



EMERGENCY COMMUNICATIONS & THE EU LEGISLATIVE FRAMEWORK

Update



The past, current and future European legislation on handling emergency communications. What does it mean for Member States?
How will citizens benefit?
What needs to be implemented?
Why and when?

EMERGENCY COMMUNICATIONS AND THE EU LEGISLATIVE FRAMEWORK



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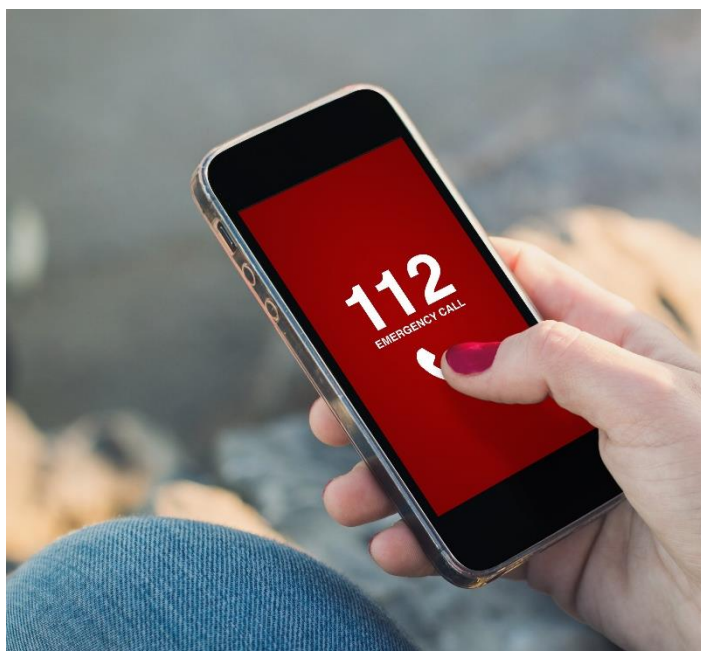
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| | |
|-----------------------------------------------------------------------------------------------------|-----------|
| EXECUTIVE SUMMARY | 4 |
| 1 LIST OF ACRONYMS | 5 |
| 2 THE BASICS OF EU LEGISLATION | 5 |
| What is EU law? | 5 |
| Where does EU law apply? | 6 |
| How is EU law voted? | 6 |
| How to read EU legislation? | 7 |
| 3 PREVIOUS EU LEGISLATIONS ON 112 | 7 |
| July 1991: Council Decision | 7 |
| Directive 98/10/EC on the application of Open Network Provision (ONP) | 8 |
| March 2002: Universal Service Directive | 9 |
| The Commission Recommendation on Caller Location | 9 |
| July 2009: The Roaming Regulation | 9 |
| December 2009: Universal Service Directive | 10 |
| 4 THE EUROPEAN ELECTRONIC COMMUNICATIONS CODE AND THE NEW LEGISLATIONS AFFECTING 112 | 12 |
| Basic provisions on emergency access | 12 |
| ‘Emergency communications’: what does this mean and what does it imply? | 13 |
| Who should provide access to 112? | 14 |
| Locating emergency communications | 18 |
| Public Warning Systems | 20 |
| Accessibility for people with disabilities | 23 |
| Transnational emergency calls | 26 |
| Promotion of 112 | 26 |
| 5 LIST OF RELEVANT LEGISLATIONS | 27 |



EXECUTIVE SUMMARY

On 14 November 2018, the entry into force of the European Electronic Communications Code marked a new milestone in the history of European legislation on 112.

This legislation introduces the concept of 'emergency communications', replacing 'emergency calls' in order to encompass the new information and communication technologies. Other provisions in the Code include the use of handset-derived information in the location information provided to the PSAP, the establishment of a telephone-based public warning system in order to alert the population of an ongoing crisis or an upcoming threat, and some improvements of the means by which people with disabilities can contact the emergency services.



This document intends to provide a comprehensive understanding of the past, current and future European legislation regarding the handling of emergency communications.



The 2018 European Communications Code introduces the concept of 'emergency communications', as well as other important provisions for public safety.

1 | LIST OF ACRONYMS

| | |
|-------|-----------------------------------------------------------|
| AML | Advanced Mobile Location |
| BEREC | Body of European Regulators for Electronic Communications |
| EAA | European Accessibility Act |
| EEA | European Economic Area |
| EECC | European Electronic Communications Code |
| EU | European Union |
| GNSS | Global Navigation Satellite System |
| NBICS | Number-Based Interpersonnal Communication Services |
| NIICS | Number-Independent Interpersonnal Communication Services |
| ONP | Open Network Provision |
| PSAP | Public Safety Answering Point |
| PSTN | Public-Switched Telephone Network |
| SMS | Short Message Service |

2 | THE BASICS OF EU LEGISLATION

What is EU law?

Law of the European Union (EU) is binding on all the Member States of the Union and is superior to national laws. There are different kind of legal acts, the main ones being a directive and a regulation.

A **directive** sets out some objectives that the Member States need to achieve within a specific deadline (usually two years). This leaves some flexibility to the States to decide on how they will achieve these objectives. Consequently, this process requires the Member States to change their national legislation and adapt it to the objectives set out in the directive. This is called the “transposition”.

Unlike the directives, **regulations** are self-executive. This means that they do not require any transposition by the national authorities, and they are directly integrated into the national law of the Member States.

Directives and regulations are sometimes not sufficient and further clarity may still be needed. To do so, **implemented and delegated acts** can complement some elements of specific legislations.

