

II

(Non-legislative acts)

REGULATIONS

COMMISSION DELEGATED REGULATION (EU) 2023/444

of 16 December 2022

supplementing Directive (EU) 2018/1972 of the European Parliament and of the Council with measures to ensure effective access to emergency services through emergency communications to the single European emergency number '112'

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code ⁽¹⁾, and in particular Article 109(8) thereof,

Whereas:

- (1) Pursuant to Article 109(8) of Directive (EU) 2018/1972, in order to ensure effective access to emergency services through emergency communications to the single European emergency number '112' in the Member States, the Commission shall adopt delegated acts, with the first such act to be adopted by 21 December 2022. These delegated acts are to supplement paragraphs 2, 5 and 6 of Article 109 of the Directive on measures necessary to ensure the compatibility, interoperability, quality, reliability and continuity of emergency communications in the Union with regard to caller location information solutions, access for end-users with disabilities and routing to the most appropriate public safety answering point (PSAP).
- (2) Emergency communications are an important element for the pursuit of public safety, security and health. For more than 30 years, 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 establishing the Digital Decade Policy Programme 2030 ⁽²⁾, is bringing about a technological migration to all-IP technologies of electronic communication services used by citizens, in particular by 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 Regulation aims to ensure that in this transformational process the quality and reliability of emergency communications are ensured.

⁽¹⁾ OJ L 321, 17.12.2018, p. 36.

⁽²⁾ Decision (EU) 2022/2481 of the European Parliament and of the Council of 14 December 2022 establishing the Digital Decade Policy Programme 2030 (OJ L 323, 19.12.2022, p. 4).

- (3) The goal of emergency services is to avoid, alleviate or manage the effects of emergency incidents through emergency intervention. The time necessary for emergency intervention has a fundamental impact on the outcome of emergency incidents. Effective emergency intervention requires rapid mobilisation of the intervention resources that could effectively address the emergency incident, and the fast arrival at the intervention scene.
- (4) The goal of emergency communications is to enable end-users to access emergency services to request and receive emergency relief from emergency services. While emergency communications are set up between the end-user and the PSAP, it should be the role of the most appropriate PSAP to process the information received and convey the request to the emergency services, hence ensuring access to emergency services. Depending on the national organisation of PSAP systems and emergency services systems, PSAPs and emergency services can be overlapping or autonomous entities.
- (5) In order to enable access to emergency services, effective emergency communications should ensure both the timely communication between the end-user and the most appropriate PSAP and the making available in a timely manner of contextual information, including caller location information. The contextual information contributes to the description of the emergency incident, for example, the physical environment, the condition and abilities of the persons involved, the localisation of the incident, etc. The availability and accuracy of contextual information enables the timely identification of the appropriate intervention resources and the quick arrival at the intervention scene, e.g. when an accurate caller location is available. This information may be conveyed to the emergency services through emergency communications by the end-user, or derived automatically from the device of the end-user or the network.
- (6) Caller location is one of the most important types of contextual information associated with emergency communications and it has a high impact on their effectiveness. The accuracy and reliability of caller location information influences the time necessary to identify the site of the emergency and the on-site arrival of emergency services.
- (7) Directive (EU) 2018/1972 requires competent regulatory authorities to establish the caller location accuracy and reliability criteria. Those criteria represent the minimum levels of accuracy and reliability of caller location information that have to be implemented on the territory of the Member State through network-based and handset-derived technologies. According to the case-law of the European Court of Justice ⁽³⁾, the criteria should ensure, within the limits of technical feasibility, that the end-user's position is located as reliably and accurately as is necessary to enable the emergency services to usefully come to the end-user's assistance. The mix of these technologies ensures that even where a handset-derived caller location solution fails to make the caller location information available to the most appropriate PSAP, emergency services can rely on network-based location to usefully come to the end-user's assistance, in line with the caller location accuracy and reliability criteria established by Member States. Caller location criteria, which do not allow the establishment of minimum levels of accuracy and reliability may lead to implementation that does not ensure that emergency services receive caller location information, which they can effectively use. It should be for the Member States to assess the combined effect of the technically feasible caller location solutions, and to establish minimum criteria for both accuracy and reliability of caller location, which, if implemented, would enable emergency services to usefully intervene. The usefulness of the accuracy of caller location information might vary depending on the area from which the emergency communication is originated (e.g. urban or rural) and could be reflected accordingly in the criteria set. In order to ensure a harmonised approach within the Union to the setting of the accuracy and reliability criteria which ensures a minimum level of contextual information, it is necessary to define the parameters that competent regulatory authorities should take into account when laying down such criteria. Moreover, it is important to recall that pursuant to the principle of sincere cooperation laid down in Article 4(3) of the Treaty on European Union, competent regulatory authorities are to cooperate among each other when laying down the criteria for the accuracy and reliability of the caller location information by consulting the Body of European Regulators for Electronic Communications (BEREC) or other relevant fora competent to provide guidance in this regard, in order to ensure the full effectiveness of Article 109(6) of Directive (EU) 2018/1972.

