EUROPEAN
COMMISSION

Brussels, 16.12.2022
COM(2022) 724 final

**REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND
THE COUNCIL**

**on the effectiveness of the implementation of the single European emergency number
'112'**

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1. INTRODUCTION

This report reviews the effectiveness of the implementation of the single European emergency number '112' in line with Article 109(4) of the European Electronic Communications Code[1] (EECC). The report is based on the responses of Member States and Norway, to the questionnaire[2] submitted to the Communications Committee (COCOM)[3] on the implementation of emergency communications and the European emergency number '112'. This data-gathering was the fifteenth such exercise conducted by the Commission services since 2007.

Under Article 109(4) EECC the Commission is required to submit by 21 December 2020, and every two years thereafter, a report to the European Parliament and to the Council on the effectiveness of the implementation of the single European emergency number '112'. The first such report was published on 21 December 2020[4].

The data gathering relied on specific questions that serve to assess the level of implementation of EU law requirements and the improvement of the national Public Safety Answering Point (PSAP) systems. The reporting period for the quantitative data[5] (e.g. number of emergency calls to '112') is 1 January 2021 to 31 December 2021. When assessing the availability of a system (e.g. deployment of a caller location solution, application, etc.) the latest information available is reflected in this report. Member States and COCOM observers from Candidate and EEA Countries were invited on 4 April to submit their responses by 31 May 2022.

Member States were called on to develop their measuring tools for monitoring a number of indicators in order to provide accurate data on the functioning of their emergency communications systems. Throughout the report, where Member States are not mentioned with regard to a qualitative or quantitative assessment, it means that relevant data was not provided to the Commission services.

2. CALLS TO '112'

In 2021 calls to the single European emergency number '112' increased by 3% to 153 million compared to 2019. Meanwhile, the total number of emergency calls, including to the national emergency numbers, where these are still in use, remained steady at 270 million. Calls to '112' represented 56% of all emergency calls in 2021.

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[1] Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code (OJ L 321, 17.12.2018, p. 36).
[2] COCOM22-01
[3] Communications Committee established on the basis of Article 118 EECC.
[4] https://digital-strategy.ec.europa.eu/en/library/2020-report-effectiveness-implementation-european-emergency-number-112
[5] The quantitative data is gathered every second year, and concerns only the year immediately preceding the report, in order to ease the administrative burden on reporting authorities.
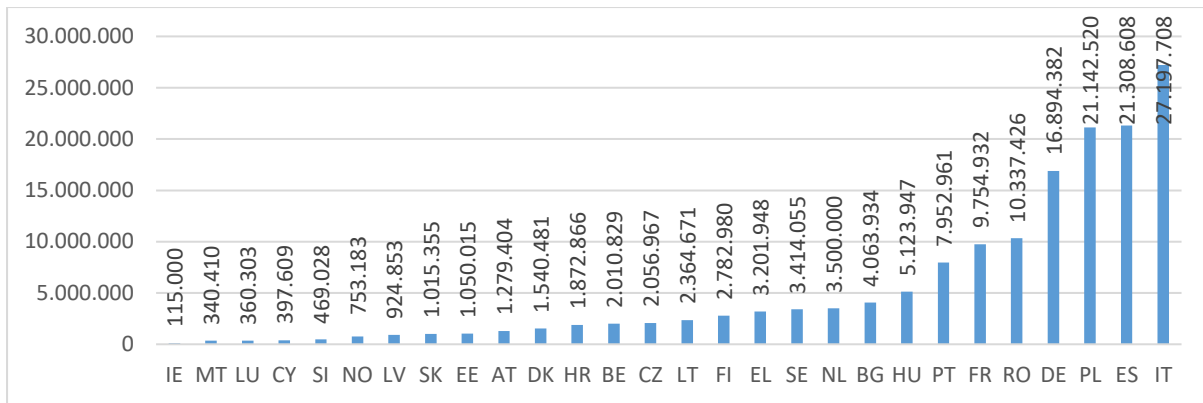
Figure 1. Number of calls to '112'

'112' is the single emergency number in Denmark, Estonia, Finland, Malta, the Netherlands, Portugal, Romania and Sweden. However, only 23% of calls to '112' in the EU are placed in these countries. The large majority of calls to '112' are placed in Member States where national numbers are still in use. In these Member States, the use of the single European emergency number varies largely, from 5% in Ireland to 97% in Bulgaria.
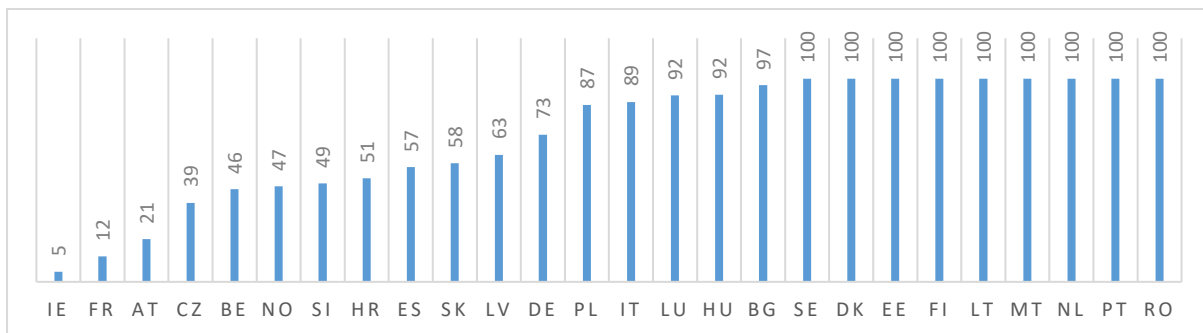

Figure 2. Percentage of calls to '112'

The number of calls to '112' depends on the level of end-users' awareness on the availability of the '112' number but also on the co-existence of national 'legacy' numbers.

