

EUROPEAN EMERGENCY NUMBER ASSOCIATION

# eena

## Introduction

Welcome to the third AML Report Card. This document is intended to provide you with all the information you need about how AML is deployed in each country and how it works operationally.

As more countries implement Advanced Mobile Location (AML), you might find it hard to keep up with all the latest developments. Has your country already deployed this technology to provide accurate caller location information in times of emergency? What features are available and on which devices? How does this compare to your neighbours? The latest edition of our AML Report Card will help you to keep track!

The number of countries having deployed AML keeps increasing, but there's still a long way to go. **That's** why the AML Report Card is so important. By providing as much information as possible about how AML has been implemented across the world, countries can see the possibilities and impact of this technology. Through the publication of this document, EENA aims to make as much information as possible available on the possibilities and impact of implementing AML by indicating how this has been done in other countries.

Our 2023 update addresses the following questions for 30 countries:

- Where is AML deployed?
- How are AML messages transmitted and how quickly are they received?
- In which countries is AML activated for roaming users?
- Where is AML working for Text-to-112 or equivalent?
- How has AML impacted emergency services and citizens?

At the end of the report, you can also find a **summary of information** on the state of AML deployment in 2023.

We would like to thank all of the countries who provided information to us.

## Disclaimer

This document is created by EENA staff members with contributions from emergency services representatives of each country involved. This document does not represent the views of individual members of EENA, or any other parties. This document is published for information purposes only and it does not declare to be a statement or interpretation of EU law or the national law of EU Member States. This document is entirely without prejudice to the views of relevant national statutory authorities and their legal functions and powers, whether under EU law or the national law of their Member State. Accordingly, under no circumstances may reliance be placed upon this document by any parties in compliance or otherwise with any applicable laws. Neither may reliance be placed upon this document in relation to the suitability or functionality of any technical specifications, or any other matters discussed in it. Legal advice, technical advice and other advice as relevant, may be sought as necessary.

## What is AML?

Accurate caller location in case of an emergency is one of the most significant pieces of information for emergency call takers. Caller location can have a huge impact on the safety of citizens in many ways and helps reduce response times.

AML stands for Advanced Mobile Location. In the event of an emergency call, an AML-enabled smartphone (all Android and iOS devices worldwide) automatically sends accurate location information of the caller to the emergency services. This information is derived from the location data of the phone (GNSS, Wifi).

AML is not an app; it does not require any action from the caller. AML is simply a protocol to transport the data (using SMS and/or HTTPS) from the smartphone to the emergency call centre. AML is – of course – free of charge. Emergency services are then able to receive this information in all the countries that have deployed AML.

The European Electronic Communications Code (Directive 2018/1972/EC) makes it mandatory for all the Member States of the European Union to make use of handset-derived location to locate people calling emergency services starting from December 2020. AML is a technology that enables the provision of such information and thus, ensures compliance with this legislation.

Starting from March 2022, all the smartphones sold in the European single market will have to offer the possibility to send handset-derived location information of the caller to the emergency services. This is already the case for a large majority of smartphones, namely all Android and iOS phones.

EENA can:

- Respond to any questions you may have about AML
- Put you in contact with other public safety officials who have already deployed AML
- Facilitate contact with key contact points at Google and Apple as we maintain regular contact with them

Feel free to contact Benoit Vivier at <a href="https://www.bygeena.org">by@eena.org</a> for more information.

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• Reporting



Country:

Austria Questionnaire answered by EENA based on information available

## **1.** AML coverage in the country

#### 1.1 Is AML operational in the whole country?

- Yes
- □ No If no, why not?

Additional details:

#### 1.2 For which operating systems is AML working in your country?

- Android
- □ iOS (Apple)
- □ Others (please specify)

Additional details:

## **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

- 🗌 Yes
- □ No If no, why not?

Additional details:

No information
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#### 1.4 In what year was AML activated in your country?

For Android	2016
Additional details:	

## Austria

#### **1.5 For which emergency service is AML working?**

- ☑ Emergency Medical Service
- ☑ Fire & Rescue Service
- Police
- □ Coastguard
- ✓ Other (please specify)
- Additional details:

Gas emergency, Mountain rescue, Emergency doctor

## 1.6 For which emergency numbers is AML activated?

Number	
112	
122 (Fire)	<b>v</b>
128 (Gas emergency)	<b>v</b>
140 (mountain rescue)	V
141 (emergency doctor)	V
144 (ambulance service	V
	112 122 (Fire) 128 (Gas emergency) 140 (mountain rescue) 141 (emergency doctor) 144 (ambulance



## 2. Legislation

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

### 3. End-point and transmission

#### 3.1 How are the AML messages transmitted to the end-point?

Transmission Method	For Android
SMS to short number	
SMS to long number	<b>~</b>
HTTPS	•

Additional details:

Austria

## **3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?**

	Not an issue. HTTPS messages always contain MSISDN
	The HTTPS and SMS AML messages are matched using the IMEI/Time Stamp as a common identifier to find the MSISDN
	The AML location information is pushed to the PSAP call taker even without the MSISDN
	The AML message is discarded if the MSISDN cannot be obtained
Additio	nal details:

No information

## **3.3 Is the transmission of the AML message free to the caller (message `zero-rated')?**

🗹 Ye	s
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No

#### 3.4 Which organisation maintains the AML end-point?

Notruf Niederösterreich (Emergency Medical Services of the state of Lower Austria)

## **3.5** Are several AML messages received during the duration of the call?

	Yes	No
For Android		
Additional details:		

## **3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?**

Seconds

For Android

No information

Additional details:

## **3.7** Are AML positions presented directly to the call-taker's GIS and CAD display?

Yes

No

Additional details:

#### **3.8** How is the location information transmitted from the endpoint/PSAP receiving the AML to (other) PSAPs in the country?

- Automatically, over a data interface
- Manually, using voice communications
- Other (please specify)

## 4. AML & Other Evolutions

#### 4.1 Is AML activated for roaming?

		For Android
	Yes, using a long number	
	Yes, SMS to MCC + shortcode	
	Yes, but HTTPS only	
	Yes, Other (please specify)	
•	No	

Additional details:

Austria

#### 4.2 Is AML working for SMS to Emergency Numbers?

		For Android
	Yes, SMS-to-112	
	Yes, SMS-to-other - shortcode(s) (please provide details below)	
✓	No	

Additional details:

#### 4.3 Is any additional data transmitted via AML?

	For Android	For iOS (Apple)
Caller name		
Caller medical info		
Caller phone language		
Automated detections (e.g. fall, crash)		
Other (Please specify)		
No		



Additional details:

No information

## 4.4 Do you have plans to activate AML using HTTPS in the next 12 months?

🗌 Yes

□ No If no, why not?

Additional details:

Already activated

## 4.5 Are you evaluating any other transport methodologies for the provision of caller location information?

- $\Box$  Yes, using SIP messaging
- □ Yes, using HTML5
- □ Yes, using Network Induced Location Request (NI-LR)
- $\Box$  Yes, using other (please specify)
- 🗆 No

Additional details:

### 5. Facts & Figures

Austria

#### 5.1 Can you please share some statistics for the full year 2022 on:

Total number of mobile originated emergency communications for 2022 (mobile calls + SMS-to-shortcode)	n/a	
% of mobile originated communications where network-provided location (e.g. Cell-ID, Timing advance etc) is received	n/a	
% of mobile originated communications where an AML position is received	n/a	
% of AML messages received within 60 seconds	n/a	
% of AML messages received within 30 seconds	n/a	
% of AML messages received within 15 seconds	n/a	
% of AML messages with an accuracy below 100m	n/a	
% of AML messages with an accuracy below 50m	n/a	
% of AML messages with an accuracy below 30m	n/a	
	Network	Handset
Average comparison (expressed in metres) between accuracy provided by network and	n/a	n/a

## 5.2 Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

□ Yes, it is recorded and reported back by the emergency services If yes, please provide details of the process below

Yes, by carrying out periodic testing

accuracy provided by handset

If yes, please provide details (e.g. process, frequency) below

□ No

If no, why not? Please provide details below. Additional details:



## 6. Reporting

6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

🗌 Yes

□ No If no, why not?