The European Commission is responsible for making sure that EU legislation is correctly implemented and enforced. If a Member State fails to comply with European laws, the Commission can refer the case to the Court of Justice of the European Union, which might impose financial sanctions to the countries.



Where does EU law apply?

All EU laws are binding on all the Member States of the European Union. In November 2019, the Member States of the European Union are: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark (excluding Faroe Islands and Greenland), Estonia, Finland (including the Åland islands), France (including Guadeloupe, French Guiana, Martinique, Réunion, Mayotte and Saint-Martin; excluding the other overseas territories), Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands (excluding the Netherlands Antilles), Poland, Portugal (including Azores, Madeira), Romania, Slovakia, Slovenia, Spain (including Ceuta, Melilla and the Canary Islands), Sweden and the United Kingdom (including Gibraltar and the Channel Islands)¹.

In addition, the three other members of the European Economic Area (EEA) – Iceland, Liechtenstein and Norway (except Svalbard) – are also required to apply European laws (except in some specific policies such as agriculture or fisheries).

Finally, all the new Member States will also have to apply all the EU legislations that are in force when they join the Union.

How is EU law voted?

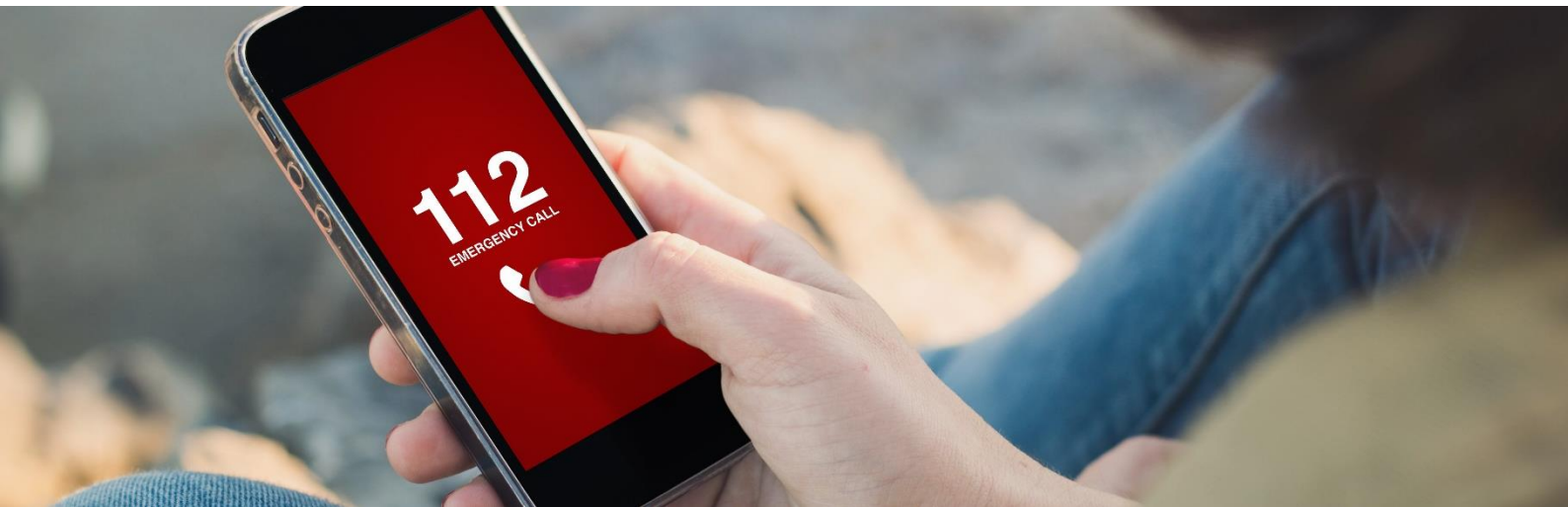
Proposals for new directives and regulations are drafted by the European Commission. Most proposals are then debated and voted by two institutions: the Council of the European Union, which represents all the governments of the Member States, and the European Parliament, which is composed of 751 members (in November 2019) - also called MEPs - that are directly elected by the European citizens. Both the Council and the Parliament can amend the initial proposal, but the same text should be voted on the same terms. This may result in quite a long decision procedure (usually about two years).

¹ In March 2017, the United Kingdom decided to pull out the article 50 of the Treaty of the European Union and withdraw from the European Union. At the time of writing this document, negotiations on exiting the EU were still ongoing and the United Kingdom was therefore still a member of the European Union.

How to read EU legislation?

When one reads a European legislation, several elements of the law should be looked at:

- The **article** itself. The articles set the obligations to the Member States. This is therefore the main source of information about the objectives that need to be achieved by the Member States.
- The **recitals**. The recitals are included in the text but are not themselves binding. The role of the recitals is to give more information about the context and the reasoning behind an obligation. They are sometimes very useful in order to understand the articles.
- The **definitions**. As some terms used in the text can be quite vague, a closer look at the definitions can help to understand what falls under the scope of an article.



3 | PREVIOUS EU LEGISLATIONS ON 112

July 1991: Council Decision

In July 1991, the Council of the European Union adopted a decision on 112. Member States were requested to introduce the single European emergency number 112 in order to make emergency services more accessible, especially for travellers. It was foreseen that the single European emergency number 112 would operate alongside the existing national emergency numbers in most countries and would not directly replace those existing national emergency numbers. 112 is now accessible in every EU Member State and is the single emergency number in several countries.