⁽³⁾ Case C 417/18; Judgment of the Court (Fourth Chamber) of 5 September 2019, *AW and Others v Lietuvos valstybė*.

- (8) The accuracy of caller location information may be expressed as a maximum radius of the search area for the intervention that is presented to the emergency services. Emergency intervention times could be significantly reduced when accurate and reliable network-based and handset-derived caller location information is available to the most appropriate PSAP, especially when end-users requesting emergency assistance are not able to specify their location. Therefore, for fixed networks, Member States should express the minimum levels of accuracy to be implemented on their territory as caller location information related to the physical address of the network termination point, for example by reference to the concrete street address, apartment, floor or similar information. For mobile networks the minimum levels of accuracy should be expressed in metres to indicate the maximum radius of the horizontal search area that is presented to the emergency services for intervention purposes. If applicable and technically feasible, the elevation or vertical accuracy criterion should be expressed in metres as well. Member States should assess whether these parameters are feasible to be applied to network independent providers of number-based interpersonal communication services when these are used in fixed or mobile networks.
- (9) The reliability of caller location should pertain to two aspects of the caller location information: the establishment and the transmission. The reliability of caller location information should be established according to the statistical measurements that indicate the success rate with which the actual location of the device originating the emergency communication matches the physical area indicated on the basis of the caller location information. An emergency communication should trigger both network-based and handset-derived caller location information, when the latter is available. The reliability of the caller location information for the emergency services should be established as a combined effect of these two technologies. The reliability of transmission of caller location information should be expressed as the success rate of the technical solution to transmit the caller location information to the most appropriate PSAP. The success rate is dependent on the capabilities of the network to convey the information, in case of network-based caller location, or the interoperability between the handset and the network resources to allow the transmission, in case of handset derived caller location, as well as the most appropriate PSAP capabilities to receive the information.
- (10) In order to enable the Commission to monitor the caller location criteria established in accordance with this Regulation, Member States should report on the adoption of the criteria and explain how they have taken into account the parameters established in this Regulation.
- (11) Directive (EU) 2018/1972 requires access to emergency services through emergency communications for end-users with disabilities to be equivalent to that enjoyed by other end-users. The principle of equivalence implies that end-users with disabilities should be able to access emergency services through emergency communications in a functionally equivalent manner to that in which other end-users access emergency services, in particular by calling the '112' number via voice-based services. Since there is no common understanding of the functional equivalence requirements, the requirements that replicate the functionalities of emergency communications enjoyed by other end-users, mainly voice-based services, should be established. If for technical reasons, Member States are not able to comply with the functional equivalence requirements established by this Regulation, they should inform the Commission of the specific reasons why this is not possible. Member States should inform the Commission when the technical design of the mandated means of access to emergency services does not require or allow the use of the single European emergency number '112' and how it is ensured that the same or higher awareness is reached amongst end-users with disabilities with regard to that means of access.
- (12) In order to enable the Commission to monitor the compatibility, quality, reliability, interoperability and continuity of the means of access to emergency services for end-users with disabilities, Member States should report the means of access to emergency services mandated in their jurisdiction for end-users with disabilities, including those using roaming services. The report should contain a first assessment of the compliance of the reported means of access with the functional equivalence requirements in accordance with this Regulation. The migration to all-IP networks will enable the implementation of new, accessible communication services like real time text and total conversation services. Member States should therefore report interoperability, compatibility or continuity issues encountered when deploying such services, in particular for roaming end-users. In order to fulfil their obligation under Article 16 of Regulation (EU) 2022/612 of the European Parliament and of the Council (*) to report to BEREC the means of access to emergency services that are mandated in their Member State and that are technically feasible to be used by roaming customers, national regulatory authorities or other competent authorities should establish, if applicable, the technical reasons for the lack of availability of the emergency communication service for roaming end-users where those services are available for domestic end-users. The first report, as well as information provided in the following years will enable the Commission to assess the necessity of adopting further measures, including standardisation mandates, to address such issues.