Additional details:

No information

#### 6.2 If yes, what is the frequency of these reports?

- □ Monthly
- □ Quarterly
- □ Annually

Additional details:

No information

## 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

Yes, I send a specific email to MNOs and OS providers when I notice unusual error rates Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)
No

Additional details:



### 7. Others

**7.1** Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

n/a

**7.2** List the companies/organisations that helped in deploying AML in your country



**Country:** 

Belgium

## **1.** AML coverage in the country

#### 1.1 Is AML operational in the whole country?

Yes

🗆 No

Additional details:

#### 1.2 For which operating systems is AML working in your country?

Android

- ☑ iOS (Apple)
- $\Box$  Others (please specify)

Additional details:

## **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

🗹 Yes

🗆 No

#### 1.4 In what year was AML activated in your country?

Belgium

For Android	2016
For iOS (Apple)	2017
Additional details:	

#### **1.5** For which emergency service is AML working?

Emergency Medical Service	
Fire & Rescue Service	
Police	
Coastguard	
$\Box$ Other (please specify)	
Additional details:	

#### 1.6 For which emergency numbers is AML activated?

Nu	ımber	For Android	For iOS (Apple)		
	112	<b>v</b>	<b>v</b>		
Other:	101 (police)	•		Apple is working on it	
Other:	100 (old number for fire & EMS)	V		Apple is working on it	
Other:	8101(sms)	•		Apple is working on it	
Other:	8112 (sms)	•		Apple is working on it	
Additional details:					



## 2. Legislation

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

There is no specific legislation, BIPT (regulator) did include the EU guidelines for handset derived location into Belgium law. We do have a privacy disclaimer on https://112.be/en/privacy.

### 3. End-point and transmission

#### **3.1 How are the AML messages transmitted to the end-point?**

Transmission Method	For Android	For iOS (Apple)
SMS to short number	•	•
SMS to long number		
HTTPS		
Additional details:		

## 3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?

Not an issue. HTTPS messages always contain MSISI		Not an issue.	HTTPS	messages	alwavs	contain	MSISD
---	--	---------------	-------	----------	--------	---------	-------

- The HTTPS and SMS AML messages are matched using the IMEI/Time Stamp as a common identifier to find the MSISDN
- $\hfill \square$  The AML location information is pushed to the PSAP call taker even without the MSISDN
- The AML message is discarded if the MSISDN cannot be obtained

Additional details:

Belgium

## **3.3 Is the transmission of the AML message free to the caller (message `zero-rated')?**

✓	Yes
---	-----

No



#### 3.4 Which organisation maintains the AML end-point?

N.V. Astrid
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## **3.5** Are several AML messages received during the duration of the call?

	Yes	No
For Android	<b>v</b>	
For iOS		•
Additional details:		

## **3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?**

	Seconds
For Android	20 seconds
For iOS	
Additional details:	

## **3.7 Are AML positions presented directly to the call-taker's GIS and CAD display?**

Yes

□ No

Additional details:

#### **3.8** How is the location information transmitted from the endpoint/PSAP receiving the AML to (other) PSAPs in the country?

- Automatically, over a data interface
- Manually, using voice communications
- Other (please specify)

## 4. AML & Other Evolutions

#### 4.1 Is AML activated for roaming?

		For Android	For iOS (Apple)
	Yes, using a long number		
•	Yes, SMS to MCC + shortcode	V	
	Yes, but HTTPS only		
	Yes, Other (please specify)		
	No		

Additional details:

Belgium

#### 4.2 Is AML working for SMS to Emergency Numbers?

		For Android	For iOS (Apple)			
	Yes, SMS-to-112					
<b>v</b>	Yes, SMS-to-other - shortcode(s) (please provide details below)	<b>v</b>	V	8101 and 8112		
	No					
Additional details:						
Service has been tested for Apple iOS.						

#### 4.3 Is any additional data transmitted via AML?

		For Android	For iOS (Apple)
	Caller name		
	Caller medical info		
	Caller phone language		
	Automated detections (e.g. fall, crash)		
	Other (Please specify)		
•	No		

Additional details:

**Belgium** 

## **4.4 Do you have plans to activate AML using HTTPS in the next 12 months?**

🗆 Yes

✓ No
If no, why not?

Additional details:

Lack of time/budget

## **4.5** Are you evaluating any other transport methodologies for the provision of caller location information?

- ✓ Yes, using SIP messaging
- $\Box$  Yes, using HTML5
- □ Yes, using Network Induced Location Request (NI-LR)
- $\Box$  Yes, using other (please specify)
- 🗆 No

### 5. Facts & Figures

Belgium

#### 5.1 Can you please share some statistics for the full year 2022 on:

Total number of mobile originated emergency communications for 2022 (mobile calls + SMS- 6.660.780 to-shortcode)

% of mobile originated communications where network-provided location (e.g. Cell-ID, Timing advance etc) is received

% of mobile originated communications where an AML position is received

% of AML messages received within 60 seconds

- % of AML messages received within 30 seconds
- % of AML messages received within 15 seconds

% of AML messages with an accuracy below 100m

% of AML messages with an accuracy below 50m

% of AML messages with an accuracy below 30m

Average comparison (expressed in metres) between accuracy provided by network and accuracy provided by handset

No exact figur 90%	es, around
n/a	
Network	Handset
n/a	n/a

## 5.2 Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

Yes, it is recorded and reported back by the emergency services If yes, please provide details of the process below

 $\square$  Yes, by carrying out periodic testing

If yes, please provide details (e.g. process, frequency) below

✓ No

If no, why not? Please provide details below. Additional details:

No reporting tool for that.



## 6. Reporting

6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

□ Yes

✓ No If no, why not?

Additional details:

No reporting tool for that

#### 6.2 If yes, what is the frequency of these reports?

- □ Monthly
- □ Quarterly
- □ Annually

Additional details:

## 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

- Yes, I send a specific email to MNOs and OS providers when I notice unusual error rates
- Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)
- ✓ No



### 7. Others

**7.1** Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

n/a

**7.2** List the companies/organisations that helped in deploying AML in your country

Telenet Business and Portalify



**Country:** 

Bulgaria

## 1. AML coverage in the country

#### 1.1 Is AML operational in the whole country?

🗹 Yes

□ No If no, why not?

Additional details:

#### 1.2 For which operating systems is AML working in your country?

- Android
- ☑ iOS (Apple)
- $\Box$  Others (please specify)

Additional details:

## **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

🗌 Yes

🗆 No
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Additional details:

There is a possibility, but it is not implemented

## Bulgaria

#### 1.4 In what year was AML activated in your country?

For Android	2022
For iOS (Apple)	2022
Additional details:	

#### **1.5 For which emergency service is AML working?**

Emergency Medical Service	
Fire & Rescue Service	
Police	
Coastguard	Maritime Rescue Coordination Centre
Other (please specify)	Mountain Rescue Service, Civil Aviation Administration
Additional details:	

AML data is populated to all emergency services through the National 112 System.