More information: [*91/396/EEC: Council Decision of 29 July 1991 on the introduction of a single European emergency call number*](#)

Directive 98/10/EC on the application of Open Network Provision (ONP)

Below are the main references to 112 from the ONP Directive:

ONP Directive, Recital 9:

'Whereas Council Decision 91/396/EEC of 29 July 1991 on the introduction of a single European emergency call number (13) called for Member States to ensure that no later than 31 December 1996 the number '112' is introduced in public telephone networks as the single European emergency call number; whereas it is important that users are able to call emergency telephone numbers and, in particular, the single European emergency call number '112' free of charge from any telephone, including public pay-telephones, without the use of coins or cards;'

ONP Directive, Article 3 (b):

'Member States shall ensure that it is possible to make emergency calls from public pay telephones using the single European emergency call number '112' referred to in Decision 91/396/EEC and other national emergency numbers, all free of charge and without having to use coins or cards.'

ONP Directive, Article 9 (c):

*'Member States shall ensure that all users provided with a connection to the fixed public telephone network can:
Access emergency services at no charge, using the dialling code '112' and any other dialling codes specified by national regulatory authorities for use at a national level.'*

More information: [*Directive 98/10/EC on the application of Open Network Provision \(ONP\)*](#)



March 2002: Universal Service Directive

In March 2002, the Universal Service Directive was adopted. The Directive outlined specific requirements concerning 112 such as:

- **Free of charge:** Member States must ensure that users of fixed and mobile telephones, including payphones, are able to call 112 free of charge.
- **No discrimination:** 112 calls must be appropriately answered and handled, irrespective of whether 112 or other national emergency numbers are dialled. Some Member States (Sweden, Denmark and the Netherlands) have introduced 112 as their main emergency number, while in most Member States, 112 operates alongside existing national emergency numbers.
- **Caller location:** Member States must also ensure that emergency services are able to establish the location of the person calling 112. The ability to locate the caller in case of an emergency may be of great significance in a situation where the person is unable to state his or her location, which can happen particularly when calling from mobile phones or while travelling abroad.
- **Raising awareness:** All EU countries must inform citizens (nationals and visitors) of the existence of 112 and in which circumstances they should call it.

More information: *Directive 2002/22/EC of the European Parliament and of the Council of 7 march 2002 on universal service and Users' rights relating to electronic communications networks and services (Universal Service Directive)*

The Commission Recommendation on Caller Location

In July 2003, the Commission Recommendation on caller location was adopted. The European Commission recommended that Member States should implement the “push” method rather than the “pull” for the provision of caller location information. This would have the effect of providing the location information to the emergency services as soon as the call is presented, rather than the emergency services having to pull the information, often on a request basis.

More information: *European Commission Recommendation of 25 July 2003 on the processing of caller location information in electronic communication networks for the purpose of location-enhanced emergency call services*

July 2009: The Roaming Regulation

In July 2009, the new Roaming Regulation, which entered into force in July 2009, provides that citizens using their mobile phone when travelling to another EU Member State will automatically receive an SMS with information about the European emergency number 112. In practice, this is provided by the “home” mobile phone network operator and sent to the citizen directly. Also included in this SMS is tariff information and other roaming specific information.

More information: *Regulation (EC) No 544/2009 of the European Parliament and the Council of 18 June 2009 amending Regulation (EC) No 717/2007 on roaming on public mobile telephone networks within the Community and Directive 2002/21/EC.*



December 2009: Universal Service Directive

In December 2009, the new Universal Service Directive was published, which ensures that European citizens gain better access to emergency services by extending the 112 access requirements from traditional telephony to new technologies (such as VoIP), strengthening operators' obligation to provide information about caller location to emergency authorities and improving access to 112 for people with disabilities. The obligations regarding the setting of accuracy and reliability requirements for caller location information were also provided for by mandating the competent national authorities to lay down such requirements.

The main elements pertaining to 112 and emergency services in the Directive 2009/136/EC (Universal Service Directive) are set out in the article 26:

- 1. Member States shall ensure that all end-users of the service referred to in paragraph 2, including users of public pay telephones, are able to call the emergency services free of charge and without having to use any means of payment, by using the single European emergency call number "112" and any national emergency call number specified by Member States.*
- 2. Member States, in consultation with national regulatory authorities, emergency services and providers, shall ensure that undertakings providing end-users with an electronic communications service for originating national calls to a number or numbers in a national telephone numbering plan provide access to emergency services.*
- 3. Member States shall ensure that calls to the single European emergency call number "112" are appropriately answered and handled in the manner best suited to the national organisation of emergency systems. Such calls shall be answered and handled at least as expeditiously and effectively as calls to the national emergency number or numbers, where these continue to be in use.*
- 4. Member States shall ensure that access for disabled end-users to emergency services is equivalent to that enjoyed by other end-users. Measures taken to ensure that disabled end-users are able to access emergency services whilst travelling in other Member States shall be based to the greatest extent possible on European standards or specifications published in accordance with the provisions of Article 17 of Directive 2002/21/EC (Framework Directive), and they shall not prevent Member States from adopting additional requirements in order to pursue the objectives set out in this Article.*

5. Member States shall ensure that undertakings concerned make caller location information available free of charge to the authority handling emergency calls as soon as the call reaches that authority. This shall apply to all calls to the single European emergency call number "112". Member States may extend this obligation to cover calls to national emergency numbers. Competent regulatory authorities shall lay down criteria for the accuracy and reliability of the location information provided.

6. Member States shall ensure that citizens are adequately informed about the existence and use of the single European emergency call number "112", in particular through initiatives specifically targeting persons travelling between Member States.

7. In order to ensure the effective access to "112" services in the Member States, the Commission, having consulted BEREC, may adopt technical implementing measures. However, these technical implementing measures shall be adopted without prejudice to, and shall have no impact on, the organisation of emergency services, which remains of the exclusive competence of Member States.