(*) 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 (recast) (OJ L 115, 13.4.2022, p. 1).

- (13) Emergency communications and caller location information have to be routed to the most appropriate PSAP to enable the appropriate answering and handling of the emergency communications. Effective routing of emergency communications should be ensured also in the context of the technological migration from circuit-switched to packet-switched technologies. The most appropriate PSAP is normally determined by the Member State on the basis of a territorial competence to handle emergency communications or the competence to handle a certain type of communication, for example a PSAP equipped to handle real time text or sign-language communication. The interpersonal communication services provided through packet-switched technologies providing voice, text – including real time text –, and video may be routed in the public network domain or PSAP domain. Depending on the national organisation of PSAPs, while the emergency communication reaches PSAP system through the public networks, further routing may be necessary within the PSAP domain to reach the most appropriate PSAP. In order to guarantee the availability of effective emergency communications to the benefit of all end-users, Member States should ensure the timeliness of routing to the most appropriate PSAP of all types of emergency communications and of caller location information mandated on their territory.
- (14) The effectiveness of access to emergency services is dependent on the timeliness of the conveyance of the contextual information to the emergency services. Member States should ensure that the most appropriate PSAP to which the emergency communication is routed, is technically capable of transmitting in a timely manner the contextual information to the emergency services from the moment those services are alerted by that PSAP. According to the national organisation of PSAPs, the most appropriate PSAP may assess the usefulness of the contextual data and filter the information to be provided to emergency services.
- (15) In order to enable the monitoring by the Commission of the effectiveness of routing to the most appropriate PSAP, Member States should report on the performance of the routing of emergency communications to the most appropriate PSAP in terms of their timeliness, including when using voice, text, or video services.
- (16) Ensuring seamless access to emergency services, without pre-registration, for end-users, including end-users with disabilities, travelling in another Member State might not be under the sole control of a Member State and would require compliance with commonly agreed interoperability requirements. Without prejudice to the implementation of real time text and total conversation services pursuant to Directive (EU) 2019/882 of the European Parliament and of the Council ⁽⁷⁾, it should be possible to implement access to emergency services through voice, text or video services through emergency communications via mobile applications. Mobile applications may enable the transmission of rich contextual data to the most appropriate PSAP. Once a mobile application is downloaded and installed, the end-user may communicate with the most appropriate PSAP across the Union if the common interoperability requirements make that possible, and the mobile application providers and the national PSAP systems comply with those requirements. Member States should cooperate with the Commission in good faith to identify the common interoperability requirements the implementation of which would enable the use of such emergency communications to the most appropriate PSAP via mobile applications across the Union.
- (17) PSAP systems that were developed to answer and handle circuit-switched communications may not be able to answer, handle and process all features of emergency communications initiated through packet-switched technology. In order to ensure transparency with relevant stakeholders, in particular electronic communications services and network providers, as well as to ensure a coherent and timely upgrade of PSAPs systems within their territory, Member States should prepare a roadmap for the upgrade of the capabilities of their PSAP systems to answer, handle and process emergency communications provided through packet-switched technologies. The roadmap should contain the expected timeline and date of deployment of novel means of access to emergency services through emergency communications through packet-switched technologies, whether these are enabled in the core network as number-based interpersonal communication services or deployed via a mobile application. The roadmap should contain information on the timeline of the upgrade of the capabilities of the PSAP systems, taking account of the obligations set in Directive (EU) 2019/882 and the legal deadlines provided therein. This concerns in particular the appropriate answering by the most appropriate PSAP the emergency communications to the single European emergency number ‘112’, by using synchronised voice and text (including real time text), or, where video is provided, voice, text (including real time text) and video synchronised as total conversation. If applicable, the

