice services, it would place a disproportionate obligation on the smaller emerging providers and stifle innovation and competition. This would be counter-productive.

Instead, the Commission and BEREC should decide following further research and consultations what that critical mass point is and once the OTT-1 provider has reached that point then it should become obligated. This critical mass point is where, in practice, OTT services become a prominent part of telephony. BEREC should set out clear guidelines to the NRAs as to how to decide where the critical mass point is and allow NRAs to decide accordingly.

What should the Commission and Member States do?

Member States have to ensure that PSAPs are ready to receive calls from OTTs (see above).

In order to achieve this, EENA calls on the Commission to propose within the scope of the new USD a clearly defined set of rules based on European and international standards such as ETSI M493. It should be understood that access to 112 from all communications services will not function without clear definitions and responsibilities to each part of the chain. The following should be considered by way of example:

1. Innovation would be hampered if all the obligations were to fall on OTTs. While certain type of OTTs should provide the possibility to call 112, the relative small-size of many such providers would discourage them to enter into the market if they had to carry the access to 112 obligation on their own. By their nature, they have no control over the underlying network and thus the capability to send the call to the right end-point.

2. OTTs cannot ensure access to 112 on their own. During the last years it has been observed that Skype Out's access to 112 could not be provided - although mandated – in a majority of EU Member States. Access to 112 was provided by Skype Out in the UK in a simple manner to the UK national entity receiving emergency calls but could not be provided in other Member States as there were no obligations on the Internet Access Providers to route the call to the appropriate end-point and no obligations on Member States to ensure PSAPs' readiness.

3. On the other hand, not all obligations should fall on the Internet Access Providers. The Internet Access Providers' (including the MNOs) core obligation should be to ensure that the emergency call and the related data is carried to the right PSAPs (appropriate routing based on network-derived location).

4. While some caller location information may be provided based on network location information, it should be noticed that OTTs often have access to very accurate caller location information based on GNSS and WiFi for instance, and this information should be used.

5. Last but not least, Member States have to ensure that emergency services organisations are ready. It would be disproportionate to put all of the burden on OTTs and Internet Access Providers without having the ability to receive and process the emergency calls. EENA believes that previous regulations may have proportionally placed too large a share of responsibilities on the ECSs and MNOs vs the responsibilities of public authorities. This is why several Member States are still not compliant with the Universal Service Directive's Article 26.5 on caller location e.g. more than 30 minutes to collect location information (by fax) in Greece. This is also why some OTTs provide access to 112 only in 3 EU Member States.

Question 134: Continuous technological change and market developments, in particular regarding voice over Internet Protocol (VoIP) based on digital service platforms associated with a broadening range of connected devices, are raising an increasing number of technical and regulatory challenges on the possibility for EU citizens to access the 112 emergency number in the future. The annual reports on the implementation of 112 provisions have constantly shown a dissatisfactory state of play, such as low awareness of the 112 number, caller location accuracy levels that reach the emergency services well below the current technological possibilities offered by next generation access and Global Navigation Satellite Systems and access for disabled end-users heavily relying on 112 SMS.

In your view, is it important to ensure access to 112 from all connected devices at the end-user's disposal and from any newly defined communications services, including in a private corporate network environment?

EENA's view: Yes. It is extremely important to ensure access from all connected devices which enables originating national calls to a number or numbers in a national telephone numbering plan and to ensure that any current barriers to access to 112 are removed.

1. See response to question 128.

2. The current legislation refers to just emergency calls; as a result there is a need to redefine this to also include emergency SMS (SMS sent to emergency services) and data packets to emergency services (such as Total Conversation and Real Time Text).

3. Direct access to 112 and other national numbers from private networks (e.g. campus, hotels, and internal networks) should be mandated based on ETSI-EMTEL's work. The location information of the caller from private networks should also be mandated. The management protocols should also ensure notification of the facilities personnel where the emergency call has been placed. The possibility of call back from emergency services should be ensured.

4. At this time, SMS to emergency services, short and long numbers, is available in 18 European countries. EENA believes that, as a minimum, SMS should be mandated in all Member States (and not preventing Member States from adding additional services for accessibility if they so choose). Alongside national short codes and long numbers, SMS to 112 should function all over Europe. SMS to 112 does not function when roaming today, even though it is obvious that people with disabilities should not be refused access to 112 when travelling across countries. The Commission should ensure that undertakings concerned, namely MNOs, enable 112 SMS when roaming and route the SMS to the appropriate PSAP.