In countries where each emergency service has its own PSAP it should be assured that '112' calls are effectively transferred and handled by the most appropriate emergency service in line with Article 109(3) and previously Article 26 of the Universal Service Directive[6]. State of the art implementation of national PSAP systems ensures an interconnected and redundant handling of both '112' calls and calls to the national numbers while providing for access to all concerned emergency services. Such systems should implement a routing function adapted to the migration to packet-switched communications that ensures that all emergency communications – calls, text-based, video, including those originated from network independent electronic communication service providers – are handled by the most appropriate PSAP.

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[6]Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on the universal service and users' rights relating to electronic communications networks and services (Universal Service Directive), OJ L 108, 24.4.2002, p. 51–77.

Calls from mobile phones largely outweighed the number of calls from fixed phones. On average, 78% of the calls in 2021 were placed from mobile phones. However, the use of mobile phones for emergency communication purposes varies significantly across Member States, from 42% in Luxembourg and 63% in Germany to 96% in Cyprus and 99% in Czech Republic.

> The growing penetration of mobile phones, in particular smartphones, shows the importance of ensuring access to emergency services while on the move, in particular in the context of migration to Voice over Long Term Evolution (VoLTE) and Voice over WiFi (VoWiFi). It also indicates that the growing amount of data and features derived from both the network and the end-user's handset could make emergency communications more effective (e.g. caller location, text and video for end-users with disabilities, vertical location (z-axis) and other contextual data).

The ratio of false calls[7] to the total number of emergency calls still varies considerably among the Member States[8], reaching 76% in Malta. Some Member States do not allow calls from SIM-less phones in order to decrease the risk of false calls that may potentially burden the PSAP system. However, access to emergency services from SIM-less phones is mandated in the majority of Member States (20)[9].
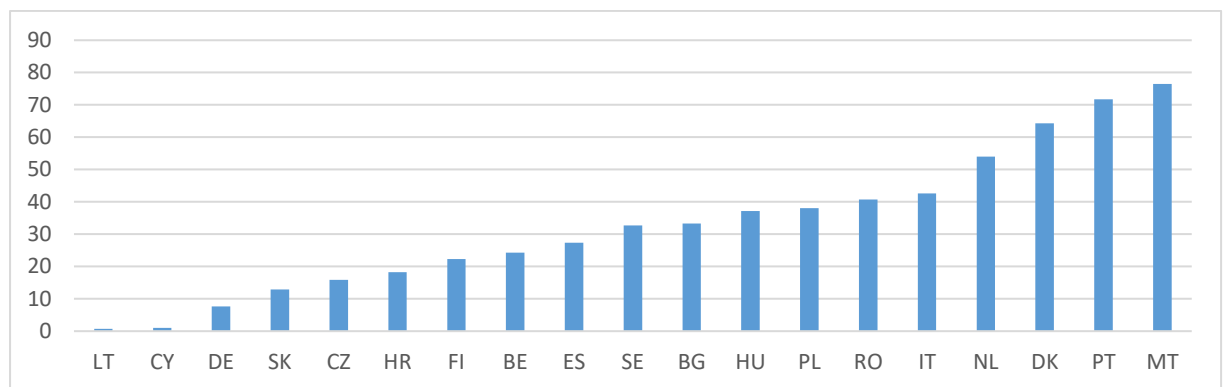

Figure 3. False calls to emergency numbers (%)

> Under Article 109 EECC, Member States may mandate other means of emergency communications than calls to '112'. Currently Member States are deploying SMS and app-based communications as an alternative means of access available for all end-users.

16 Member States mandated SMS-based emergency communications for all end-users[10]. In 11 Member States[11] the emergency SMS is sent to '112'. The number of emergency communications through SMS varies significantly depending on the level of promotion of

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[7]False calls are calls that are not followed up with intervention or assistance from the PSAP or the emergency services. Calls that report an emergency event that have already triggered intervention or assistance from the part of the PSAP, therefore not triggering separate intervention or assistance will not be considered false calls.
[8]19 Member States provided information on false calls.
[9]AT, CY, CZ, DK, EE, EL, ES, FI, HU, IE, IT, LT, LU, LV, MT, NL, PL, PT, SE, SK.
[10]SMS communication is deployed in some Member States exclusively for end-users with disabilities, as indicated in section 8.
[11]EE, EL, FI, HR, IE, IS, LT, LU, LV, SI, SK.

this type of emergency communication, from a few to tens of thousands. 13 Member States[12] confirm that the provision of emergency SMS is ensured free of charge.