#### **1.6 For which emergency numbers is AML activated?**

Number	For Android	For iOS (Apple)
112	•	<b>~</b>

Bulgaria

## 2. Legislation

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

The collection and transmission of caller location information are free of charge to the end user and PSAPs. Location is considered to be information that identifies the individual/personality and National 112 System - Ministry of Interior as a personal data operator may receive and process such information, in accordance with national laws and regulatory requirements, e-Privacy DIRECTIVE and GDPR. The information is transmitted via a secure channel, in compliance with all the requirements of the Personal Data Protection Act, and is provided only to the relevant PSAP at the moment the call is established.

Rules determining the conditions and procedure for providing user location information and end user data by undertakings providing interpersonal communication services with emergency numbers **BG https://crc.bg/files/Pravna/Pravila za 112.pdf** 

Promulgated, State Gazette No. 20/2021 ELECTRONIC COMMUNICATIONS ACT, Section VI, Article 242a. (3) BG https://dv.parliament.bg/DVWeb/showMaterialDV.jsp?idMat=156329 https://crc.bg/files/Vlado-Pravna/61\_0.pdf EN https://www.cem.bg/files/1654151045\_electronic\_communications act.pdf

### 3. End-point and transmission

#### **3.1 How are the AML messages transmitted to the end-point?**

Transmission Method	For Android	For iOS (Apple)
SMS to short number		
SMS to long number	•	•
HTTPS		
Additional details:		

## **3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?**

- Not an issue. HTTPS messages always contain MSISDN
- The HTTPS and SMS AML messages are matched using the IMEI/Time Stamp as a common identifier to find the MSISDN
- $\hfill \square$  The AML location information is pushed to the PSAP call taker even without the MSISDN
- The AML message is discarded if the MSISDN cannot be obtained

Additional details:

Bulgaria

## **3.3 Is the transmission of the AML message free to the caller (message `zero-rated')?**

- Yes
- No

Additional details:

#### 3.4 Which organisation maintains the AML end-point?

National 112 System, Ministry of Interior

	Yes	Νο
For Android	V	
For iOS	<b>v</b>	
Additional details:		

## **3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?**

Seconde

	Seconds	
For Android	At start, as soon as an accurate location can be established after 112 is dialled; then 2nd at 20 sec.;	
	3rd at 90 sec.; then every 90 sec.	
	Variable. Decision is made by the	
For iOS	workflow when to be seen by	
	PSAP's operator	

#### Additional details:

Bulgaria

## **3.7 Are AML positions presented directly to the call-taker's GIS and CAD display?**

Yes

□ No

Additional details:

#### **3.8** How is the location information transmitted from the endpoint/PSAP receiving the AML to (other) PSAPs in the country?

- Automatically, over a data interface
- Manually, using voice communications
- Other (please specify)

## 4. AML & Other Evolutions

#### 4.1 Is AML activated for roaming?

		For Android	For iOS (Apple)
	Yes, using a long number		
	Yes, SMS to MCC + shortcode		
	Yes, but HTTPS only		
	Yes, Other (please specify)		
<b>~</b>	No		

Additional details:

Bulgaria

#### 4.2 Is AML working for SMS to Emergency Numbers?

		For Android	For iOS (Apple)	
	Yes, SMS-to-112			
	Yes, SMS-to-other - shortcode(s) (please provide details below)			
✓	No			
Add	itional details:			

## Bulgaria

#### 4.3 Is any additional data transmitted via AML?

		For Android	For iOS (Apple)	
	Caller name			
	Caller medical info			
	Caller phone language			
	Automated detections (e.g. fall, crash)			
•	Other (Please specify)	<b>v</b>		Altitude
	No			

Additional details:

## **4.4 Do you have plans to activate AML using HTTPS in the next 12 months?**

🗆 Yes

☑ No If no, why not?

Additional details:

The National 112 System is a closed network system, but there are future plans to receive AML via HTTPS.

## 4.5 Are you evaluating any other transport methodologies for the provision of caller location information?

- □ Yes, using SIP messaging
- □ Yes, using HTML5
- □ Yes, using Network Induced Location Request (NI-LR)
- □ Yes, using other (please specify)
- 🗹 No

## 5. Facts & Figures

Bulgaria

#### 5.1 Can you please share some statistics for the full year 2022 on:

Total number of mobile originated emergency communications for 2022 (mobile calls + SMS-to-shortcode)	3.446.885	
% of mobile originated communications where network-provided location (e.g. Cell-ID, Timing advance etc) is received	98,64%	
% of mobile originated communications where an AML position is received	46,42%	
% of AML messages received within 60 seconds	79,13%	
% of AML messages received within 30 seconds	81,96%	
% of AML messages received within 15 seconds	56,56%	
% of AML messages with an accuracy below 100m	86,07%	
% of AML messages with an accuracy below 50m	76,45%	
% of AML messages with an accuracy below 30m	66,87%	
	Network	Handset
Average comparison (expressed in metres) between accuracy provided by network and accuracy provided by handset	n/a	29m.

## 5.2 Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

- Yes, by carrying out periodic testing

If yes, please provide details (e.g. process, frequency) below

No No

If no, why not? Please provide details below. Additional details:



Given that AML data is received multiple times in each emergency call and the degree of veracity is visualized in CAD and GIS, the call taker and emergency services can make a judgment about the veracity of the data in advance.



6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

Yes

□ No If no, why not?

Additional details:

Bulgaria

#### 6.2 If yes, what is the frequency of these reports?

Monthly
---------

Quarterly

□ Annually

Additional details:

AML data is recorded for subsequent analysis as the technical need arises.

## 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

- Yes, I send a specific email to MNOs and OS providers when I notice unusual error rates
- Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)

🗌 No

## Bulgaria

## 7. Others

## **7.1** Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

On the European 112 Day celebration, during the official speeches, Mr. Emil Neshev, Director of the Mountain Rescue Service, announced that in the past year, mountain rescuers helped more than 2,200 people, with almost all distress signals being handled through the emergency number 112 and AML data. He reported how useful the Advanced Mobile Location (AML) system is, noting that through it a person's in-need location can be established with an accuracy of 5 to 20 meters. This greatly helps rescuers, especially in winter conditions, he emphasized.

#### Story 1:

Late in the evening in June 2022, an emergency call came in from a woman reporting that she and her companion had been lost in Vitosha Nature Park for four hours, unable to find a trail. It was raining heavily and the people, soaked, exhausted and frightened, couldn't describe their location. The 112 call-taker established a conference call with the Mountain Rescue Service and provided them with the AML data, through which they could locate them and direct them where to go to meet the rescue team.

#### Story 2:

One Afternoon in April 2022, a 112 call-taker received an emergency call from a foreign-speaking man who reported that he and three other men were lost in Vitosha Nature Park. During a conference call, an on-duty Mountain Rescue Service rescuer received the AML data, which he used to locate them and direct them where to go to meet the rescue team.

#### Story 3:

Rapid response by Ruse District Police in February 2022, following a 112 call received from a woman reporting domestic violence. When the call-taker asked for the address, her husband pounced on her. Screams are heard and the connection is disconnected. Thanks to the coordinates received from AML, law enforcement established the location and rescued the woman.

