



112
EMERGENCY CALL

The future of emergency services

What will change with the new EU legislations

Benoît VIVIER, Public Affairs Manager, EENA

INTRODUCTION: Some words about me...



- EENA's Public Affairs Manager
- Joined EENA in 2015
- Following EU legislations for EENA
- Graduated in EU affairs
- From Nice, France / Based in Brussels, Belgium

INTRODUCTION: What is EU legislation?

Different kinds of legal acts:

- Regulation
- Directive
- Delegated and implementing acts

INTRODUCTION: What is EU legislation?

Different kinds of legal acts:

- Regulation
 - Binding
 - Self-executive
- Directive
- Delegated and implementing acts

INTRODUCTION: What is EU legislation?

Different kinds of legal acts:

- Regulation
- Directive
 - Binding
 - Require “transposition” in MS law
- Delegated and implementing acts

INTRODUCTION: What is EU legislation?

Different kinds of legal acts:

- Regulation
- Directive
- Delegated and implementing acts
 - Binding
 - Completes a previous legislation

INTRODUCTION: Where does EU legislation apply?

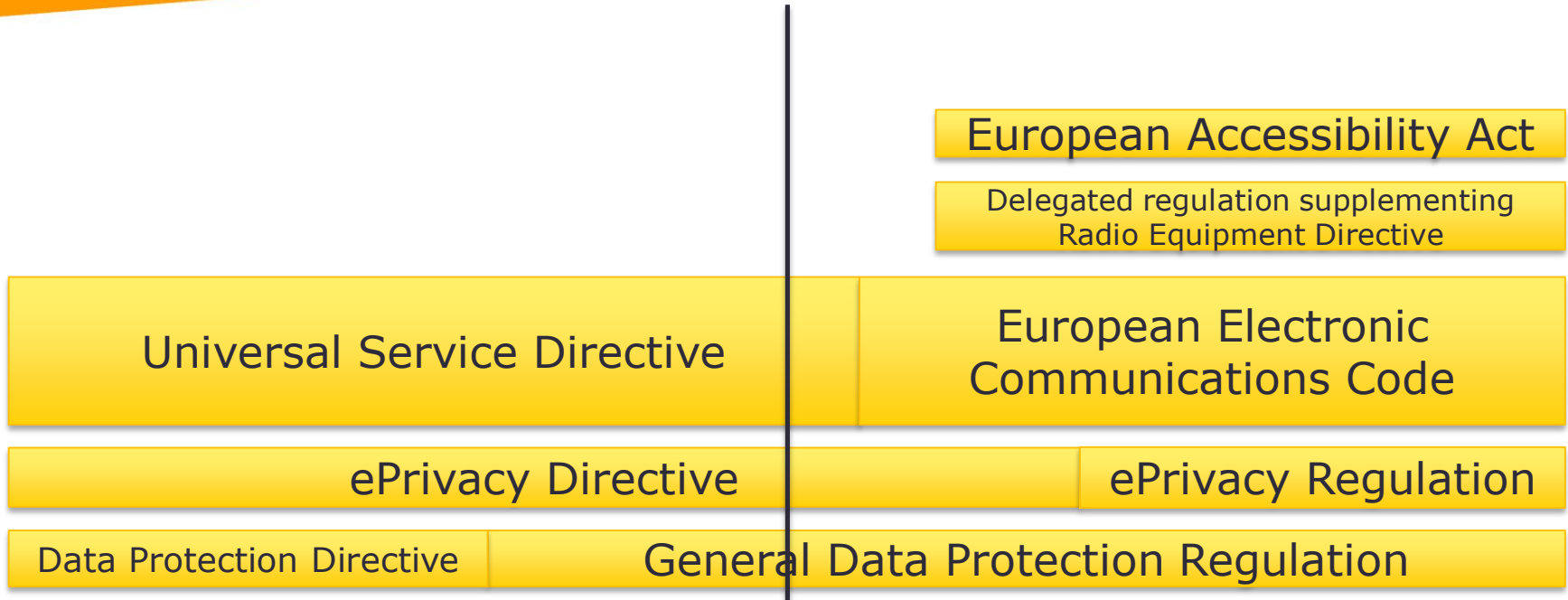


INTRODUCTION: Who decides in the EU?