More information: *Directive 2009/136/EC of the European Parliament and of the Council of 25 November 2009 amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services, Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector and Regulation (EC) No 2006/2004 on cooperation between national authorities responsible for the enforcement of consumer protection laws.*

More information on European legislation before 2013 is available in EENA's document on '*112 and the EU legislative framework*'.





4 | THE EUROPEAN ELECTRONIC COMMUNICATIONS CODE AND THE NEW LEGISLATIONS AFFECTING 112

After a two-year legislative procedure, the European Electronic Communications Code (EECC) was voted in at the end of 2018 and entered into force on 20 December 2018. This legislation intends to regulate telecommunications in the European Union and will repeal several directives that are currently in application, once the deadline for transposition has passed. Except where specifically mentioned, Member States have until 21 December 2020 to achieve all the targets that are set out in this directive. As of this date, this legislation will serve as the main legal reference for emergency communications in Europe. This section intends to explain the main provisions related to 112 in this directive, sometimes in relation to other EU legislations.

Basic provisions on emergency access

As in the previous legislations, all Member States are required to provide access to the European Emergency Number 112:

European Electronic Communications Code, Article 109, paragraph 1:

'Member States shall ensure that all end-users [...], including users of public pay phones are able to access the emergency services through emergency communications free of charge and without having to use any means of payment, by using the single European emergency number '112' and any national emergency number specified by Member States.'

Free access to the emergency services for all

Access to 112 should be provided to “all end-users” meaning both the citizens and the visitors can contact 112 and this access should be free of charge.

European vs. national emergency numbers

While EU law mandates the possibility to contact 112 everywhere in Europe, there is no requirement on making 112 the single emergency number in the Member States. National governments keep the competence of deciding on the existence of national numbers and how 112 calls are received in each country, as long as calls to 112 are handled as well as calls to other emergency numbers. The latter is also called the ‘principle of non-discrimination’:

European Electronic Communications Code, Article 109, paragraph 3:

‘Member States shall ensure that all emergency communications to the single European emergency number ‘112’ are appropriately answered and handled in the manner best suited to the national organisation of emergency systems. Such emergency communications shall be answered and handled at least as expeditiously and effectively as emergency communications to the national emergency number or numbers, where these continue to be in use.’

More information on how 112 calls are received in each European country can be found in EENA’s [‘PSAPs Global document’](#).

‘Emergency communications’: what does this mean and what does it imply?

One of the most important changes in the European Electronic Communications Code is a change in vocabulary. While previous legislations referred to ‘emergency calls’, the new text refers to ‘emergency communications’:

European Electronic Communications Code, Article 109, paragraph 1:

‘Member States shall ensure that all end-users [...] are able to access the emergency services through emergency communications free of charge and without having to use any means of payment, by using the single European emergency number ‘112’ and any national emergency number specified by Member States.’

This word change can be explained by the new information and communication technologies, which provide new possibilities to contact the emergency services. The new text intends to reflect this. In order to clearly understand what ‘emergency communications’ means, more clarity is brought in the definitions and the recitals:

European Electronic Communications Code, Article 2 (38):

“emergency communication’ means communication by means of interpersonal communications services between an end-user and the PSAP with the goal to request and receive emergency relief from emergency services;’

European Electronic Communications Code, Recital 285:

'[...] Emergency communications are means of communication, that include not only voice communications but also SMS, messaging, video or other types of communications, for example real time text, total conversation and relay services. [...]'

Although the new text encompasses the new communications technologies, Member States keep some flexibility to determine which means of communications are suitable for the purpose of contacting the emergency services:

European Electronic Communications Code, Recital 285:

'Member States, taking into account the capabilities and technical equipment of the PSAPs, should be able to determine, which number-based interpersonal communications services are appropriate for emergency services, including the possibility to limit those options to voice communications and their equivalent for endusers with disabilities, or to add additional options as agreed with national PSAPs.'

Having in mind the scope of 'emergency communications' will help define who should provide access to emergency services.

Who should provide access to 112?

As we saw earlier, the EECC requires the Member States to make sure that everybody can contact the emergency services. However, many new communication means are now available with different limitations. During the legislative discussions, EU decision-makers debated for many months on who should provide access to 112. Should this obligation only fall on the mobile network operators or should it also be extended to online platforms, such as Skype or WhatsApp?

Number-based vs. number-independent interpersonal communication services

The EECC provides the following definition of 'interpersonal communication services' as:

European Electronic Communications Code, Article 2 (5):

"interpersonal communications service" means a service normally provided for remuneration that enables direct interpersonal and interactive exchange of information via electronic communications networks between a finite number of persons, whereby the persons initiating or participating in the communication determine its recipient(s) and does not include services which enable interpersonal and interactive communication merely as a minor ancillary feature that is intrinsically linked to another service;



However, it is necessary to distinguish two categories: the number-based interpersonal communications services (NBICS) and the number-independent communications services (NIICS). NBICS are the communications services done through the public switched telephone network (PSTN), i.e. phone numbers. Within number-based communications services, a specific category are the network-independent providers who, unlike the mobile network operators, provide communications services in a PSTN without having control over the network. This is for instance the case for Skype Out (when you make a call via Skype by dialling a phone number) or Viber. NIICS are communications services which do not provide access to a PSTN. Examples are infinite, but to mention some of them: WhatsApp (although you need a phone number to register, this is used by WhatsApp as an identification and not for communications purposes), Facebook Messenger, Snapchat...