⁽⁷⁾ 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).

expected legal mandate to deploy emergency communications through packet-switched technologies under national legislation should be indicated. The roadmap should refer to the intermediary milestones, for example public and stakeholder consultations, legislative measures, interoperability, continuity and reliability testing, public procurement, etc. Member States should provide the roadmap to the Commission and provide updates on its implementation. Member States should also report the interoperability and continuity issues encountered with regard to the provision of electronic communication services used for accessing emergency services to enable the Commission to assess the necessity of adopting further measures, including standardisation mandates, that would address such bottlenecks.

- (18) A regular and structured gathering of information from Member States regarding several aspects pertaining to the effectiveness of emergency communications in the Union is necessary to enable the Commission to monitor their implementation and compliance with obligations set out in Article 109 of Directive (EU) 2018/1972, as supplemented by this Regulation. Following the first report as provided for in this Regulation, Member States should provide the Commission with updated information as requested in the context of each data gathering that the Commission initiates for the purposes of fulfilling its obligation to report to the European Parliament and the Council pursuant to Article 109(4) of Directive (EU) 2018/1972.
- (19) The Body of European Regulators for Electronic Communications was consulted in accordance with Article 109(8) of Directive (EU) 2018/1972 and delivered an opinion on 14 October 2022.
- (20) The European Data Protection Supervisor was consulted in accordance with Article 42(1) of Regulation (EU) 2018/1725 of the European Parliament and of the Council ⁽⁶⁾ and delivered an opinion on 15 November 2022,

HAS ADOPTED THIS REGULATION:

CHAPTER 1

SUBJECT MATTER, SCOPE AND DEFINITIONS

Article 1

This Regulation establishes measures to ensure effective access to emergency services through emergency communications with regard to caller location information solutions, access for end-users with disabilities and routing to the most appropriate PSAP.

Article 2

For the purposes of this Regulation, the following definitions apply:

- (1) 'effective emergency communication' means emergency communication as defined in Article 2, point (38) of Directive (EU) 2018/1972 that ensures:
 - (a) timely communication between the end-user and the most appropriate PSAP, and
 - (b) the making available in a timely manner of contextual information, including caller location information;

⁽⁶⁾ Regulation (EU) 2018/1725 of the European Parliament and of the Council of 23 October 2018 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data, and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002/EC (OJ L 295, 21.11.2018, p. 39).

- (2) 'contextual information' means the information conveyed through an emergency communication by the end-user or derived and transmitted automatically from the device of the end-user or the relevant network in order to enable the timely identification of the intervention resources of the emergency services and the fast arrival of the emergency services at the intervention scene.