EU legislation and emergency calls

Today



European Electronic Communications Code

- New EU legislation on telecommunications
- Repeals the Universal Service Directive
- Main EU legislation on emergency communications
- Nature of the text: directive
- Call it the “EECC”

European Electronic Communications Code - Calendar

Date	European Commission	European Parliament (EP)	Council of the EU
14 September 2016	Release of the proposal		
04 September 2017		EP vote on the amendments	
11 October 2017			General Approach
Q4 2017 - 2018	Interinstitutional negotiations		
05 June 2018	Agreement found		
13 November 2018		Formal vote on the agreement	
04 December 2018			Formal vote on the agreement
20 December 2018	Entry into force		
21 December 2020	Deadline for transposition of the EU Directive into national law		
21 June 2022	Deadline for transposition of the provisions on Public Warning Systems into national law		

So, what will
happen now?

Let's first talk
about vocabulary

Let's first talk about vocabulary

Previous legislation was about... **emergency calls**

Let's first talk about vocabulary

Previous legislation was about... **emergency calls**

Let's first talk about vocabulary

New legislation is about... **emergency communications**

What is an "emergency communication"?

"emergency communication" means a 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;"

"interpersonal communications" 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); it does not include services which enable interpersonal and interactive communication merely as a minor ancillary feature that is intrinsically linked to another service;"

What is an "emergency communication"?

Recital 20: **"Technical developments make it possible for end-users to access emergency services not only by voice calls but also by other interpersonal communications services.** The concept of emergency communication should therefore cover all those interpersonal communications services that allow such emergency services access."

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.**"

Emergency communication

Article 109, paragraph 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 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.”

Caller location



Caller location

Universal Service Directive

“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. [...]”

Caller location

Universal Service Directive

“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. [...]”

European Electronic Communications Code

“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 [...]”

Caller location – What's new?

- Emergency services in all Member States should use handset-derived location to locate users of emergency communications.

Example of technology: AML

- Establishment and transmission of location information should be free for the end-user.
- Location information should be provided for all kind of emergency communications.

Caller location – What's new?

- NB: These obligations covers only emergency services and mobile operators
 - So what about the handsets?
 - Well, let's look at another legislation



Delegated regulation
supplementing the Radio
Equipment Directive in order
to ensure caller location in
emergency communications
from mobile devices

Delegated regulation – To sum up...

- As of 17 March 2022: All smartphones sold in the European single market will need to be able to send handset-derived location information (Wifi, GNSS) to emergency services.
- Establishment of location should make use of European global navigation satellite system Galileo.

Delegated regulation – To sum up...

- Android phones and iPhones already support AML. What does that bring?
 - Certainty

Alert to the population



Alert to the population – The principle

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. [...]”

Recital 293:

“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.”

Alert to the population – The principle

- Mandatory implementation of public warning system in all the Member States.

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. [...]”

Recital 293:

“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.”

Alert to the population – The principle

- Mandatory implementation of public warning system in all the Member States.
- Transmission of the alerts should be done via the telephone networks.

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.** [...]”

Recital 293:

“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.”

Alert to the population – The principle

- Mandatory implementation of public warning system in all the Member States.
- Transmission of the alerts should be done via the telephone networks.
- Should alert all the citizens and visitors in a specific area.

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. [...]”

Recital 293:

“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.”

Alert to the population – The principle

- Mandatory implementation of public warning system in all the Member States.
- Transmission of the alerts should be done via the telephone networks.
- Should alert all the citizens and visitors in a specific area.
- Two main technologies: cell broadcast & location-based SMS.