Mandatory access to 112 from number-based services, if technically feasible

The EECC explicitly requires all the providers of number-based communications services to provide access to 112:

European Electronic Communications Code, Article 109, paragraph 2:

'Member States, in consultation with national regulatory authorities and emergency services and providers of electronic communications services, shall ensure that providers of publicly available number-based interpersonal communications services, where that service allows end-users to originate calls to a number in a national or international telephone numbering plan, provide access to emergency services through emergency communications to the most appropriate PSAP.'

If it is no surprise that all mobile network operators should provide reliable access to 112, the question is more open to the network-independent NBICS. In principle the obligation set out in the article 109 also includes such services. However, recital 286 of the legislation does consider the current technical limitations in terms of provision of caller location information and routing to the appropriate PSAP:

European Electronic Communications Code, Recital 286:

'Where the number-based interpersonal communications service is not provided over a connection which is managed to give a specified quality of service, the service provider might not be able to ensure that emergency calls made through

their service are routed to the most appropriate PSAP with the same reliability. For such network-independent providers, namely providers which are not integrated with a public communications network provider, providing caller location information may not always be technically feasible. Member States should ensure that standards ensuring accurate and reliable routing and connection to the emergency services are implemented as soon as possible in order to allow network-independent providers of number-based interpersonal communications services to fulfil the obligations related to access to emergency services and caller location information provision at a level comparable to that required of other providers of such communications services. Where such standards and the related PSAP systems have not yet been implemented, network-independent number-based interpersonal communications services should not be required to provide access to emergency services except in a manner that is technically feasible or economically viable. As an example, this may include the designation by a Member State of a single, central PSAP for receiving emergency communications. Nonetheless, such providers should inform end-users when access to 112 or to caller location information is not supported.'

Hence, network-independent providers of NBICS, such as Skype Out or Viber are required to provide access to 112 only where and when this is technically feasible. If access to emergency services cannot be guaranteed, users of the services should be clearly informed of such limitation.

European Electronic Communications Code, Recital 284:

'Providers of number-based interpersonal communications services have an obligation to provide access to emergency services through emergency communications. In exceptional circumstances, namely due to a lack of technical feasibility, they might not be able to provide access to emergency services or caller location, or to both. In such cases, they should inform their customers adequately in the contract. Such providers should provide their customers with clear and transparent information in the initial contract and update it in the event of any change in the provision of access to emergency services, for example in invoices. This information should include any limitations on territorial coverage, on the basis of the planned technical operating parameters of the communications service and the available infrastructure. Where the service is not provided over a connection which is managed to give a specified quality of service, the information should also include the level of reliability of the access and of caller location information compared to a service that is provided over such a connection, taking into account current technology and quality standards, as well as any quality of service parameters specified under this Directive.'



No mandate yet on access to 112 from number-independent services

As some number-independent communications services, such as WhatsApp or Facebook Messenger, have become increasingly used, the question can be raised as to whether these services need to provide access to the emergency services. Long discussions have been held between the EU decision-makers to decide as to whether the obligation should apply or not, despite the current technical limitations both on the online platform and on the PSAP's side. The decision-makers eventually settled on a rather balanced mandate. Currently, access to 112 from NIICS is not mandated. However, in the future, access to 112 may be extended to such platforms if the high penetration rate "threatens" emergency access (for example: if WhatsApp has become so widely used that people no longer use regular SMS or regular telephone service). BEREC, the Bureau of European Regulators in Emergency Communications will assess this level of 'threat' and may decide to extend the obligations to provide access to 112 to NIICS.

European Electronic Communications Code, Article 123:

'BEREC shall monitor the market and technological developments regarding the different types of electronic communications services and shall, three years from the entry into force of this Directive and every three years thereafter, or upon a reasoned request from at least two of its members from a Member State, publish an opinion on such developments and on their impact on the application of Title III. [...] As a basis for the opinion, BEREC shall in particular analyse: [...]

c) to what extent effective access to emergency services is appreciably threatened, in particular due to an increased use of number-independent interpersonal communications services, by a lack of interoperability or technological developments.'

The issue of private networks

In some cases, users of private networks must dial another number to reach the emergency services (for instance, in hotels, on a campus or in large companies). While the Universal Service Directive did not mention anything about this point, the EECC suggests that:

European Electronic Communications Code, Article 109, paragraph 1:

'Member States shall promote the access to emergency services through the single European emergency number '112' from non-publicly available electronic communication networks enabling calls to public networks, in particular when the operator responsible for that network does not provide an alternative and easy access to an emergency service.'

Hence, although the legislation acknowledges the limitations of accessing 112 from private networks, no binding requirement is set out.



Locating emergency communications

Obligations on the public authorities to receive caller location information

Since 2002, the EU legislation states that emergency calls should be located. This obligation is strengthened in the EECC:

European Electronic Communications Code, Article 109, paragraph 6:

'Member States shall ensure that caller location information is made available to the most appropriate PSAP without delay after the emergency communication is set up. This shall include network-based location information and, where available, handset-derived caller location information. Member States shall ensure that the establishment and the transmission of the caller location information are free of charge for the end-user and to the PSAP with regard to all emergency communications to the single European emergency number '112'.'

The main difference compared to previous legislations is that while the previous texts did not have any binding provision on the method to obtain this location information, the EECC specifies that the location information transmitted to the Public Safety Answering Points (PSAPs) should include both "network-based location" (for instance: Cell-ID) and "handset-derived caller location information". The use of location data of the phones (GNSS, Wifi) brings considerable improvements in terms of accuracy of location information (in most of cases below 50m., compared to an average accuracy of 2km for Cell-ID), as this is stated in one of the recitals:

European Electronic Communications Code, Recital 290:

'[...] handset-based location technologies have proven to be significantly more accurate and cost effective due to the availability of data provided by the EGNOS and Galileo Satellite system and other Global Navigation Satellite Systems and Wi-Fi data. Therefore handset-derived caller location information should complement network-based location information even if the handset-derived location may become available only after the emergency communication is set up. [...]'