In addition to the possibility to access emergency services by calling '112', 18 Member States[13] deployed national or regional applications available to all end-users[14], which enable emergency communications. These means of access, depending on their design, enable end-users to share additional information with the PSAP, provide handset-derived location information or ensure a text-based communication with the PSAP. Belgium, Cyprus, Germany and Poland confirmed that the data traffic generated by the emergency application is zero-rated.

eCalls originated in cars capable of placing a '112' emergency call should be adequately routed to the most appropriate PSAP in case of an accident. A total of 421,000 eCalls were reported by 27 Member States and Norway.
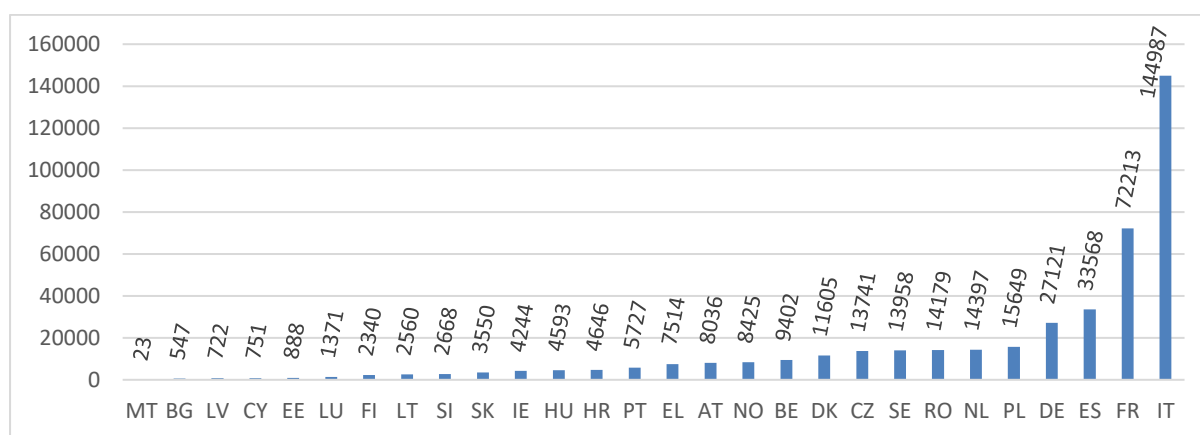
Figure 3. Number of eCalls placed in the EU

3. ANSWERING TIME[15]

25 Member States reported 10 seconds or less for the average answering time needed to get in contact with the emergency services.
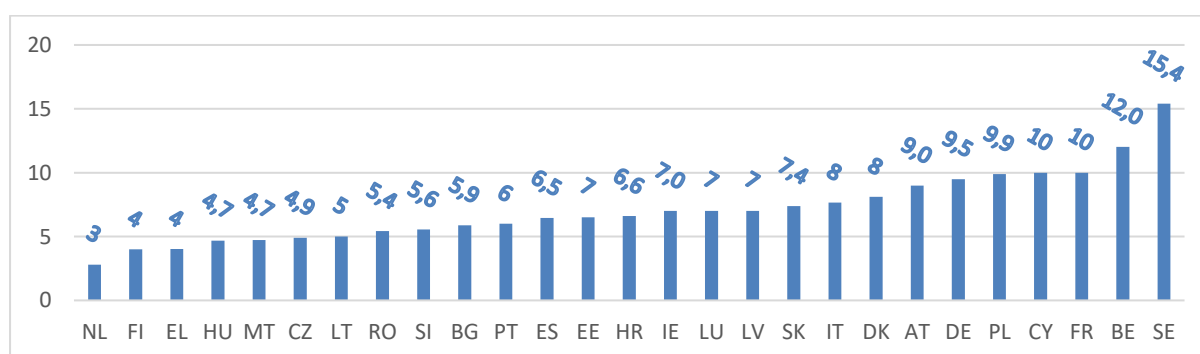
Figure 4. Average answer times to emergency calls (seconds)

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[12]AT, BE, CY, EE, EL, HR, HU, IE, LT, LU, LV, SI, SK.
[13]AT (regional), BE, CY, CZ, DK, FI, IT, LU, LV, MT, PL, RO, SE, SK.
[14]Application-based communication is deployed is some Member States exclusively for end-users with disabilities, as indicated in section 8.
[15]The time between the moment the emergency call is presented to the 1st level PSAP switch and the moment the call is being answered by a PSAP human operator.

4. CALL ABANDON RATE

27 respondents reported[16] on the calls that are presented to the PSAP switches but terminate prior to an answer by a human operator. Call abandons may be caused by network problems, call congestion, technical faults, handling capacity, caller disconnect (possibly dialling by mistake), etc. While involuntary calls and caller disconnect are not under the control of the PSAP system operators, the lack of handling capacity is pointing towards the failure to adequately answer and handle calls to '112' in the national PSAP system.