5. A database of all European emergency services' long numbers for the PSAP in country A to be able to contact a PSAP in Country B where the incident is taking place should be created. Such a secured database of European emergency services' long numbers (E.164 numbers) should be maintained at EU level. With the freedom of movement within the EU, there are many reported instances where a citizen in country A calls 112 in country A to report an incident occurring in country B. In this case the PSAP in country A needs to have the contact details of country B (currently a modest service offered by the EENA). This database should be maintained by public authorities or by an organisation with a mandate from public authorities. Recent tragic events have shined more light on the lack of interoperability of emergency services between countries and this should be tackled.

6. Caller location remains very inaccurate (several kilometres in average). Some countries report that it takes 10 or more minutes to retrieve caller location, sometimes still using fax. This is not acceptable in the EU of 2015. The Digital Single Market should contribute to a safer Europe, even more now considering the recent

tragic events. Undertakings concerned i.e. Network Operators should ensure that GNSS location information, including the information based on the European Galileo and EGNOS, is used, in addition to other handset derived location information such as WiFi and to other network based location information.

Handset-derived location is already used in the UK with Advanced Mobile Location which enables GNSS or WiFi location to be sent to the PSAPs via SMS at almost zero cost. While the location information is now sent over by SMS, it should be sent by SMS and/or IP if data connection is available. Access to data will be more available when roaming fees are abolished as from 2017[3]. Along with the database of E.164 numbers, a database of IP end-points of PSAPs should also be created and maintained at EU level.

7.   On Accessibility for people with disabilities:

EENA notes that under the Convention for Human Rights, the legal obligations enshrined in the UN Convention on the Rights of Persons with Disabilities, particularly with regard to Article 11 requests that States Parties should take all the necessary measures to ensure the protection and safety of persons with disabilities in situations of risk, including humanitarian emergencies and natural disasters.

EENA notes that the European Council conclusions[4] on disability-inclusive disaster management called for the use of new technologies and innovative solutions in all phases of the disaster management cycle by taking into consideration the specific needs of persons with disabilities and, in particular, but not exclusively, by ensuring the accessibility of 112 emergency services and information related to preparedness for disasters, including early warning systems.

To that end EENA believes that as a minimum an SMS to the emergency services programme should be deployed in every Member State in Europe. It should include the ability for the citizen to send such an SMS whilst roaming if so required. To support these services, the Undertakings concerned (mostly MNOs) should ensure that is supported in full and made available free of charge.

To support the functionality of Total Conversation and Real-Time Text, data packets used should be transmitted free of charge and routed to the correct PSAP. A secure database of all IP end-points of PSAPs should be managed at an EU level by an appropriate EU institution. Services also could be facilitated by Emergency Apps where multimedia data, caller location and caller information could be provided to people with disabilities enabling them to make contact with the emergency services.

8.   On awareness of 112:

The Commission refers to the low awareness levels of 112. At this stage Member States have the responsibility to inform citizens on 112, although the Commission can support them. The Commission should be given the responsibility to inform citizens on 112 together with the Member States. The Commission should support and supplement the Member States where needed, in particular in countries where 112 remains alarmingly unknown to the population.

9.   On Reverse-112:

The EU lacks an integrated system which would enable Europeans to be informed of

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[3] http://europa.eu/rapid/press-release_IP-15-5265_en.htm
[4] Ref 6450/15

an upcoming disaster or threat. The Commission should propose a Reverse-112 communication system, using existing electronic communication networks, which covers the whole Union, is universal, multilingual, accessible, straightforward and effective in order to alert the public in the event of an imminent or developing disaster or major state of emergency. This should be done together with Member States and Civil Protection authorities.

In addition:

EENA invites the Commission to propose clear set of rules and guidelines for each stakeholder; such guidelines would include a clear reference to technologies, which should be used rather than general objectives; and a clear timeframe. Problems related to emergency calls could actually easily be solved using already existing technologies; the regulatory challenges mentioned by the Commission can only be met by using a more detailed definition of the role of each stakeholder, a more explicit reference to the capability of the available technologies (whilst still maintaining the "technology neutral policy") and a more defined timeframe.

Question 135: Would it be appropriate, having regard to the division of responsibility in the Union regarding civil protection, for the EU electronic communications framework to regulate not only the means of connection to emergency services, but also the performance criteria of those services (e.g. the data processing capabilities and minimum performance levels of the Public Safety Answering Points)?

