EUROPEAN EMERGENCY NUMBER ASSOCIATION

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Public consultation on the Draft BEREC Report on M2M and permanent roaming (BoR (24) 96)

EENA, the European Emergency Number Association, is a non-governmental organisation with the mission to contribute to improving the safety and security of the people. EENA welcomes the opportunity to respond to this public consultation. EENA's comments are limited to two specific matters related to the provision of eCall which provides a vital channel of access to emergency services when road accidents occur. The Draft BEREC Report acknowledges eCall as a known M2M roaming application.

1. Permanent Roaming and eCall

The initial regulatory framework[1] for eCall mandated that vehicle manufacturers integrate appropriate In-Vehicle Systems (IVS) capable of sending emergency communications and contextual data to Public Safety Answering Points (PSAPs). The technology uses circuit-switched 2G and 3G networks allowing for robust and reliable voice and data transmission even when the device is in Limited Service State(LSS)[2] as data is transmitted "in band" over the voice channel.

The automotive industry and European Public Safety Answering Points (PSAPs) must support Next Generation (NG) eCall by 01 January 2026. This deadline is enshrined in the amended regulatory framework[3,4] which entered into force in May 2024. The migration to Next Generation eCall, utilising packet-switched 4G and 5G networks, introduces certain challenges for the provision of a service that relies heavily on roaming agreements and where normal operation is predominantly on a permanent roaming basis.

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[1] Regulation (EU) 2015/758 of the European Parliament and of the Council of 29 April 2015 concerning type-approval requirements for the deployment of the eCall in-vehicle system based on the 112 service and amending Directive 2007/46/EC.

[2] ECC Report 324, Study of issues related to calls to emergency services from devices that are SIM-less or in Limited Service State (LSS) for another reason, November 2021 (see Chapter 2, p.6-8). Essentially a device in Limited Service State can connect to an available network for the sole purpose of making an emergency call. i.e. When your mobile phone displays "Emergency Calls Only" it is most likely in LSS.

[3] Commission Delegated Regulation (EU) 2024/1084 of 6 February 2024 amending Delegated Regulation (EU) No 305/2013 supplementing Directive 2010/40/EU of the European Parliament and of the Council with regard to the harmonised provision for an interoperable EU-wide eCall.

[4] Commission Delegated Regulation (EU) 2024/1180 of 14 February 2024 amending Regulation (EU) 2015/758 of the European Parliament and of the Council as regards the standards relating to eCall.

With the transition to NG eCall, the reliance shifts to Voice over Long Term Evolution (VoLTE) and Voice over New Radio (VoNR) over 4G and 5G networks respectively. While VoLTE has been available for a decade or so, its application in emergency communications is relatively recent and its introduction requires rigorous end-to-end testing in a home network and roaming network environment. Roaming on 4G networks is more complex than on 2G and 3G networks, which poses a significant challenge for the provision of a voice service. This was illustrated in 2022 when European roamers in the US could not access a voice service after the shutdown of 2G and 3G networks. When a VoLTE service cannot be provided and 2G and 3G networks are still available, it is possible to fallback to circuit-switched technology for an emergency call. However, new NG eCall chipsets are unlikely to have a legacy capability and even if they did, 2G and 3G networks will not be around forever.

LSS is also a feature in VoLTE. Mobile originated calls without a roaming agreement can be placed[5]. However, this feature has not been extensively tested for VoLTE yet. In the absence of roaming agreements or a mismatch of roaming profiles, NG eCall may not work. This scenario would pose a significant public safety risk. It is therefore essential that appropriate roaming agreements are negotiated and compatible VoLTE roaming profiles are implemented for NG eCall. Rigorous end-to-end testing is also necessary.

2. Numbering for eCall

Each eCall IVS has a telephone number that is presented to the PSAP call taker upon connection. This number can be used to facilitate a call back to the vehicle should the connection be disrupted or should follow up be required. As alluded to in the Draft BEREC Report, many eCall connectivity providers have opted to use ITU 15-digit numbers in the ranges commencing +882 and +883. EENA strongly supports the conclusion in the Draft BEREC Report stating that *"Numbering should not be used to prevent access providers from concluding roaming agreements with access seekers, nor to impose different wholesale charges based on the number ranges used to provide M2M/IoT services, nor to prevent ITU assigned numbering resources from being used for specific uses cases"*.

CEPT/ECC adopted a Recommendation on Numbering for eCall[6] and maintains a list of numbering ranges used for eCall. All electronic communications network and service providers should ensure that these ranges are provisioned on networks and that appropriate tariffs are applied. If this voluntary approach is not successful, then a review of Article 97 of the European Electronic
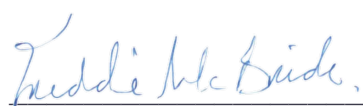
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[5] GSMA Official Document NG.136, Emergency Services White Paper, November 2022 (sub-section 6.2.1, p.22)
[6] ECC Recommendation (17)04, Numbering for eCall, Approved 22 November 2017, Amended 16 December 2020.

Communications Code[7] may be necessary to ensure the mandatory provisioning of these ranges and the introduction of appropriate tariff principles.

Please contact me if you require any information or clarification on our submission and we are available for further collaboration with BEREC on the issues addressed herein.

Yours sincerely,

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[7] Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code (Recast) (Article 97 – Access to numbers and services, p.173-174).