Up to the Member State to define which technology to use

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. [...]”

Recital 293:

“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.”

Alert to the population – The alternatives

European Electronic Communications Code

Article 110:

Possible alternative to use other electronic communications services, such as apps. However several conditions must be met (*recital 294*):

- As efficient as network-based technologies
- Reception of the alert should be easy
- Information to all visitors entering the country
- Transmission of the alert is free to the user
- Comply with privacy rules

"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.

Accessibility to people with disabilities



Universal Service Directive

“Member States shall ensure that access for disabled end-users to emergency services is equivalent to that enjoyed by other end-users. [...]”

Accessibility to people with disabilities

Universal Service Directive

"Member States shall ensure that access for disabled end-users to emergency services is equivalent to that enjoyed by other end-users. [...]"

European Electronic Communications Code

"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."

Accessibility to people with disabilities



"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." (Recital 285)

European Electronic Communications Code

"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."

European Accessibility Act

- Directive on accessibility requirements for products and services in the EU Single Market
- Being adopted
- Transposition period: 3-6 years

European Accessibility Act

“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.”

Recital 28

European Accessibility Act

“The Commission and the national regulatory or other competent authorities are to 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.”

Recital 45

European Accessibility Act

“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.”

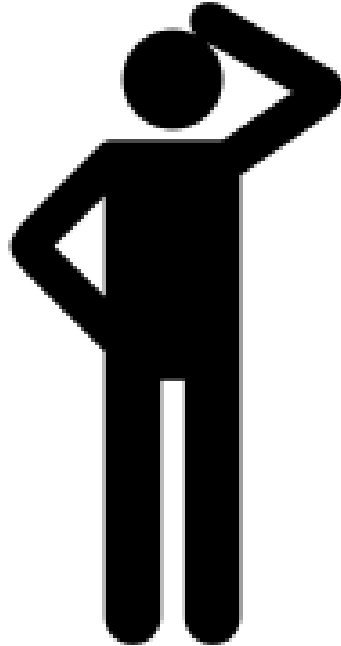
Recital 44

European Accessibility Act

“In any case, obligations of this Directive should not be understood to restrict or lower any obligations for the benefit of end-users with disabilities, including equivalent access to electronic communications services and emergency services as well as accessibility obligations as set out in Directive (EU) 2018/1972 [EECC].”

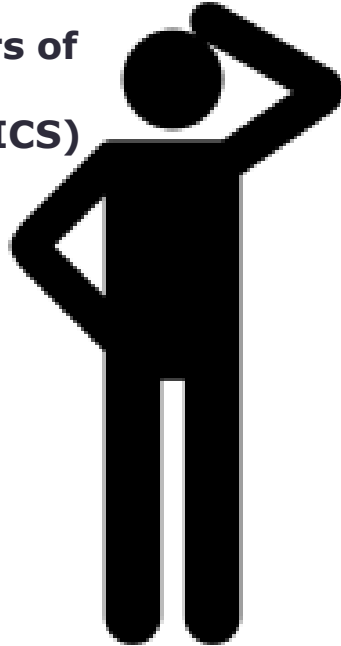
Recital 45

Access to 112 from online platforms – Who should provide access?



Access to 112 from online platforms – Who should provide access?

**Network-independent providers of
Number-based interpersonnal
communications services (NBICS)**



**Number-independent
interpersonnal
communications
services (NIICS)**



Let's distinguish two categories...

Number-based interpersonnal communication services

Article 109:

"Member States [...] 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."

Recital 286:

"Member States should ensure that providers of NBICS provide reliable and accurate access to emergency services. [...] Where the NBICS 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 [...]. Where such standards and the related PSAP systems have not yet been implemented, network-independent NBICS should not be required to provide access to emergency services except in a manner that is technically feasible or economically viable. [...] Nonetheless, such providers should inform end-users when access to 112 or to caller location information is not supported."