Figure 5. Percentage of abandoned calls to emergency numbers

While end-user behaviour and network issues do influence both answer times and call abandon rates, the organisation and capabilities of the national PSAP system is d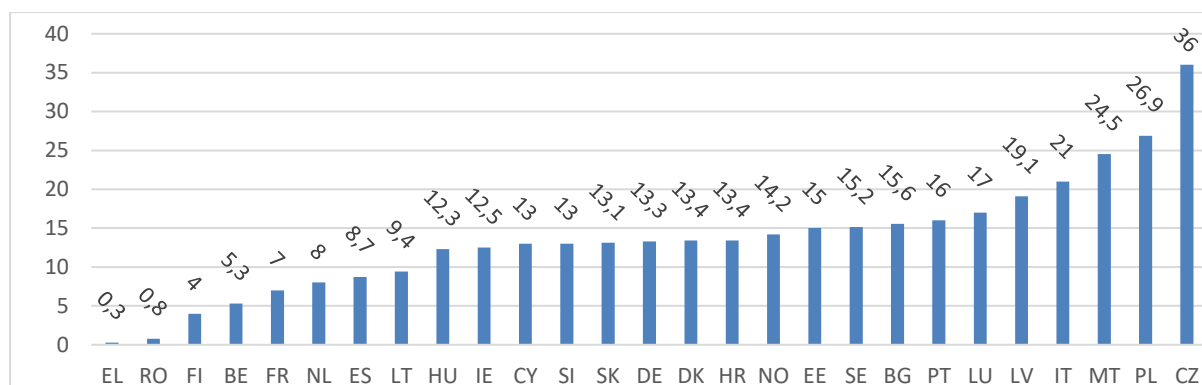ecisive in the effectiveness of handling the emergency calls and emergency communications through alternative means of access. In order to leverage the technological developments, all-IP networks of interconnected PSAPs are being deployed in several EU Member States to ensure resource efficiency and, most importantly, that all emergency calls are effectively handled.

5. AVAILABILITY OF CALLER LOCATION

Article 109 EECC makes mandatory the availability of both, network-based and the more accurate handset-derived[17] location information, to the most appropriate PSAP.

In most of the reporting Member States[18], the lack of availability of network-based caller location information occurs in less than 3% of the calls. Higher rates of failure to provide caller location were reported for the Netherlands (3%), Estonia (4%), Portugal (5%), Ireland 5.5%, Italy (9.4%), Spain (12.3%), Croatia (13.8%) and Latvia (21%).

14 Member States and Norway[19], in particular where the Advanced Mobile Location (AML) solution[20] is deployed, reported on the availability of handset-derived caller location. Even

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[16]Austria did not report this data

[17]While the accuracy of network-based location may vary from 50 m to 40,000 m, handset-derived location provides a much more accurate location up to 5 m.

[18]18 Member States have provided relevant data: CZ, BG, DK, EE, ES, FR, HR, HU, IE, IT, LT, LV, MT, NL, PT, RO, SE and SI.

[19]Handset derived caller location is not available in the following proportions: PT (1%), HR (2%), HU (2.9%), SI (5%), SE (20%), DK (23.7%), NO (30%), RO (33.9%), LT (38%), MT (40.4%), EE (46%), IE (48%), CZ (50%), BG (68.2%), IT (94.2%)

where the national PSAP system is upgraded to receive AML, still a significant number of calls do not benefit from this very accurate location. In addition to locating the end-user that places a call to '112', Member States could also enable AML for the SMS type of emergency communications.

Roaming end-users, visiting other Member States, might potentially be in a more vulnerable situation in case of emergency as they may not be able to describe their location precisely. While AML is deployed in 22 Member States, Iceland and Norway, only 6 Member States confirmed that handset-derived location is available for roaming end-users[21].

> The high penetration of smartphones carries the benefit of making emergency communications more effective through the availability of accurate caller location information. The Roaming Regulation[22] requires that access to emergency services is enabled by wholesale level transparency between roaming partners, by exchanging technical and regulatory information to ensure the provision of emergency communications and caller location to roaming customers.

6. CALLER LOCATION ACCURACY AND RELIABILITY

Article 109(6) EECC requires Member States to lay down accuracy and reliability criteria for the caller location information. 18 Member States[23] and Norway reported the caller location criteria laid down in national legislation. In addition, the Delegated Regulation 2019/320[24] aims at supporting the policy objectives laid down in the EECC by mandating manufacturers of smartphones to ensure as of 17 March 2022 that data from Global Navigation Satellite Systems (GNSS), at least from EU's Galileo, and data from Wi-Fi, are made available in emergency communications. This allows to locate the smartphone, and hence the person carrying it, with an adequate and effective accuracy.

Network-based location
In all Member States, as well as in Norway, the location of the caller from *fixed networks* is given by the installation address or street/mailing/billing address of the calling party.

All Member States reported that for calls from *mobile networks* the location is given by the Cell/sector ID providing a high reliability of the data transmitted to the PSAP operator. The reported accuracy ranges from 500m to 40km, depending on the density of the network, i.e. urban or rural area. More accurate mobile network-based location solutions used are Timing advance, Round trip time or Sector ID. These positioning methods substantially improve the accuracy of network-based location up to 50m in some cases.