The main technology that enables the provision of handset-location information to the PSAPs in an automatic way (the end-user doesn't have to do anything) is Advanced Mobile Location (AML). At the moment of writing this document, AML was available in 21 countries worldwide, including 14 in the European Union (+ 2 other members of the EEA). More information on AML can be found at www.eena.org/aml.

Finally, it should be noted that the establishment and the transmission of the location information should be free to both the end user and the PSAP.

Obligation to locate calls originated from SIM-less phones

While EU law does not explicitly require SIM less phones to provide access to the emergency services (it is currently available in 20 Member States and unavailable in 8 Member States), a recent judgement from the Court of Justice of the European Union interpreted the provisions in EU law related to emergency caller location in a way that SIM-less calls to 112 fall in the scope of these provisions. This means that SIM-less calls to 112 should also be located in the best possible way.

More information on this case can be found [here](#).

Specific provisions related to privacy

The 2002 ePrivacy Directive gives an exemption to the emergency services to receive caller location information without having to request the prior consent of the user:

ePrivacy Directive, Article 10 :

*'Member States shall ensure that there are transparent procedures governing the way in which a provider of a public communications network and/or a publicly available electronic communications service may override: [...]
(b) the elimination of the presentation of calling line identification and the temporary denial or absence of consent of a subscriber or user for the processing of location data, on a per-line basis for organisations dealing with emergency calls and recognised as such by a Member State, including law enforcement agencies, ambulance services and fire brigades, for the purpose of responding to such calls.'*

At the time of writing this document, a new proposal for an ePrivacy Regulation that would repeal the ePrivacy Directive was under discussion at the different European institutions. Based on the current state of negotiations, decision-makers plan to keep this exemption and consolidate it by making sure that handset-derived location information also falls in the scope of this exemption.

Obligation on the handset manufacturers to transmit caller location information

While the EECC imposes that public authorities must receive handset-derived location, another legislation, the Delegated Regulation supplementing the Radio Equipment Directive, adopted in early 2019 requires that, as of February 2022, all the smartphones sold in the European Single Market (EU + other members of the EEA) will have to be equipped with a technology that allows the transmission of accurate location information, such as AML.

Public Warning Systems

Public Warning Systems based on telecommunications were added to the European law in 2018 with the EECC. It requires that, as of June 2022 (specific deadline), public authorities should be able to use telecommunications networks to alert the population of an ongoing crisis or an upcoming threat.

European Electronic Communications Code, Article 110:

'1. By 21 June 2022, Member States shall ensure that, when public warning systems regarding imminent or developing major emergencies and disasters are in place, public warnings are transmitted by providers of mobile number-based interpersonal communication services to end-users concerned.

2. Notwithstanding paragraph 1, Member States may determine that public warnings be transmitted through publicly available electronic communications services other than those referred to in paragraph 1 and other than broadcasting services, or through internet access service or a mobile application relying on an internet access service, provided that the effectiveness of the public warning system is equivalent in terms of coverage and capacity to reach end-users including those only temporarily present in the area concerned, taking utmost account of BEREC guidelines. Public warnings shall be receivable by end-users in an easy manner.

By 21 June 2020, and after consulting the authorities in charge of PSAPs, BEREC shall publish guidelines on how to assess whether the effectiveness of public warnings under paragraph 2 is equivalent to those under paragraph 1.'





A mandatory Public Warning System

To understand the way paragraph 1 is phrased, one must keep in mind that the definition of public warning and the sending of the alert falls under civil protection, which is a national competence. For this reason, the final text must mention “when public warnings [...] are in place”. However, it is assumed that all European countries already have a public warning system in place, relying at least on sirens. There are many different channels that can potentially be used to alert the population. The EECC makes sure that telecommunications networks are one of them. The main technologies to make it possible are cell broadcast and location-based SMS, which are already rolled out in several Member States. A more detailed description of the different ways to alert the population is available in [EENA’s document on Public Warning Systems](#).

While the provision to “end-users concerned” might appear a bit vague, a clearer definition is brought in the recitals:

European Electronic Communications Code, Recital 293:

‘Diverging national legislation has developed in relation to the transmission by electronic communications services of public warnings regarding imminent or developing major emergencies and disasters. In order to approximate legislation in that area, this Directive should therefore provide that, when public warning systems are in place, public warnings should be transmitted by providers of mobile number-based interpersonal communication services to all end-users concerned. End-users concerned should be deemed to be those end-users who are located in the geographic areas potentially being affected by imminent or developing major emergencies and disasters during the warning period, as determined by the competent authorities.’

In other words, in case of crisis, public warning alerts should be sent at least to all the people that are located in the affected area, whether they are local or visitors.