CHAPTER 2

CALLER LOCATION INFORMATION

Article 3

1. When laying down criteria for the accuracy and reliability of caller location information pursuant to Article 109(6) of Directive (EU) 2018/1972, competent regulatory authorities shall ensure, within the limits of technical feasibility, that the end-user's position is located as reliably and accurately as is necessary to enable the emergency services to come to the end-user's assistance. Competent regulatory authorities shall lay down the criteria taking into account the parameters specified in paragraphs 2 and 3 of this Article.
2. With respect to the fixed networks:
 - (a) the accuracy criterion for caller location information shall be expressed as information related to the physical address of the network termination point;
 - (b) the reliability criterion for caller location information shall be expressed as the success rate, in percentage, of the technical solution or mix of technical solutions to establish and transmit to the most appropriate PSAP a caller location information corresponding to the accuracy criterion.
3. With respect to the mobile networks:
 - (a) the accuracy criterion for caller location information shall be expressed in metres. If applicable, the elevation or vertical accuracy criterion shall be expressed in metres as well;
 - (b) the reliability criterion for caller location information shall be expressed as the success rate, in percentage, of the technical solution or mix of technical solutions to establish and transmit to the most appropriate PSAP a search area corresponding to the accuracy criterion.

CHAPTER 3

ACCESS TO EMERGENCY SERVICES FOR END-USERS WITH DISABILITIES

Article 4

When implementing means of access to emergency services through emergency communications for end-users with disabilities, Member States shall ensure that, subject to technical feasibility, the following functional equivalence requirements are met:

- (a) the emergency communication enables two-way interactive communication between the end-user with disabilities and the PSAP;
- (b) the emergency communication is available in a seamless way, without pre-registration, to end-users with disabilities travelling in another Member State;
- (c) the emergency communication is provided to end-users with disabilities free of charge;
- (d) the emergency communication is routed without delay to the most appropriate PSAP that is qualified and equipped to appropriately answer and process the emergency communication from end-users with disabilities;
- (e) equivalent levels of accuracy and reliability of caller location information are ensured for the emergency communication for end-users with disabilities as for emergency calls by other end-users;

- (f) the end-users with disabilities are enabled to reach at least the same level of awareness about the means of access to emergency services through emergency communications as other end-users about emergency calls to '112', either by the design of the means of access or through awareness raising measures.

CHAPTER 4

ROUTING TO THE MOST APPROPRIATE PUBLIC SAFETY ANSWERING POINT

Article 5

Member States shall ensure that emergency communications and caller location information are routed without delay to the most appropriate PSAP that is technically capable to convey the contextual information to the emergency services when alerting those services.

Article 6

For the purpose of ensuring the technical feasibility of the seamless access to emergency services as provided in Article 4(1), point (b) of this Regulation, without prejudice to the implementation of Directive (EU) 2019/882, Member States shall cooperate with the Commission to identify common interoperability requirements that enable the emergency communication to the most appropriate PSAP via a mobile application anywhere in the Union.

CHAPTER 5

REPORTING

Article 7

1. Member States shall regularly report to the Commission the performance of the routing to the most appropriate PSAP under Article 5, implemented for emergency communications and caller location information.
2. Member States shall prepare and report to the Commission no later than on 5 November 2023 a roadmap for upgrading the national PSAP system in order to be able to receive, answer and process emergency communications through packet-switched technology. The roadmap shall indicate the date of the expected deployment of voice, text or video based emergency communications through packet-switched technologies. The roadmap shall also include the indicative date by when PSAPs will be ready to receive such emergency communications. Member States shall provide updated information on the implementation of the intermediary milestones of the roadmap in accordance with Article 8.

Article 8

1. Member States shall report to the Commission no later than on 5 March 2024:
 - (a) the criteria for the accuracy and reliability of caller location information expressed according to the parameters referred to in Article 3,
 - (b) the means of access to emergency services through emergency communications to be used by end-users with disabilities, including those using roaming services, and the assessment of their compliance with the functional equivalence requirements in Article 5.
2. Member States shall provide the Commission with the information referred to in this article and Article 7 without prejudice to the initial deadlines provided therein, in the context of each data gathering that the Commission initiates for the purposes of fulfilling its obligation to report to the European Parliament and the Council pursuant to Article 109(4) of Directive (EU) 2018/1972.

CHAPTER 6

FINAL PROVISIONS*Article 9*

This Regulation shall enter into force on the third day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 16 December 2022.

For the Commission
The President
Ursula VON DER LEYEN