#### Story 4:

In June 2022, on 112 a call-taker received an emergency call within the North Central District in which a dispute/quarrel was heard between a man and a woman. The female caller accused the man of domestic violence and wanted him to leave the residence. At his refusal, she tells him that she has dialed 112 and that the Police are aware of the situation.

During the course of the call, the call-taker on duty transmitted the incident information and location of the caller, received through AML data to the Police emergency service. A police team arrived during the call at the exact address and location.

## Bulgaria

## 7.2 List the companies/organisations that helped in deploying AML in your country

OS and deployment: Google and Apple Integration and implementation: Enterprise Communication Group Ltd. MNOs - data transport, setup and end user service: Vivacom LLC, A1 Bulgaria LLC and Telenor Bulgaria LLC





Croatia,

Information provided by EENA based on information available

**Country:** 

## 1. AML coverage in the country

## 1.1 Is AML operational in the whole country?

Yes

□ No If no, why not?

Additional details:

## 1.2 For which operating systems is AML working in your country?

- Android
- ✓ iOS (Apple)
- □ Others (please specify)

Additional details:

# **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

🗌 Yes

🗆 No	If no, why not?
------	-----------------

Additional details:

No information

# Croatia

## 1.4 In what year was AML activated in your country?

For Android	2019
For iOS (Apple)	2019
Additional details:	

### **1.5 For which emergency service is AML working?**

Emergency Medical Service	
□ Fire & Rescue Service	
Police	
Coastguard	
☑ Other (please specify)	Croatian auto-club (HAK): road assistance
Additional details:	

Emergency Medical Services and Fire & Rescue Services have yet to establish end-points to receive AML data

### **1.6 For which emergency numbers is AML activated?**

N	umber	For Android	For iOS (Apple)
	112	•	•
Other:	192 (police)	•	
Other:	195 (maritime rescue coordination centre)	V	
Other:	1987 (HAK - Croatian autoclub)	V	
Other:	193 (fire and rescue services)	V	





194Other:(emergency<br/>medical<br/>services)□

Additional details:

193 and 194 have yet to establish endpoints to receive AML data



## 2. Legislation

Croatia

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

Law on the Electronic Communications – OG 73/08, 90/11, 133/12, 80/13, 71/14, 72/17 and Ordinance on the Single European Emergency Number 112 – OG 138/15

## 3. End-point and transmission

#### **3.1 How are the AML messages transmitted to the end-point?**

Transmission Method	For Android	For iOS (Apple)
SMS to short number	•	
SMS to long number	•	
HTTPS		
Additional details:		

3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?

- Not an issue. HTTPS messages always contain MSISDN
- The HTTPS and SMS AML messages are matched using the IMEI/Time Stamp as a common identifier to find the MSISDN
- The AML location information is pushed to the PSAP call taker even without the MSISDN
- The AML message is discarded if the MSISDN cannot be obtained

Additional details:

No information

Croatia

## **3.3 Is the transmission of the AML message free to the caller (message `zero-rated')?**

✓	Yes
---	-----

🗌 No



## **3.4 Which organisation maintains the AML end-point?**

Ministry	of	the	Interior
----------	----	-----	----------

## **3.5** Are several AML messages received during the duration of the call?

	Yes	Νο
For Android		
For iOS		
Additional details:		

No information

## **3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?**

	Seconds
For Android	
For iOS	
Additional details:	

# **3.7 Are AML positions presented directly to the call-taker's GIS and CAD display?**

Yes

□ No



### **3.8** How is the location information transmitted from the endpoint/PSAP receiving the AML to (other) PSAPs in the country?

- Automatically, over a data interface
- Manually, using voice communications
- Other (please specify)

Croatia

## 4. AML & Other Evolutions

## 4.1 Is AML activated for roaming?

		For Android	For iOS (Apple)
•	Yes, using a long number	<b>v</b>	
	Yes, SMS to MCC + shortcode		
	Yes, but HTTPS only		
	Yes, Other (please specify)		
	No		

Additional details:

Croatia

### 4.2 Is AML working for SMS to Emergency Numbers?

		For Android	For iOS (Apple)	
•	Yes, SMS-to-112	<b>v</b>	V	
	Yes, SMS-to-other - shortcode(s) (please provide details below)			
	No			
Add	itional details:			

# Croatia



		For Android	For iOS (Apple)
	Caller name		
	Caller medical info		
	Caller phone language		
	Automated detections (e.g. fall, crash)		
	Other (Please specify)		
•	No		

Additional details:

# **4.4 Do you have plans to activate AML using HTTPS in the next 12 months?**

🗌 Yes

□ No If no, why not?

Additional details:

No information

# **4.5** Are you evaluating any other transport methodologies for the provision of caller location information?

- $\Box$  Yes, using SIP messaging
- □ Yes, using HTML5
- □ Yes, using Network Induced Location Request (NI-LR)
- $\Box$  Yes, using other (please specify)
- 🗆 No

Additional details:

#### No information

#### 5. **Facts & Figures**

Croatia

### 5.1 Can you please share some statistics for the full year 2022 on:

Total number of mobile originated emergency communications for 2022 (mobile calls + SMSto-shortcode)

% of mobile originated communications where network-provided location (e.g. Cell-ID, Timing advance etc) is received

% of mobile originated communications where an AML position is received

% of AML messages received within 60 seconds

% of AML messages received within 30 seconds

% of AML messages received within 15 seconds

% of AML messages with an accuracy below 100m

% of AML messages with an accuracy below 50m

% of AML messages with an accuracy below 30m

Average comparison (expressed in metres) between accuracy provided by network and accuracy provided by handset

#### 5.2 Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

Yes, it is recorded and reported back by the emergency services If yes, please provide details of the process below

 $\square$  Yes, by carrying out periodic testing If yes, please provide details (e.g. process, frequency) below

🗆 No

If no, why not? Please provide details below.

n/a	
n/a	
Network	Handset
n/a	n/a





6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

🗆 Yes

Croatia

□ No If no, why not?

Additional details:

No information

#### 6.2 If yes, what is the frequency of these reports?

- □ Monthly
- □ Quarterly
- □ Annually

Additional details:

No information

# 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

Yes, I send a specific email to MNOs and OS providers when I notice unusual error rates Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)
No

Additional details:

#### No information



## 7. Others

**7.1** Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

n/a

Croatia

7.2 List the companies/organisations that helped in deploying AML in your country

No information

## **Country:**

**Czech Republic** 

## **1.** AML coverage in the country

## 1.1 Is AML operational in the whole country?

🗹 Yes

□ No If no, why not?

Additional details:

### 1.2 For which operating systems is AML working in your country?

- Android
- ✓ iOS (Apple)
- □ Others (please specify)

Additional details:

# **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

Yes

□ No If no, why not?

Additional details:

This is not important information for the PSAP operator.

### 1.4 In what year was AML activated in your country?

For Android	2020
For iOS (Apple)	2020

## **1.5 For which emergency service is AML working?**

<ul> <li>✓ Fire &amp; Rescue Service</li> <li>✓ Police</li> <li>✓ Coastguard</li> <li>✓ Other (please specify)</li> <li>Additional details:</li> </ul>	Emergency Medical Service	
<ul> <li>Coastguard</li> <li>Other (please specify)</li> </ul>	Fire & Rescue Service	
□ Other (please specify)	✓ Police	
	Coastguard	
	Other (please specify) Additional details:	

#### **1.6 For which emergency numbers is AML activated?**

Number		For Android	For iOS (Apple)
11	12	•	<b>~</b>
Other:	150	•	V
Other:	155	•	V
Other:	158	•	<b>v</b>
Additional details:			

## 2. Legislation

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

There is the Electronic Communications Act (127/2005) in the Czech Republic. This Act defines that the position, including the position generated by the end device, will be made available to PSAPs.