Handset-derived location solutions

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[20]https://ec.europa.eu/digital-single-market/en/news/112-112-day-locating-emergency-calls-aml-technology-rise
[21]EL, FI, LU, RO and partially in BE and SE
[22]Article 3(6) of Regulation (EU) 2022/612 of the European Parliament and of the Council of 6 April 2022 on roaming on public mobile communications networks within the Union
[23]BE, BG, CY, CZ, DE, ES, HU, IT, LT, LV, MT, NL, PL, PT, RO, SE, SI, SK
[24]Commission Delegated Regulation (EU) 2019/320 of 12 December 2018 supplementing of Directive 2014/53/EU of the European Parliament and of the Council with regard to the application of the essential requirements referred to in Article 3(3)(g) of that Directive in order to ensure caller location in emergency communications from mobile devices, OJ L 55, 25.2.2019, p. 1–3.

In terms of handset-derived location solutions, Member States reported two types of implementations, described below.

a) Advanced Mobile Location (AML) solution

AML can improve accuracy levels by up to 4000 times, providing accuracy to under 100 m[25]. The solution does not ignore the Cell-ID location information provided by the network, but rather supplements it with either GNSS or Wi-Fi location information derived from the handset. 22 Member States[26], Iceland and Norway reported the deployment of AML on their territory.

b) Location information derived from the handset through an emergency application

Emergency applications deployed at a national or regional level enable the delivery of more accurate caller location information, based on GNSS or Wi-Fi capability of the smartphone, than that provided through network-based solutions.

However, these applications require prior action by the citizen – as opposed to AML – as they need to be downloaded. The transmission of location data is possible only when data connection is active.

> Under the Delegated Regulation adopted by 21 December 2022, the Commission proposes measures that set out parameters that need to be taken into account by the competent regulatory authorities when setting the criteria for accuracy and reliability of caller location information.

7. AVERAGE TIME NEEDED FOR RECEIVING THE CALLER LOCATION BY THE 112 OPERATOR

Due to the implementation of the "push" system or the automatic "pull" system all Member States reported near instant times (up to 10 seconds) for the provision on *network-based caller location*.

Due to its inherent architecture, *handset-derived location* technologies rely on the speed of the handsets to derive relevant location parameters from GNSS or Wi-Fi signals. On the basis of the reports from 15 Member States, it was confirmed that the provision of handset-derived location could range from near instant to up to 26 seconds.

> Under Article 109(6) EECC Member States have the responsibility to ensure that caller location information, both network-based and handset-derived, is made available to the most appropriate PSAP without delay. Under the Delegated Regulation adopted by 21 December 2022, the Commission proposes measures that ensure effective routing of contextual data, including caller location information.

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[25]https://ec.europa.eu/digital-single-market/en/news/112-112-day-locating-emergency-calls-aml-technology-rise
[26]BE, BG, CZ, DE, DK, EE, EL, ES, FI, FR, HR, HU, IE, IT, LT, LV, MT, NL, PT, RO, SE, SI

8.   ACCESS TO EMERGENCY SERVICES WHILE EU ROAMING

All Member States reported the availability of access to '112' and network-based caller location information in case of roaming calls.

11 Member States[27] provided information on the number of calls placed by roaming end-users to '112'. These Member States account for one third of emergency calls to '112'. On the basis of such data it may be extrapolated that 1,06% of all calls to '112' are placed by roaming end-users, approximately 1.5 million calls to '112' in the EU. It is estimated, that 800,000 calls were placed by roaming end-users to national emergency numbers, where these are in use. Therefore, a consolidated estimation indicates a total of 2.3 million emergency calls placed by roaming end-users in the reporting period.

Available data confirms that roaming end-users do not benefit from free of charge handset-derived location, as explained in section 4. Only 6 Member States confirmed that handset-derived location is available for roaming end-users. The Roaming Regulation[28] will ensure that a BEREC database on the means of access to emergency services informs operators and national regulatory authorities and, where applicable, other competent authorities, on the means of access to emergency services that are mandated in each Member State and that are technically feasible to be used by roaming customers.

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9.   ACCESS TO EMERGENCY SERVICES FOR END-USERS WITH DISABILITIES

Pursuant to Article 109(5) EECC, Member States are obliged to ensure that end-users with disabilities benefit from access to emergency services equivalent to that enjoyed by other end-users. The implemented accessibility solutions should replicate (be equivalent to) two-way voice communication ensured in the case of a call to '112', including in roaming. By virtue of equivalence, Member States should also ensure that caller location is available to the most appropriate PSAP to enable emergency services to intervene effectively.

To comply with this obligation, Member States have deployed a broad range of accessibility solutions dedicated to end-users with disabilities, including real time text, total conversation[29], SMS, emergency applications, web services, relay services, access from special devices, email or fax.

The technology that is most deployed is SMS, which ensures a two-way, text-based interaction between the person alerting the emergency services and the PSAP. SMS is available for end-users with disabilities in 22 Member States[30] and Norway.

Emergency applications are deployed in 19 Member States[31]. Depending on the design, they may rely on initiating emergency calls or SMS communications, but may also serve as a platform to provide real time text and total conversation communications. In addition,

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[27]LU, HR, MT, SI, SE, CY, EE, CZ, RO, IT, BG.
[28]Article 16 of Regulation (EU) 2022/612 of the European Parliament and of the Council of 6 April 2022 on roaming on public mobile communications networks within the Union
[29]As defined in Article 2 EECC: (35) 'total conversation service' means a multimedia real time conversation service that provides bidirectional symmetric real time transfer of motion video, real time text and voice between users in two or more locations.
[30]AT, BE, CY, CZ, DK, EE, EL, FI, FR, HR, HU, IE, LT, LU, LV, MT, NL, PT, RO, SE, SI, SK.
[31]AT, BE, BG, CY, CZ, DE, DK, ES, FR, HU, IT, LT, LU, LV, MT, NL, PL, PT, SK.

applications may provide accurate handset-derived location based on GNSS/Wi-Fi positioning data (5-100m).