EENA's view:

Yes, performance criteria related to the access part should be listed and enforced. A list of Key Performance Indicators exists today but without any related consistency or enforcement.

As with the successful eCall project, the Commission should also make sure that there are clear requirements on the technological access to 112 by mandating requirements on the access to PSAPs e.g. eCall mandates that eCall PSAPs are equipped with a modem to decode eCalls. Without that requirement, eCalls could not effectively be used. The requirements set down by the Commission should be based on the relevant European Standards. Where necessary, the equipment to fulfil the obligations of Article 26 should be listed. As an example, a fax machine will never be able to help fulfil the obligations of article 26.5 on caller location. This has been evidenced by the COCOM reports published by the EC itself.

However, EENA believes that this shall be without prejudice to, and shall have no impact on, the organisation of emergency services, which should remain of the exclusive competence of Member States e.g. the organisation of the different services such as staff numbers, services offered, PSAPs structures. Instead the focus should be on the technological capabilities, caller location quality, capability to accept emergency calls from citizens with disabilities, capability to transfer of emergency calls between member states etc. A precedent for such a scope is evident in the eCall project and as such a capability assessment should be carried out by the EC.

EENA does not see the Commission having jurisdiction over emergency intervention response times etc. These requirements should not impact the organisation of emergency services such as Police, Fire, Coastguard or Ambulance. The core objective is to respond to an ever more challenging technical and regulatory environment and ensure by also defining the equipment of the PSAPs' access layers. Without this the multiple stakeholders involved will either:

- Not enable emergency calls (with the related data) to be placed from certain devices and communications services, putting at stake lives and properties.
- Enable emergency calls, which will effectively not be received or not be received entirely by 112 emergency services, with the same consequences.

Question 136: *In your opinion have the provisions related to harmonised numbers for harmonised services of social value proven to have EU-level added value, and should they be maintained at the EU level?*

EENA's view: EENA has previously expressed publicly its concerns with the never-ending duplicity of numbers for emergency services / non-emergency services / social services and similar. The Commission recognises, as EENA does, the extremely low levels of awareness, while at the same time 112 itself remains unknown to 73% of Europeans as the pan European emergency number.

EENA calls on the Commission:

• To put an end to the creation of additional 116xxx numbers; in practice they will be have close to zero impact as the general public do not know and will not know these numbers.

• To consider reducing the amount of existing 116xxx numbers for the same reasons.

• Some numbers, like 116000 for missing children, should be maintained, but the services reachable by this number should be requested to work in close cooperation with 112 services, notably for technological reasons such as access to caller location information when needed. Technological integration should be encouraged in order to reduce public spending.

Question 98: *Improved mobile communications networks could to a certain extent ensure public protection and disaster relief (PPDR) communications, as well as safety systems for utilities and intelligent transport services (ITS) for road and rail (as reported in a 2014 study). Would you consider it appropriate to include in the licence conditions for spectrum (or for certain spectrum bands), or otherwise to impose on (certain) mobile network operators, obligations in terms of quality of service, resilience of network infrastructure and hardening to enable such dual use of commercial mobile networks?*

Strongly agree.

In recognising the ECC Report 218 regarding PPDR broadband spectrum allocation for the EU, EENA believes that in the interests of EU citizens, the allocation of same should be harmonised and made available to the PPDR in the most cost effective way possible. Under the Radio Spectrum Policy Programme (RSPP) the harmonised conditions are essential to allow the PPDR community operate cross-borders and share data in a secure and efficient manner. The recent tragic events in Europe reminds us all of the importance of providing the PPDR community with common infrastructure and devices and harmonised spectrum is no different. EENA believes that consideration and support must be given to the PPDR community to ensure that their spectrum allocation needs are recognised, understood and provided for accordingly.

About EENA

EENA, the European Emergency Number Association, is a Brussels-based NGO set up in 1999 dedicated to promoting high-quality emergency services reached by the number 112 throughout the EU. EENA serves as a discussion platform for emergency services, public authorities, decision makers, researchers, associations and solution providers with a view to improving the emergency

response in accordance with citizens' requirements. EENA is also promoting the establishment of an efficient system for alerting citizens about imminent or developing emergencies.

The EENA memberships include more than 1100 emergency services representatives from over 80 countries world-wide, 75 solution providers, 15 international associations/organisations, more than 180 Members of the European Parliament and 90 researchers.

EENA is a registered organisation in the official EU transparency register and we deeply believe that the transparency register should be mandatory rather than optional.