## 3. End-point and transmission

### **3.1 How are the AML messages transmitted to the end-point?**

Transmission Method	For Android	For iOS (Apple)	
SMS to short number	•	•	
SMS to long number	•		For roaming
HTTPS Additional details:			

# **3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?**

Not an issue. HTTPS messages always contain MSISDN
The HTTPS and SMS AML messages are matched using the IMEI/Time Stamp as a common identifier to find the MSISDN
The AML location information is pushed to the PSAP call taker even without the MSISDN
The AML message is discarded if the MSISDN cannot be obtained

Additional details:

# **3.3 Is the transmission of the AML message free to the caller (message `zero-rated')?**

- Yes
- No

Additional details:

### 3.4 Which organisation maintains the AML end-point?

O2 IT Services – provider of IT solution for emergency communication for Fire rescue service of The Czech Republic

## 3.5 Are several AML messages received during the duration of the call?

	Yes	Νο
For Android	<b>v</b>	
For iOS	V	
Additional details:		

## **3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?**

	Seconds
For Android	60 seconds
For iOS	If location has changed

Seconde

Additional details:

# **3.7 Are AML positions presented directly to the call-taker's GIS and CAD display?**

Yes

□ No

Additional details: Fire rescue service – yes, Police – yes, emergency medical services – yes

#### **3.8** How is the location information transmitted from the endpoint/PSAP receiving the AML to (other) PSAPs in the country?

- Automatically, over a data interface
- Manually, using voice communications
- Other (please specify)

## 4. AML & Other Evolutions

### 4.1 Is AML activated for roaming?

		For Android	For iOS (Apple)
•	Yes, using a long number	V	
	Yes, SMS to MCC + shortcode		
	Yes, but HTTPS only		
	Yes, Other (please specify)		
	No		

Additional details:

### 4.2 Is AML working for SMS to Emergency Numbers?

		For Android	For iOS (Apple)
<b>v</b>	Yes, SMS-to-112	<b>v</b>	<b>v</b>
•	Yes, SMS-to-other - shortcode(s) (please provide details below)	<b>v</b>	V
	No		

Additional details:

AML works (for SMS communication) for the Fire rescue service – 150, for the Police – 158 and for the Emergency medical services - 155

### 4.3 Is any additional data transmitted via AML?

		For Android	For iOS (Apple)
	Caller name		
	Caller medical info		
	Caller phone language		
	Automated detections (e.g. fall, crash)		
	Other (Please specify)		
~	No		

Additional details:

# **4.4 Do you have plans to activate AML using HTTPS in the next 12 months?**

🗌 Yes

✓ No If no, why not?

Additional details:

# **4.5** Are you evaluating any other transport methodologies for the provision of caller location information?

- □ Yes, using SIP messaging
- $\Box$  Yes, using HTML5
- □ Yes, using Network Induced Location Request (NI-LR)
- $\Box$  Yes, using other (please specify)
- 🗹 No

Additional details:

#### Police

## 5. Facts & Figures

## 5.1 Can you please share some statistics for the full year 2022 on:

	FRS (Fire & Rescue Services)	Police	EMS (Emergency Medical Services)
Total number of mobile originated emergency	FRS 112 2.193.354 calls, 68.273 SMS,	1.227.597 calls,	1.967.244 calls
communications for 2022 (mobile calls + SMS-to-shortcode)	FRS 150 262.120 calls, 37.836 SMS	13 938 SMS	
% of mobile originated communications where network-provided location (e.g. Cell-ID, Timing advance etc) is received	100%	100%	n/a
% of mobile originated communications where an AML position is received	51 % communications to 112 and 150	s 53%	n/a
% of AML messages received within 60 seconds	96%	n/a	n/a
% of AML messages received within 30 seconds	95%	n/a	n/a
% of AML messages received within 15 seconds	94%	n/a	n/a
% of AML messages with an accuracy below 100m	85,5%	n/a	n/a
% of AML messages with an accuracy below 50m	75,6%	n/a	n/a
% of AML messages with an accuracy below 30m	66,4%	n/a	n/a
	Network Handset	:	
Average comparison (expressed in metres) between accuracy	n/a n/a		

provided by network and accuracy provided by handset

5.2 Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

- Yes, by carrying out periodic testing If yes, please provide details (e.g. process, frequency) below
- ✓ No

If no, why not? Please provide details below.

Additional details:

AML is usually only approximately verified by comparison with displayed network-provided location. It is then verified by querying caller by the PSAP operator.

It is not possible to report every AML message with inaccurate location because of time reasons.

## 6. Reporting

6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

Yes

□ No If no, why not?

Additional details:

### 6.2 If yes, what is the frequency of these reports?

- □ Monthly
- □ Quarterly
- Annually

Additional details:

We can share this information on request too.

# 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

- Yes, I send a specific email to MNOs and OS providers when I notice unusual error rates
- Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)
- 🗌 No

Additional details:

In case we find any irregularities during the inspection, we will contact the MNO and OS providers. This does not happen regularly.

## 7. Others

**7.1** Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

n/a

# **7.2 List the companies/organisations that helped in deploying AML in your country**

Fire rescue service of the Czech Republic, Police of the Czech Republic, Emergency medical services, O2 IT Services, Vitkovice IT Solutions, RCS Kladno, Komcentra, Performance, Google, Apple, O2 Czech Republic, Vodafone, T-Mobile.



## **Country:**

Denmark

## **1.** AML coverage in the country

## 1.1 Is AML operational in the whole country?

Yes

□ No If no, why not?

Additional details:

Does not include Greenland and the Faroe Islands

## 1.2 For which operating systems is AML working in your country?

- Android
- ✓ iOS (Apple)
- □ Others (please specify)
- Additional details:

# **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

Yes

□ No If no, why not?

Additional details:

## 1.4 In what year was AML activated in your country?

2019

For Android

2019

Additional details:

For iOS (Apple)

## **1.5 For which emergency service is AML working?**

Emergency Medical Service	
Fire & Rescue Service	
✓ Police	
Coastguard	
$\Box$ Other (please specify)	
Additional details:	

### **1.6** For which emergency numbers is AML activated?

Nun	ıber	For Android	For iOS (Apple)
11	12	•	•
Other:	911	•	V

## 2. Legislation

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

No information

## 3. End-point and transmission

#### **3.1 How are the AML messages transmitted to the end-point?**

Transmission Method	For Android	For iOS (Apple)
SMS to short number		
SMS to long number	✓	•
HTTPS		

Additional details:

Denmark

## **3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?**

	Not an issue. HTTPS messages always contain MSISDN
	The HTTPS and SMS AML messages are matched using the IMEI/Time Stamp as a common identifier to find the MSISDN
	The AML location information is pushed to the PSAP call taker even without the MSISDN
	The AML message is discarded if the MSISDN cannot be obtained
۸ dditia	

Additional details:

# **3.3 Is the transmission of the AML message free to the caller (message `zero-rated')?**

- Yes
- No

Additional details:

#### 3.4 Which organisation maintains the AML end-point?

Greater Copenhagen Fire Brigade

# **3.5** Are several AML messages received during the duration of the call?

	Yes	Νο
For Android	<b>v</b>	
For iOS	<b>~</b>	

Additional details:

Denmark

## **3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?**

	Seconds
For Android	
For iOS	
Additional details:	
No information	

## **3.7** Are AML positions presented directly to the call-taker's GIS and CAD display?

Yes

No

Additional details:

#### **3.8** How is the location information transmitted from the endpoint/PSAP receiving the AML to (other) PSAPs in the country?