Relay services for end-users with disabilities may also relay a communication to access emergency services. However, currently user location is in most cases not available for this means of access in Member States.

While fax and e-mail remain available as a means of access to emergency services in some Member States, they can hardly be considered equivalent. They do not ensure the swift two-way communication that is required in case of emergency, in contrast with the effectiveness of a '112' call. Furthermore, an e-mail does not allow the provision of automatic user location to the PSAP.

Article 109(5) EECC requires measures for end-users with disabilities to be in accordance with Union law harmonising accessibility requirements for products and services[32], seek to ensure interoperability across Member States, and, where feasible, avoid pre-registration for accessing emergency services by alternative means of emergency communications. Furthermore, the European Accessibility Act (EAA) requires that, in addition to voice, emergency communications is available by real time text or, where video is available, synchronised as total conversation[33]. While the relevant provisions should already be in place[34], the national PSAP systems will have to comply with these requirements[35] by 28 June 2025 or by derogation by 28 June 2027.

In addition, in line with Article 109(7) EECC, Member States shall ensure that end-users are adequately informed about the existence and the use of the single European emergency number '112', as well as its accessibility features, including through initiatives specifically targeting persons travelling between Member States and end-users with disabilities.

> Article 109(5) of the EECC requires availability of access to emergency services, where feasible without pre-registration. In case of national emergency applications serving end-users with disabilities, this would mean that the home application could be used in the visited EU Member State to access emergency services[36].
>
> The Roaming Regulation[37] will ensure that roaming providers inform the roaming customers on alternative means of access to emergency services through emergency communications mandated in the visited Member State. In practice, end-users will receive an automatic message with a link to access, free of charge, a dedicated webpage accessible to persons with disabilities, which provides such information.
>
> Legacy PSAP systems are not yet able to handle and process emergency communications that are truly accessible for end-users with disabilities. The deployment of state of the art real time

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[32]The European Accessibility Act (EAA), Directive (EU) 2019/882 of the European Parliament and of the Council of 17 April 2019 on the accessibility requirements for products and services (OJ L 151, 7.6.2019, p. 70).

[33]EAA Article 4(1) and Annex I, Section IV, point (a).

[34]Member States were required to transpose the EAA by 28 June 2022.

[35]EAA Article 4(8) and Annex I, Section V.

[36]https://www.etsi.org/deliver/etsi_ts/103400_103499/103478/01.01.01_60/ts_103478v010101p.pdf

[37]Article 15 of Regulation (EU) 2022/612 of the European Parliament and of the Council of 6 April 2022 on roaming on public mobile communications networks within the Union

text and total conversation necessitates the upgrade of the PSAP system to an all-IP network of interconnected PSAPs that could adequately route and process IP-based emergency communications.

Under the Delegated Regulation adopted by 21 December 2022, the Commission proposes to establish functional equivalence requirements for emergency communications to be used by end-users with disabilities for accessing emergency services.

An overview of the alternative means of access for end-users with disabilities currently deployed in the EU is presented in the Annex.

10. CONCLUSIONS

For more than 30 years[38], citizens of the Union have relied on access to emergency services using the single European Emergency number '112'. They should continue to be able to do so in the digital world. Citizens should benefit from comprehensive and timely delivery of contextual information necessary for addressing an emergency situation. The high level of connectivity that is targeted by Europe's digital transformation, as reflected in the Decision of the European Parliament and of the Council of [… to be updated] establishing the Digital Decade Policy Programme 2030, is bringing about a technological migration to all-IP technologies of electronic communication services used by citizens, in particular for persons with disabilities. The migration from circuit-switched to packet-switched technologies in electronic communication networks triggers the deployment of voice services through IP Multimedia Subsystem based fixed and mobile managed VoIP technologies such as Voice over Long Term Evolution (VoLTE), Voice over New Radio (VoNR in 5G) and Voice over Wi-Fi (VoWiFi). Packet-switched technologies also enable text and video-based services like real time text and total conversation services. Those IP-based communication services cannot be supported by the legacy circuit-switched networks, such as 2G and 3G networks that are in the process of being decommissioned. Therefore, there is a need to migrate emergency communications to packet-switched technologies as well. This report shows that handling of emergency communications, availability of accurate caller location information, availability of equivalent means of access for end-users with disabilities and access for roaming end-users play an important role in the effectiveness and speed of the relief action that is deployed by emergency services. The potential of the digital technologies could be fully realised only if both the emergency communication services and the national PSAP systems are able to leverage the technological developments.