Alternative transmission channels

Paragraph 2 of the article introduces an alternative transmission channel, still using communications networks but where the message is not carried by a mobile network operator; for instance, in the case of a national app. However, paragraph 2 of the article 110 and recital 294 bring clear conditions for the use of this alternative:

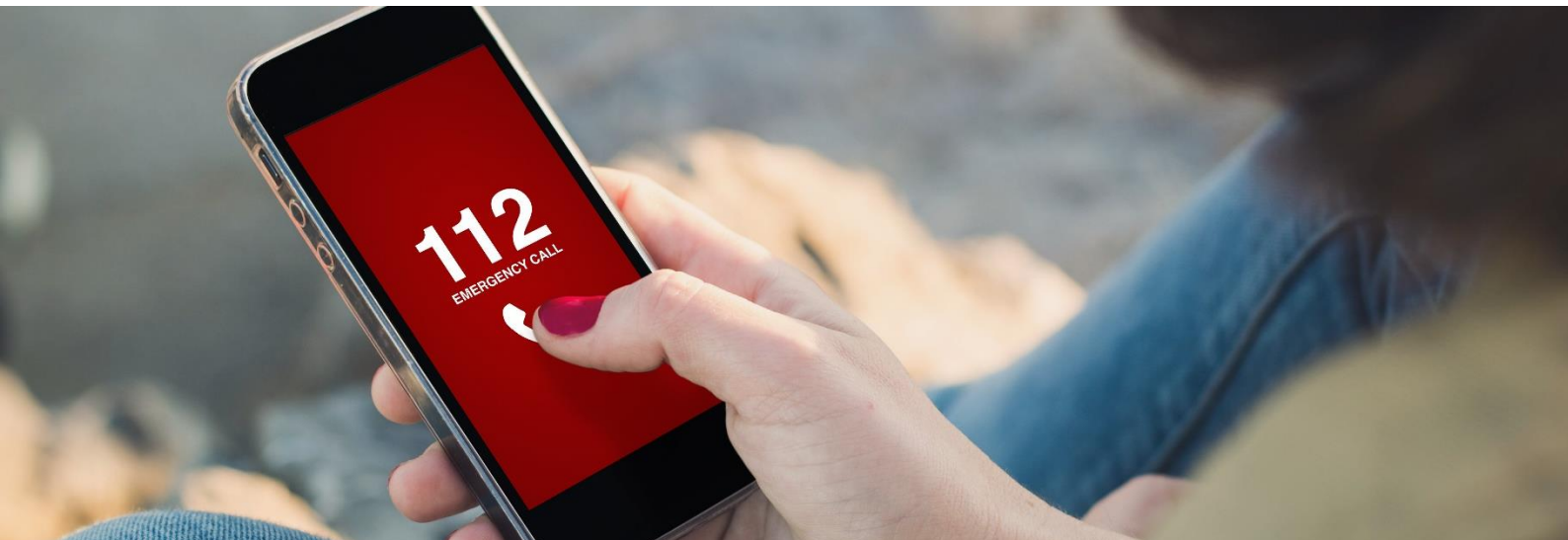
- The alternative method should be as “efficient” as the technologies described in the first paragraph of the article. “As efficient” means here that the same amount of people are covered by this technology (including visitors) and that they can be reached within the same amount of time. National authorities have the responsibility to assess the effectiveness of such alternatives, following guidelines drafted by BEREC (still in drafting process at the time of drafting this document).
- The reception of the alert should be “easy”, which means that the user should not be required to log into an app: “Public warnings other than those relying on mobile number-based interpersonal communications services should be transmitted to end-users in an easily receivable manner. Where a public warning system relies on an application it should not require end-users to login or register with the authorities or the application provider.” (recital 294)
- Any visitor entering the Member State should be informed by a free SMS of how to get public warning alerts: “In order to inform end-users entering a Member State of such available public warning systems, that Member State should ensure, that those end-users receive, automatically by means of SMS, without undue delay and free of charge, easily understandable information on how to receive public warnings, including by means of mobile terminal equipment not enabled for internet access services.” (recital 294).
- The transmission of public warning alerts should remain free of charge to the user.
- The alternative should comply with privacy rules.

EU-wide public warning system

If national authorities will remain competent to define the alert: when, which transmission, which text, which public... the text also intends to pave the way for the introduction of a pan-European Reverse-112 system in the future.

European Electronic Communications Code, Recital 294:

‘In the course of the future review of this Directive, the Commission could also assess whether it is possible, in accordance with Union law, and feasible to set up a single EU-wide public warning system in order to alert the public in the event of an imminent or developing disaster or major state of emergency across different Member States.’ (recital 294).’



Accessibility for people with disabilities

The 2009 legislation added the principle of “equivalent access” to make sure that persons with disabilities can also easily reach the emergency services. However, the lack of clarity in the text resulted in diverging implementations across the EU Member States.

The EECC intends to consolidate and clarify this principle:

European Electronic Communications Code, Article 109, paragraph 5:

“Member States shall ensure that access for end-users with disabilities to emergency services is available through emergency communications and equivalent to that enjoyed by other end-users in accordance with Union law harmonising accessibility requirements for products and services.”

While the wording of the text remains quite vague, the EECC brings more clarity regarding which means should be used to provide access to emergency services for people with disabilities thanks to the adding of “through emergency communications and equivalent”. As further described above, emergency communications are defined in a recital of this legislation as “means of communication, that include not only voice communications but also SMS, messaging, video or other types of communications, for example real-time text, total conversation and relay services”.

The clarifications brought by the European Accessibility Act

The European Accessibility Act (EAA), voted in 2019 and which will start to be in application from 2022, completes and clarifies the requirements set out in the EECC.

European Accessibility Act, Annex I, section IV:

‘The provision of services in order to maximise their foreseeable use by persons with disabilities, shall be achieved by including functions, practices, policies and procedures and alterations in the operation of the service targeted to address the

needs of persons with disabilities and ensure interoperability with assistive technologies:

(a) Electronic communications services, including emergency communications referred to in Article 109(2) of Directive (EU) 2018/1972:

(i) providing real time text in addition to voice communication;

(ii) providing total conversation where video is provided in addition to voice communication;

(iii) ensuring that emergency communications using voice, text (including real time text) is synchronised and where video is provided is also synchronised as total conversation and is transmitted by the electronic communications service providers to the most appropriate PSAP.'