Number-based interpersonnal communication services

- In principle: all providers of NBICS should provide reliable and accurate access to emergency services.
- For network-independent NBICS, there can be issues of routing and location information.
- If there is no standard implemented, such providers are not required to provide access to emergency services.
- When access to emergency services is not provided, providers of NBICS should inform their users of this restriction.



Number-independent interpersonnal communication services

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: [...]

(bb) 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."

Number-independent interpersonnal communication services

- Access to emergency services not mandated for the moment.
- BEREC to assess regularly if access to emergency services is threatened.



Transnational emergency calls

"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."

Article 109, par. 8

- *ECO (CEPT) currently hosting this 'PSAP Directory'*



Direct access to 112

- Any accident or fire starting must be notified to the First Aid Service on internal number 85112 or mobile phone 02 28 46 240.

European Parliament, Internal document “Health and Safety Coordination for Maintenance Companies”

“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.”

Article 109, par. 1

Multilingual access



“[...] Member States should consider the PSAPs ability to handle emergency communications in more than one language. [...]”

Recital 286

Promotion of 112

USD

EECC



"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."

"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. [...] **The Commission shall support and complement Member States' action.**"

Promotion of 112

USD

EECC



"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."

"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.** [...] The Commission shall support and complement Member States' action."

I'm not done

JUST
ONE
more
THING!



ePrivacy Regulation

ePrivacy regulation

- Replaces the ePrivacy Directive (2002)
- Nature of the text: **regulation**
- Exemption for emergency services to process caller line identification and location information without the caller's consent.
- Text under discussion at the Council

Article 13:

1. "Regardless of whether the calling end-user has prevented the presentation of the calling line identification, where emergency communications are made to emergency services, providers of number-based interpersonal communications services shall **override** the **elimination of the presentation of the calling line identification** and **the denial or absence of consent of an end-user for the processing of metadata. [...]**"

'metadata': "data processed by means of electronic communications services for the purposes of transmitting, distributing or exchanging electronic communications content; including data used to trace and identify the source and destination of a communication, data on the location of the device generated in the context of providing electronic communications services, and the date, time, duration and the type of communication;" (article 4, paragraph 3)

ePrivacy regulation – Caller location

Article 8:

1. The use of processing and storage capabilities of terminal equipment and the collection of information from end-users' terminal equipment, including about its software and hardware, other than by the end-user concerned shall be prohibited, **except on the following grounds:**
 - (f) **"it is necessary to locate terminal equipment when an end-user makes an emergency communication either to the single European emergency number '112' or a national emergency number,** in accordance with Article 13(3).

ePrivacy regulation – Caller location

Article 13:

3. Notwithstanding Article 8(1), **regardless of whether the end-user has prevented access to the terminal equipment's Global Navigation Satellite Systems (GNSS)** capabilities or other types of terminal equipment based location data through the terminal equipment settings, when a call is made to emergency services, **such settings may not prevent access to such location data** to determine and provide the calling end-user's location to an organisation dealing with emergency communications, including public safety answering points, for the purpose of responding to such calls.

ePrivacy regulation – Calling back a person in distress

Article 13:

1a. "Regardless whether the **called end-user rejects incoming calls where the presentation of the calling line identification has been prevented by the calling end-user**, providers of number-based interpersonal communications services shall **override this choice**, where technically possible, when the calling end-user is an organisation dealing with emergency communications, including public safety answering points, for the purpose of responding to such communications."

Conclusion

Other relevant legislations:

- *RescEU*
- *Cybersecurity*
- *Drones*

Conclusion

"The best way to predict the future is to create it"

Abraham Lincoln

Looks like I'm done!



Any question?



CONTACT

112
EMERGENCY CALL



Benoit VIVIER

The future of emergency services in EU legislation



BenoitVivier



bv@eena.org



Benoit Vivier