Moving to all-IP communications will also allow to leverage the potential of using applications, enabling end-users to use various means of voice, text and video communications and provide PSAPs with relevant contextual information. While some national or regional applications of this type already exist, these are not interoperable with the visited country/region PSAPs in roaming conditions. In the future, the cooperation between Member States and the Commission – as proposed under the Delegated Regulation adopted by 21 December 2022 – could allow for the interoperability of emergency applications

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[38] 91/396/EEC: Council Decision of 29 July 1991 on the introduction of a single European emergency call number, OJ L 217, 6.8.1991.

leading to their EU-wide availability similar to the EU Digital COVID Certificate that was deployed by establishing an EU gateway for the interconnection of national systems[39].

Main findings:

- The share of emergency calls to the single European emergency number '112' represented 56% of all emergency calls: out of a total of 270 million calls placed in the EU, 153 million were '112' calls. It is estimated that 2.3 million emergency calls were placed by roaming end-users, out of which 1.5 million were '112' calls.

- The implementation of handset-derived caller location continued to improve in the EU. As of September 2022, 22 Member States, Iceland and Norway ensure that their PSAP system is AML enabled. However, only 6 Member States confirmed that handset-derived location is available for roaming end-users. Due to limits of jurisdiction and lack of monitoring capacity, the visited Member States cannot ensure that the transmission of caller location is free of charge for the end-user. The reviewed Roaming Regulation[40] aims to ensure that all roaming end-users benefit from accurate caller location, free of charge.

- End-users with disabilities do not benefit from fully equivalent means of access to emergency services, especially when roaming. When these end-users are not able to place a call to '112', they have to rely on nationally fragmented solutions. This state of affairs is in contrast with the availability of the harmonised single European emergency number '112' for other end-users and represents a significant void in the accessibility of emergency services. The reviewed Roaming Regulation ensures that all roaming end-users, including end-users with disabilities are informed on the alternative means of access to emergency services in the visited Member State.

Future actions and milestones:

- Member States have to transpose and implement the necessary measures to comply with the requirements of the EECC and in particular Article 109 on emergency communications and the single European emergency number. All end-users, including end-users with disabilities, no matter where in the European Union, should be able to effectively request and receive help from emergency services.

- In order to ensure effective access to emergency services through emergency communications to the single European emergency number '112' the Commission proposed a Delegated Regulation by 21 December 2022 pursuant to the mandate given in Article 109(8) EECC. The Delegated Regulation aims to improve the effectiveness of emergency communications by imposing the following measures:

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[39] https://joinup.ec.europa.eu/collection/open-source-observatory-osor/news/eu-gateway-eu-digital-covid-certificate

[40] Article 3(6) of Regulation (EU) 2022/612 of the European Parliament and of the Council of 6 April 2022 on roaming on public mobile communications networks within the Union

- It sets out parameters that need to be taken into account by the competent regulatory authorities when setting the criteria for accuracy and reliability of caller location information;

- It establishes functional equivalence requirements for emergency communications to be used by end-users with disabilities for accessing emergency services;

- It sets out the requirements with regard to effective routing;

- To ensure that seamless access across the EU is technically feasible, the Regulation calls on Member States to cooperate with the Commission to identify common interoperability requirements, which would enable routing of the mobile-application-based emergency communications to the most appropriate PSAP when roaming;

- To ensure the access to emergency services by emergency communications to the most appropriate PSAP in the context of the technological migration to all-IP networks, the Regulation requires Member States to draft and send to the Commission a roadmap for upgrading the national PSAP system to be able to receive, answer and process emergency communications through packet-switched technology;

- It requires Member States to report and provide updated information to the Commission on the obligations established in the Regulation.

ANNEX – ALTERNATIVE MEANS OF ACCESS TO EMERGENCY SERVICES IN EU MEMBER STATES AND EEA COUNTRIES

	Feature available
🟩	Feature available
🟥	Feature not available

		Means of access	Inter active	User location	No registration	Free	Roaming access	Free roaming	Number of access
AT		SMS to long number	🟩	🟩	🟩	🟩	🟥		173
		Fax to long number	🟩	🟩	🟩	🟩	🟥		
		email	🟩	🟥	🟩	🟩	🟩	🟩	
		Application	🟩	🟩	🟥	🟩	🟩	🟩	241
BE		SMS to short number	🟩	🟩	🟩	🟩	🟥	🟥	N/A
		Application (112.be)	🟩	🟩	🟩	🟩	🟩	🟥	N/A
		Fax to 112 or 101	🟩	🟩	🟩	🟩			N/A
BG		Application (112 Bulgaria)	🟩	🟩	🟥	🟩	🟩	🟥	11
		Web based service	🟩	🟩	🟥	🟩	🟩	🟥	
CY		SMS to 112	🟩		🟩	🟩	🟥		697
		RTT (over 112 Cyprus application)	🟩	🟩	🟩	🟩	🟩	🟩	15
CZ		SMS to 112	🟩	🟩	🟩	🟩	🟥	🟥	255
		Application (zachranka)	🟩	🟩	🟩	🟩	🟩	🟩	N/A
		Web based emergency access	🟩	🟩	🟩	🟩	🟩	🟩	N/A
		General accessibility relay service	🟩	🟩	🟥	🟩	🟥	🟥	N/A
		Specialised emergency relay service			🟩	🟩	🟥		N/A
		Specialised devices from fixed locations	🟩	🟩	🟩	🟩	🟥		0
		Specialised mobile devices	🟩	🟩	🟩	🟩	🟥		0
		Email	🟩	🟥	🟥	🟩			N/A
		Fax to long number	🟩	🟥	🟥	🟩			N/A
		Other	🟩	🟥	🟥	🟩	🟥		N/A
DE		Fax to 112	🟥	🟥	🟩	🟩	🟩	🟩	N/A
		Application	🟩	🟩	🟥	🟩	🟩	🟩	4.597*
		General relay service	🟩	🟥	🟥	🟥	🟩	🟥	N/A
		Specialised relay service	🟩	🟥	🟥	🟩	🟩	🟥	650
DK		SMS to long number	🟩	🟥	🟥	🟥	🟩	🟥	N/A
		General accessibility relay service	🟩						N/A
		Emergency application	🟥	🟩	🟩				N/A

