EENA's position on NOVES – Non-Voice Emergency Services

This document summarises the position of the EENA on the NOVES proposals that were presented during an EENA NG112 conference call in December 2010.

1. General remarks about NOVES

The EENA welcomes the NOVES proposals and the efforts by 3GPP to enable citizens to communicate the PSAPs using additional media. However, the EENA believes that NOVES should renamed "Non-Voice Centric Emergency Services", since voice should not be excluded from emergency conversations when possible. The scope of NOVES and the devices concerned should also be clarified i.e. does it concern only mobile devices using mobile telephony networks? What are the implications for an iPad or a laptop connected to a 3GPP network? In EENA's view, NOVES' service does not cover all the Internet communication cases (such as defined by ECRIT) but only the 3GPP architecture cases.

2. Service aspects

1. Accessibility
   1.1. A mechanism is needed to enable NOVES in a NOVES capable device

2. Location Services
   2.1. Position information is expected to be required by regulation and based on OMA SUPL
   EENA comment: the position should be as accurate as possible considering the capabilities of the device and network. The location information should be provided instantly (with the call set up) to the PSAPs in a standardised fashion. Updates on the location information should be available. Reference to OMA SUPL shall be removed. The location information shall be based on international standards. When NOVES' standardisation process is completed, all NOVES communications shall comply with the guidelines/regulations applying to the region where NOVES communications are made. There should be a minimum level of location accuracy defined for all NOVES communications.

3. Service mode
   3.1. A NOVES capable device will require a SIM
   EENA comment: It should be noted that emergency calls are still possible without SIM cards in many European and other countries. Thus the need for a SIM shall be further explained.

   3.2. Authentication of the device will be required
   EENA comment: Calling line identification is also needed. CLIRO (Call Line Identification Restriction Override) shall be available to prevent callers from "hiding".

4. Charging
   4.1. NOVES is expected to be free of charge (although records are kept for audit purposes)
   EENA comment: Remove "is expected to". NOVES shall be free of charge like any communications with emergency services.

5. Reliability
   5.1. NOVES will not be a store and forward service (like SMS)

6. Prioritisation
   6.1. NOVES will have usually higher priority than non-emergency communications
   EENA comment: "NOVES will have higher priority than non-emergency communications" (delete "usually"). EENA's position is that all emergency communications have to be prioritised over other communications in order to guarantee quick and reliable access to the PSAPs.

   6.2. 3GPP Multimedia Priority Service may be relevant

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7. Security
   7.1. Location information is protected from user alteration

   EENA comment: Citizens shall not have the possibility to turn off or hide the location information provision (e.g., turn off the GPS function).

   7.2. Authenticity of user provided media (e.g., a picture of an emergency scene) is not guaranteed by the device or originating network

8. Routing
   8.1. Routing to the most appropriate PSAP by the originating network or emergency service network

   EENA comment: Call routing should be based on the caller's geolocation (among other factors), as established in Section 2.1. This should be the case for a very large majority of emergency calls, but in some specific cases there might be a need to proceed differently (see 9. Roaming)

   8.2. A mechanism for service specific routing (e.g., Police, fire, ambulance) is needed

9. Roaming
   9.1. If NOVES is available in a visited network then the user should be notified
   9.2. In a visited network the media would be routed to a PSAP in the visited country, not the home country

   EENA comment: Based on the REACH112 project experience (www.reach112.eu), it should be noted that citizens with disabilities (e.g., deaf and hard of hearing) may only be served appropriately in their home country. For instance, a Swedish deaf citizen might only be served appropriately if a Swedish Sign Language relay service can communicate with both the citizen and a Swedish speaking PSAP operator. In this case, the call could be routed to the home country and the emergency information passed from the Swedish PSAP to the PSAP responsible on the visited country. The EENA believes that these cases should enable specific routing scheme but only in specific cases. The default routing scheme in roaming situations for the large majority of citizens should still remain that emergency calls are routed to the responsible PSAP in the visited country.

10. Handover
    10.1. A handover between radio access technologies may result in a loss of degradation of NOVES (e.g a handover from 4G to 2G may result in loss of video) but voice should always be available

    EENA comment: The EENA agrees with this statement and supports the fact that voice shall always be available when citizens can communicate with voice. The possibility to have a fallback on text and audio or text only should be considered. Location shall always be available.

11. PSAP boundaries
    11.1. If the NOVES device moves across a PSAP boundary, all media should be routed to the PSAP that was appropriate at the beginning of the session

    EENA comment: The EENA believes that "provided the session is not interrupted" should be added to this statement.

12. Multi media
    12.1. All media should be attributable to the same NOVES device

13. Call back
    13.1. Call back by the PSAP should be possible, ideally with the same media as originally used, but always by voice

    EENA comment: The EENA agrees with this statement, but adds that voice would not be possible with deaf and hard of hearing citizens.

14. Load impact
    14.1. High call volume management techniques can be used (e.g., call clipping, recorded message in PSAP or originating network)
    14.2. There is currently no requirement for a NOVES inactive mode

    EENA comment: PSAPs should be able to interrupt the communication.

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3. Use Cases

1. Text message to emergency services and position updates

2. Multimedia Telephony communication to PSAP with Real Time Text

   EENA comment: Location information shall always be sent to the PSAP.

3. Emergency communication to PSAP with the addition of media

4. Delayed transmission of media of an emergency situation associated with voice communications to a PSAP

5. Transmission of media in a non-voice interaction with a PSAP

6. Communication with PSAP when voice is inappropriate

   EENA comment: PSAPs should also be able to prevent the citizen's device to make alerts (visible/ audible). For instance, in case of a hostage situation, the PSAP shall have the means to make sure that the citizen's phone will not ring.

7. Red button service
   EENA comment: the EENA believes that there should be a mechanism to prevent accidental emergency calls using the "red button". It should be noted that this topic has been intensively discuss during the discussions on the pan-European eCall.

8. Texting application communication to emergency services with one-way Real Time Text

   EENA comment: PSAPs should also be able to prevent the citizen's device to make alerts (visible/ audible). For instance, in case of a hostage situation, the PSAP shall have the means to make sure that the citizen's phone will not ring.

9. PSAP adding media to a text-initiated emergency call
   EENA comment: PSAP should also be able to add media in case of a "voice-initiated emergency call". For instance, video should be used when relevant for PSAPs e.g., when the emergency situation is not well described and when the PSAPs believes that video could improve the intervention. PSAPs should have the possibility and the responsibility for activating the video stream, unless there are specific needs for the callers in the context of a particular set-up (e.g., a sign-language user that is recognised as such by the PSAP network).

10. Multimedia Telephony communication mainly in sign language to emergency services (3 way video call)

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 450 emergency services representatives from 39 European countries, 25 solution providers, 9 international associations/organisations as well as 20 Members of the European Parliament.

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