Hence, the EAA clarifies that at least real time text should be made available to people with disabilities in order to contact the emergency services. The following point in the same legislation also requires the PSAPs to handle the communication using the same technology as it was received:

European Accessibility Act, annex I, section V:

'Emergency communications to the single European emergency number '112' shall be appropriately answered, in the manner best suited to the national organisation of emergency systems, by the most appropriate PSAP using the same communication means as received, namely 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.'

To achieve this, a recital of the legislation explains that Member States may need to set up a relay service that would handle such communications.

European Accessibility Act, recital 28:

'For electronic communications services including emergency communications to be accessible, providers should, in addition to voice, provide real time text, and total conversation services where video is provided by them, ensuring the synchronisation of all those communication means. Member States should, in addition to the requirements of this Directive, in accordance with Directive (EU) 2018/1972, be able to determine a relay service provider that could be used by persons with disabilities.'

Nevertheless, Member States keep a considerable flexibility in the definition of how people with disabilities should access the emergency services and the competence of the Member States on this matter is clearly recalled in one of the recitals:

European Accessibility Act, recital 44:

'The measures related to the accessibility of the answering of emergency communications should be adopted without prejudice to, and should have no impact on, the organisation of emergency services, which remains in the exclusive competence of Member States.'

On people travelling to other Member States

One of the main added values of the new legislations regarding accessibility for people with disabilities is that the situations where people travel to other Member States are considered. This is explicitly mentioned in the EECC, where the European Commission has been given the competence to take additional measures to ensure that people with disabilities can easily contact emergency services wherever they are in Europe.

European Electronic Communications Code, Article 109, paragraph 5:

'[...] The Commission and the national regulatory or other competent authorities shall take appropriate measures to ensure that, whilst travelling in another Member State, end-users with disabilities can access emergency services on an equivalent basis with other end-users, where feasible without any pre-registration. Those measures shall seek to ensure interoperability across Member States and shall be based, to the greatest extent possible, on European standards or specifications laid down in accordance with Article 39. [...]

While there is no binding requirement at the moment, the text leaves the possibility to the European Commission to adopt additional measures (for instance a delegated or an implementing act) in order to enhance accessibility for people when travelling.

Location

If the provisions related to accessibility do not explicitly refer to the location of the calls, the principle of 'equal access' can be interpreted in such a way that location information of people with disabilities contacting the emergency services must be located. As a consequence, in summer 2019, the European Commission decided to pursue infringement procedures against the countries where caller location information is not provided for people with disabilities (see more information [here](#)).



Transnational emergency calls

Situations in which a person calls 112 to report an emergency occurring in another country are frequent. In such cases, the emergency services do not have any way to contact their counterparts in other countries. As a solution, some countries were using the EENA transnational database (which was not mandatory) or used embassies to bridge between different countries' emergency services.

The EECC acknowledges this challenge and mandates the establishment of a secured and institution-maintained transnational database:

European Electronic Communications Code, Article 109, paragraph 8:

"BEREC shall maintain a database of E.164 numbers of European emergency services to ensure that they are able to contact each other from one Member State to another, if such a database is not maintained by another organisation"

BEREC will hence be responsible for establishing and handling such a "directory", unless another organisation takes this responsibility. This is currently the case, as CEPT, the European Conference of Postal and Telecommunications Administration is maintaining such a database.

Promotion of 112

Recent figures suggest that more than half of European citizens are still unaware of the European emergency number (find the latest Barometer survey [here](#)). While the Universal Service Directive did require the Member States to actively participate in the promotion of 112, the EECC adds a supporting role from the European Commission:

European Electronic Communications Code, Article 109, paragraph 7:

"Member States shall ensure that citizens are adequately informed about the existence and 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. That information shall be provided in accessible formats, addressing different types of disabilities. The Commission shall support and complement Member States' action."

Although the last sentence highlights the role of the European Commission, it will not have any major consequence. However, another improvement brought by the EECC concerns the promotion of the means of access to emergency services for people with disabilities. Furthermore, it is also specified that promotion actions should be done in different formats, so as to target all citizens, including those with disabilities.



5 | LIST OF RELEVANT LEGISLATIONS

| Name | Nature of the text | Reference | Date of entry into force | Deadline for implementation | Link |
|----------------------------------------------------------------------------------------------|----------------------|---------------------------------------|----------------------------------------------------|------------------------------------------------|----------------------|
| ePrivacy Directive | Directive | 2002/58/EC | 31 Jul. 2002 | 30 Oct. 2003 | LINK |
| Universal Service Directive | Directive | 2002/22/EC, as amended by 2009/136/EC | 19 Dec. 2009 (will be repealed on 21 Dec. 2020) | 25 May 2011 | LINK |
| Radio Equipment Directive | Directive | 2014/53/EU | 11 Jun. 2014 | 12 Jun. 2018 | LINK |
| European Electronic Communications Code | Directive | 2018/1972/EU | 20 Dec. 2018 | 21 Dec. 2020 (21 Jun. 2022 for article 110) | LINK |
| Delegated regulation on Radio equipment support access to the E112 emergency services | Delegated Regulation | 2019/320/EU | 17 Mar. 2019 | 17 Mar. 2022 | LINK |
| European Accessibility Act | Directive | 2019/882/EU | 27 Jun. 2019 | 28 Jun. 2022 | LINK |