	Means of access	Inter active	User location	No registration	Free	Roaming access	Free roaming	Number of access
EE	SMS to 112	green	green	green	green	red	red	891
EL	SMS to 112	green	green	green	green	red	green	N/A
	Email	green	red	green				N/A
	Fax to short number	green		green				N/A
ES	regional SMS to long numbers	green	red	green		green		451
	Specialised emergency relay service (video call)	green	red	green		green		200
	Regional specialised emergency relay services (call to freephone + SMS/chat)	green	green	green		green		350
	Regional specialised emergency relay service (call to 112 + SMS/chat)	green	green	red		green		2.000
	Regional specialised devices from fixed location	green	green	red	green	green		N/A
	Application	green	green	red		green		200
FI	SMS to 112	green	green	red	green	red	red	4.520
FR	SMS to 114	green	green	green	green	green	green	13.000
	Fax to 114	green	green	green	green	green	green	N/A
	Email	green	red	green	green	green	green	N/A
	Application	green	red	green	green	green	green	N/A
	Web based emergency access	green	red	green	green	green	green	N/A
	RTT as network service (www.info.urgence114.fr)	green	red	green	green	green	green	N/A
	RTT as application service (www.info.urgence114.fr)	green	red	green	green	green	green	N/A
	Specialised emergency relay service	green	red	green	green	green	green	N/A
	Specialised devices from fixed locations (114)		green					N/A
HR	SMS to 112	green	green	green	green	red	red	14
	Fax to 112	red	green	green	green	red	red	0
HU	SMS to 112	green	red	green	green	red	red	20.523
	Application (112-SOS)	green	green	green	green	red	red	
IE	SMS to 112	green	green	green	green	red	green	1.279
	Specialised emergency relay service	green		green	green			0
	General accessibility relay service	green		red	green			0
IT	Application (Flag Mii)	green	green	green	red	green	red	N/A
	Application (Where ARE U)	green	green	green	red	green	red	N/A
	Specialised emergency relay service	green	green	green	red	green	red	350

	Means of access	Interactive	User location	No registration	Free	Roaming access	Free roaming	Number of access
LT	SMS to 112	Green	Green	Green	Green	Red	Red	36.630
	Application (112 app)	Green	Green	Red	Green	Green	Red	157
LU	SMS to 112 and 113	Green	Red	Green	Green	Red		N/A
	Applications (GouvAlert, Echo 112)							N/A
	Specialised fixed devices	Green		Green	Red		Green	N/A
	email	Green		Green	Green			N/A
	Fax to 112	Green		Green	Red			N/A
LV	SMS to 112	Green	Red	Green	Green	Red	Green	5.965
	Emergency application	Green	Green	Green	Green	Green	Red	N/A
MT	SMS to long number	Green	Green	Green	Red	Green	Red	6
	112.mt application	Green	Green	Red	Green	Green	Red	228
	112.mt web service	Green	Green	Red	Green	Green	Red	
	RTT over network (long number)	Green	Red	Green	Red	Green	Red	
	RTT over application	Green	Green	Red	Green	Green	Red	
	Report through 112.mt	Green	Red	Green	Green	Green	Red	
NL	RTT over application (112NL)	Green	Green	Red	Green	Green	Green	N/A
	Web based emergency access	Green	Red	Red	Green	Green	Red	N/A
	SMS to 112	Green	Green	Red	Green	Green		N/A
	Specialised emergency relay service	Green	Green	Red	Green	Green	Red	N/A
	General accessibility relay service	Green	Green	Red	Green	Green	Red	N/A
PL	Application (Alarm 112)	Green	Green	Red	Red	Red	Red	1.475
PT	SMS to long number	Green	Red	Green	Red	Green	Red	N/A
	Emergency application	Green	Green	Green	Green	Green	Red	38
RO	SMS to 113	Green	Green	Red	Green	Red	Red	51
SE	SMS to 112	Green	Red	Red	Green	Red	Green	112
	specialised fixed devices	Green	Green	Green	Green	Green	Green	0
	General relay service	Green	Red	Red	Green	Red	Green	792
SI	SMS to 112	Green	Green	Green	Green	Green	Green	36.739
	Web based emergency access	Green	Red	Green	Green			N/A
SK	SMS to 112	Green	Green	Green	Green	Red	Red	N/A
	Application (155.sk)	Green	Green	Green	Red	Red	Red	31
NO	SMS 112	Green	Green	Red	Green	Red		N/A

*since 28.09.2021