- Automatically, over a data interface
- Manually, using voice communications
- Other (please specify)

## 4. AML & Other Evolutions

## 4.1 Is AML activated for roaming?

		For Android	For iOS (Apple)
•	Yes, using a long number	V	•
	Yes, SMS to MCC + shortcode		
	Yes, but HTTPS only		
	Yes, Other (please specify)		
	No		

Additional details:

### 4.2 Is AML working for SMS to Emergency Numbers?

		For Android	For iOS (Apple)	
	Yes, SMS-to-112			
	Yes, SMS-to-other - shortcode(s) (please provide details below)			
•	No			
Add	itional details:			

### 4.3 Is any additional data transmitted via AML?

		For Android	For iOS (Apple)
	Caller name		
	Caller medical info		
	Caller phone language		
	Automated detections (e.g. fall, crash)		
	Other (Please specify)		
<b>v</b>	No		

Additional details:

# 4.4 Do you have plans to activate AML using HTTPS in the next 12 months?

Yes

□ No If no, why not?

Additional details:

Its currently on our 2024-list

# 4.5 Are you evaluating any other transport methodologies for the provision of caller location information?

- ✓ Yes, using SIP messaging
- □ Yes, using HTML5
- □ Yes, using Network Induced Location Request (NI-LR)
- □ Yes, using other (please specify)
- 🗆 No

## 5. Facts & Figures

#### 5.1 Can you please share some statistics for the full year 2022 on:

Total number of mobile originated emergency communications for 2022 (mobile calls + SMS-to-shortcode)

% of mobile originated communications where network-provided location (e.g. Cell-ID, Timing advance etc) is received

% of mobile originated communications where an AML position is received

% of AML messages received within 60 seconds 9

- % of AML messages received within 30 seconds
- % of AML messages received within 15 seconds
- % of AML messages with an accuracy below 100m

% of AML messages with an accuracy below 50m

% of AML messages with an accuracy below 30m

Average comparison (expressed in metres) between accuracy provided by network and accuracy provided by handset 293461 91 % 71 % 99% 99% 94% 92% 82% 73% Network Handset 697m. [Average calculated based 103m.

[Average<br/>calculated based<br/>on location<br/>received by the<br/>PSAP of the<br/>Greater103m.<br/>[Average<br/>calculated at<br/>national level]Copenhagen Fire<br/>Brigade]

# 5.2 Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

- $\square$  Yes, it is recorded and reported back by the emergency services If yes, please provide details of the process below
- $\square$  Yes, by carrying out periodic testing

If yes, please provide details (e.g. process, frequency) below

☑ No If no, why not? Please provide details below. Additional details:



## 6. Reporting

6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

Yes

✓ No If no, why not?

Additional details:

### 6.2 If yes, what is the frequency of these reports?

□ Monthly

□ Quarterly

□ Annually

Additional details:

# 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

- Yes, I send a specific email to MNOs and OS providers when I notice unusual error rates
- Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)
- ✓ No

## 7. Others

**7.1** Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

n/a

7.2 List the companies/organisations that helped in deploying AML in your country

Apple, Google



**Country:** 

Estonia

## **1.** AML coverage in the country

## 1.1 Is AML operational in the whole country?

Yes

□ No If no, why not?

Additional details:

### 1.2 For which operating systems is AML working in your country?

- Android
- ✓ iOS (Apple)
- □ Others (please specify)

Additional details:

# **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

Yes

□ No If no, why not?

Additional details:

### 1.4 In what year was AML activated in your country?

For Android2016For iOS (Apple)2018

# Estonia

## **1.5 For which emergency service is AML working?**

Emergency Medical Service	
Fire & Rescue Service	
✓ Police	
Coastguard	
$\Box$ Other (please specify)	
Additional details:	

# 1.6 For which emergency numbers is AML activated?NumberFor<br/>Android<br/>(Apple)112Image: Colspan="2">Image: Colspan="2"112Image: Colspan="2">Image: Colspan="2">Image: Colspan="2"

### 2. Legislation

Estonia

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

Rescue Act https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/505012023001/consolide

Electronic Communications Act https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/512012023003/consolide

### 3. End-point and transmission

#### **3.1 How are the AML messages transmitted to the end-point?**

Transmission Method	For Android	For iOS (Apple)
SMS to short num	ber 🗹	•
SMS to long numb	er 🗌	
HTTPS		
Additional details:		

### **3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?**

	Not an issue. HTTPS messages always contain MSISDN
	The HTTPS and SMS AML messages are matched using the IMEI/Time Stamp as a common identifier to find the MSISDN
	The AML location information is pushed to the PSAP call taker even without the MSISDN
	The AML message is discarded if the MSISDN cannot be obtained
Additio	onal details:

### 3.3 Is the transmission of the AML message free to the caller (message 'zero-rated')?

Yes

Estonia

No

Additional details:

#### 3.4 Which organisation maintains the AML end-point?

IT and Development Centre of the Ministry of the Interior of Estonia

## 3.5 Are several AML messages received during the duration of the call?

	Yes	No
For Android	V	
For iOS	V	
Additional details:		

### **3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?**

	Seconds	
For Android	30 seconds	
For iOS	Smart solution, messages are sent depending on any movement by the caller	

#### Additional details:

Estonia

# **3.7 Are AML positions presented directly to the call-taker's GIS and CAD display?**

✓	Yes
---	-----

No

Additional details:

#### **3.8** How is the location information transmitted from the endpoint/PSAP receiving the AML to (other) PSAPs in the country?

- Automatically, over a data interface
- Manually, using voice communications
- Other (please specify)

### 4. AML & Other Evolutions

#### 4.1 Is AML activated for roaming?

		For Android	For iOS (Apple)
	Yes, using a long number		
~	Yes, SMS to MCC + shortcode	V	
$\Box$	Yes, but HTTPS only		
	Yes, Other (please specify)		
	No		

Additional details:

Estonia

#### 4.2 Is AML working for SMS to Emergency Numbers?

		For Android	For iOS (Apple)	
•	Yes, SMS-to-112	•		
	Yes, SMS-to-other - shortcode(s) (please provide details below)			
	No			
Adc	litional details:			

# Estonia

#### 4.3 Is any additional data transmitted via AML?

		For Android	For iOS (Apple)
	Caller name		
	Caller medical info		
	Caller phone language		
	Automated detections (e.g. fall, crash)		
	Other (Please specify)		
<b>v</b>	No		

Additional details:

# **4.4 Do you have plans to activate AML using HTTPS in the next 12 months?**

🗌 Yes

■ No If no, why not?

Additional details:

We are considering NG-112 solutions instead of HTTPS.

# **4.5** Are you evaluating any other transport methodologies for the provision of caller location information?

- □ Yes, using SIP messaging
- □ Yes, using HTML5
- □ Yes, using Network Induced Location Request (NI-LR)
- $\Box$  Yes, using other (please specify)
- 🗹 No

Additional details:

### 5. Facts & Figures

Estonia

#### 5.1 Can you please share some statistics for the full year 2022 on:

Total number of mobile originated emergency communications for 2022 (mobile calls + SMS-	1 135 377 (offered, incl. SIM-less calls)	
to-shortcode)	859 465 (offered, calls with SIM-card)	
% of mobile originated communications where network-provided location (e.g. Cell-ID, Timing advance etc) is received	87,7% (offered, incl. SIM- less calls)	
% of mobile originated communications where	42,6% (calculated from SIM- less offered calls)	
an AML position is received	56,3% (calculated from offered calls with SIM-card)	
% of AML messages received within 60 seconds	96,9%	
% of AML messages received within 30 seconds	95,9%	
% of AML messages received within 15 seconds	34,6%	
% of AML messages with an accuracy below 100m	94,9%	
% of AML messages with an accuracy below 50m	81,0%	
% of AML messages with an accuracy below 30m	72,2%	
	Network Handset	
Average comparison (expressed in metres) between accuracy provided by network and accuracy provided by handset	789,6 m 82,0 m	

## 5.2 Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

- ✓ Yes, it is recorded and reported back by the emergency services If yes, please provide details of the process below
- Yes, by carrying out periodic testing If yes, please provide details (e.g. process, frequency) below



 $\hfill \hfill \hfill$ 



6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

Yes

□ No If no, why not?

Additional details:

Estonia

Not periodically, only if needed

#### 6.2 If yes, what is the frequency of these reports?

□ Monthly

□ Quarterly

□ Annually

Additional details: Not periodically, only if needed

### 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

- Yes, I send a specific email to MNOs and OS providers when I notice unusual error rates
- Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)
- 🗌 No

Additional details: We also receive AML error rates from OS providers if needed.

### 7. Others

Estonia

### **7.1** Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

We deployed Multiple AML locations with Apple and Google. It helps to identify caller location on the move.

# **7.2 List the companies/organisations that helped in deploying AML in your country**

Google, Apple, IT and Development Centre of Ministry of the Interior, Telia (MNO), Elisa (MNO), Tele 2 (MNO), Sony, Ministry of the Interior, EENA.

#### Country:

Finland

Finland

### **1.** AML coverage in the country

#### 1.1 Is AML operational in the whole country?

- Yes
- □ No If no, why not?

Additional details:

Does not include the Åland Islands

#### 1.2 For which operating systems is AML working in your country?

- Android
- ✓ iOS (Apple)
- ☑ Others (please specify)

Additional details:

HarmonyOS (Huawei), Jolla

# **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

🗆 Yes

✓ No If no, why not?

Additional details:

Reporting tool not yet available in Finland.

# 1.4 In what year was AML activated in your country?

For Android	2017
For iOS (Apple)	2019
For HarmonyOS (Huawei)	2019
For Jolla	2020
-	

#### Additional details:

Finland

#### **1.5 For which emergency service is AML working?**

Emergency Medical Service	
☑ Fire & Rescue Service	
Police	
Coastguard	
Other (please specify)	Social Services
Additional details:	

#### **1.6 For which emergency numbers is AML activated?**

Number	For Android	For iOS (Apple)	For HarmonyOS (Huawei)	For Jolla
112	•	•	•	•
Additional details:				



### 2. Legislation

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

The Act on Electronic Communication Services

### 3. End-point and transmission

#### 3.1 How are the AML messages transmitted to the end-point?

Transmission Method	For Android	For iOS (Apple)	For HarmonyOS (Huawei)	For Jolla
SMS to short number	•	<b>v</b>	•	•
SMS to long number				
HTTPS Additional details:				

### **3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?**

		Not an issue.	HTTPS messages	always contain	MSISDN
--	--	---------------	----------------	----------------	--------

The HTTPS and SMS AML messages are matched using the IMEI/Time
Stamp as a common identifier to find the MSISDN

- $\hfill \square$  The AML location information is pushed to the PSAP call taker even without the MSISDN
- The AML message is discarded if the MSISDN cannot be obtained

Additional details:

Finland

# **3.3 Is the transmission of the AML message free to the caller (message `zero-rated')?**

- Yes
- No

Additional details:

#### 3.4 Which organisation maintains the AML end-point?

Emergency Response Centre Agency

### **3.5** Are several AML messages received during the duration of the call?

	Yes	Νο
For Android	•	
For iOS		V
For HarmonyOS		V
For Jolla Additional details:		

iOS might send several messages starting from spring 2023
---

### **3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?**

	Seconds
For Android	5, 15, 30, 60, 90
For iOS	
For HarmonyOS	
For Jolla	
Additional details:	

### **3.7 Are AML positions presented directly to the call-taker's GIS and CAD display?**

Yes

Finland

□ No

Additional details:

#### **3.8** How is the location information transmitted from the endpoint/PSAP receiving the AML to (other) PSAPs in the country?

- Automatically, over a data interface
- Manually, using voice communications
- Other (please specify)

### 4. AML & Other Evolutions

#### 4.1 Is AML activated for roaming?

Finland

		For Android	For iOS (Apple)	For Harmony OS (Huawei)	For Jolla
	Yes, using a long number				
•	Yes, SMS to MCC + shortcode	V			
	Yes, but HTTPS only				
	Yes, Other (please specify)				
	No				
Add	litional details:				

#### 4.2 Is AML working for SMS to Emergency Numbers?

		For Android	For iOS (Apple)	For Harmony OS (Huawei)	For Jolla
~	Yes, SMS-to-112	<b>v</b>			
	Yes, SMS-to-other - shortcode(s) (please provide details below)				
	No				
Add	itional details:				

iOS might get AML for SMS during spring 2023

#### 4.3 Is any additional data transmitted via AML?

		For Android	For iOS (Apple)	For Harmony OS (Huawei)	For Jolla
	Caller name				
	Caller medical info				
	Caller phone language				
	Automated detections (e.g. fall, crash)				
	Other (Please specify)				
<b>v</b>	No				
Add	itional details:				

# **4.4 Do you have plans to activate AML using HTTPS in the next 12 months?**

□ Yes

Finland

✓ No If no, why not?

Additional details:

No plans to activate at this moment

### **4.5** Are you evaluating any other transport methodologies for the provision of caller location information?

- □ Yes, using SIP messaging
- □ Yes, using HTML5
- □ Yes, using Network Induced Location Request (NI-LR)
- $\Box$  Yes, using other (please specify)
- 🗹 No

Additional details:

### 5. Facts & Figures

Finland

#### 5.1 Can you please share some statistics for the full year 2022 on:

Total number of mobile originated emergency communications for 2022 (mobile calls + SMS-to-shortcode)	n/a	
% of mobile originated communications where network-provided location (e.g. Cell-ID, Timing advance etc) is received	n/a	
% of mobile originated communications where an AML position is received	n/a	
% of AML messages received within 60 seconds	n/a	
% of AML messages received within 30 seconds	n/a	
% of AML messages received within 15 seconds	n/a	
% of AML messages with an accuracy below 100m	n/a	
% of AML messages with an accuracy below 50m	n/a	
% of AML messages with an accuracy below 30m	n/a	
	Network	Handset
Average comparison (expressed in metres) between accuracy provided by network and accuracy provided by handset	n/a	n/a

### 5.2 Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

- □ Yes, it is recorded and reported back by the emergency services If yes, please provide details of the process below
- Yes, by carrying out periodic testing If yes, please provide details (e.g. process, frequency) below
- ✓ No

If no, why not? Please provide details below. Additional details:

No reporting data available at the moment.



### 6. Reporting

6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

□ Yes

✓ No If no, why not?

Additional details:

No reporting data available at the moment.

#### 6.2 If yes, what is the frequency of these reports?

- □ Monthly
- □ Quarterly
- □ Annually

Additional details:

# 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

- Yes, I send a specific email to MNOs and OS providers when I notice unusual error rates
- Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)
- 🗌 No

Additional details:



**7.1** Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

n/a

Finland

### 7.2 List the companies/organisations that helped in deploying AML in your country

Digia, OS providers and MNOs in Finland



**France** Information provided by EENA based on information available

**Country:** 

### 1. AML coverage in the country

#### 1.1 Is AML operational in the whole country?

🗆 Yes

□ No If no, why not?

Additional details:

No information available
--------------------------

#### 1.2 For which operating systems is AML working in your country?

- Android
- ✓ iOS (Apple)
- $\Box$  Others (please specify)

Additional details:

# **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

🗆 Yes

□ No If no, why not?

Additional details:

No information available

# France

#### 1.4 In what year was AML activated in your country?

For Android	2020
For iOS (Apple)	2020
Additional details:	

#### **1.5** For which emergency service is AML working?

Emergency Medical Service	
Fire & Rescue Service	
Police	
Coastguard	
Other (please specify) Additional details:	

#### 1.6 For which emergency numbers is AML activated? For For iOS Number Android (Apple) ✓ **v** 112 **~** $\square$ Other: 15 $\checkmark$ Other: 18

Additional details:

No information available on other numbers

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

No information available

France

### 3. End-point and transmission

#### 3.1 How are the AML messages transmitted to the end-point?

Transmission Method	For Android	For iOS (Apple)
SMS to short number		
SMS to long number	•	
HTTPS		

Additional details:

France

No information available for iOS

# **3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?**

<ul> <li>The HTTPS and SMS AML messages are matched using the IMEI Stamp as a common identifier to find the MSISDN</li> <li>The AML location information is pushed to the PSAP call taker even without the MSISDN</li> <li>The AML message is discarded if the MSISDN cannot be obtained</li> </ul>	
without the MSISDN	/Time
The AMI measure is discorded if the MSISDN connet be obtained	'en
The AML message is discarded if the MSISDN cannot be obtaine	d
Additional details:	

No information available

# 3.3 Is the transmission of the AML message free to the caller (message `zero-rated')?

- Yes
- 🗌 No

Additional details:

#### 3.4 Which organisation maintains the AML end-point?

Agency for Digital in Civil Security (ANSC)

### 3.5 Are several AML messages received during the duration of the call?

	Yes	Νο	
For Android	<b>v</b>		
For iOS			
Additional details:			
No information available for iOS			
3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?			

	Seconds
For Android	
For iOS	
Additional details:	
No information available	

# **3.7 Are AML positions presented directly to the call-taker's GIS and CAD display?**

	Yes
--	-----

France

□ No

Additional details:

No information available

#### **3.8** How is the location information transmitted from the endpoint/PSAP receiving the AML to (other) PSAPs in the country?

- Automatically, over a data interface
- Manually, using voice communications
- Other (please specify)

### 4. AML & Other Evolutions

#### 4.1 Is AML activated for roaming?

	For Android	For iOS (Apple)
Yes, using a long number		
Yes, SMS to MCC + shortcode		
Yes, but HTTPS only		
Yes, Other (please specify)		
No		

Additional details:

France

No information available

#### 4.2 Is AML working for SMS to Emergency Numbers?

		For Android	For iOS (Apple)
	Yes, SMS-to-112		
	Yes, SMS-to-other - shortcode(s) (please provide details below)		
	No		
Add	itional details:		
Noi	nformation available		

# France

#### 4.3 Is any additional data transmitted via AML?

	For Android	For iOS (Apple)
Caller name		
Caller medical info		
Caller phone language		
Automated detections (e.g. fall, crash)		
Other (Please specify)		
No		

Additional details:

No information available

# **4.4 Do you have plans to activate AML using HTTPS in the next 12 months?**

🗌 Yes

□ No If no, why not?

Additional details:

No information available

# **4.5** Are you evaluating any other transport methodologies for the provision of caller location information?

- □ Yes, using SIP messaging
- □ Yes, using HTML5
- □ Yes, using Network Induced Location Request (NI-LR)
- □ Yes, using other (please specify)
- 🗆 No

Additional details:

No information available

France

#### 5.1 Can you please share some statistics for the full year 2022 on:

Total number of mobile originated emergency communications for 2022 (mobile calls + SMS- n to-shortcode)

% of mobile originated communications where network-provided location (e.g. Cell-ID, Timing advance etc) is received

% of mobile originated communications where an AML position is received

% of AML messages received within 60 seconds

% of AML messages received within 30 seconds

% of AML messages received within 15 seconds

% of AML messages with an accuracy below 100m

% of AML messages with an accuracy below 50m

% of AML messages with an accuracy below 30m

Average comparison (expressed in metres) between accuracy provided by network and accuracy provided by handset

### 5.2 Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

Yes, it is recorded and reported back by the emergency services If yes, please provide details of the process below

Yes, by carrying out periodic testing If yes, please provide details (e.g. process, frequency) below

🗆 No

If no, why not? Please provide details below.



6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

Yes

□ No If no, why not?

Additional details:

France

No information available

#### 6.2 If yes, what is the frequency of these reports?

- Monthly
- □ Quarterly
- □ Annually

Additional details:

No information available

# 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

- Yes, I send a specific email to MNOs and OS providers when I notice unusual error rates
- Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)
- 🗌 No

Additional details:

No information available

### 7. Others

France

**7.1** Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

\_n/a\_\_\_\_\_

### **7.2 List the companies/organisations that helped in deploying AML in your country**

No information available

**Country:** 

Germany

### 1. AML coverage in the country

#### 1.1 Is AML operational in the whole country?

Yes

□ No If no, why not?

Additional details:

#### 1.2 For which operating systems is AML working in your country?

- Android
- ✓ iOS (Apple)
- □ Others (please specify)

Additional details:

# **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

Yes

🗆 No 🛛 If	no, why not?
-----------	--------------

Additional details:

#### 1.4 In what year was AML activated in your country?

For Android	2019	
For iOS (Apple)	2019	
Additional details:		

#### **1.5 For which emergency service is AML working?**

Emergency Medical Service	
Fire & Rescue Service	
Police	
Coastguard	
Other (please specify) Additional details:	

# 1.6 For which emergency numbers is AML activated?NumberFor<br/>Android<br/>(Apple)112Image: Colspan="2">Image: Colspan="2" Image: Colspan="2">Image: Colspan="2">Image: Colspan="2" Image: Colspan="2">Image: Colspan="2" Image: Colspan="2" Image: Colspan="2" Image: Colspan="2">Image: Colspan="2" Image: Colspan="" Image: Colspan="2" Image: Colspan="2"

Additional details:

### 2. Legislation

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

Telecommunications Act

### 3. End-point and transmission

#### **3.1 How are the AML messages transmitted to the end-point?**

Transmission Method	For Android	For iOS (Apple)
SMS to short number	<b>v</b>	•
SMS to long number		
HTTPS	•	

Additional details:

# **3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?**

	Not an issue. HTTPS messages always contain MSISDN
•	The HTTPS and SMS AML messages are matched using the IMEI/Time Stamp as a common identifier to find the MSISDN
	The AML location information is pushed to the PSAP call taker even without the MSISDN
	The AML message is discarded if the MSISDN cannot be obtained
A .I .I''''	

Additional details:

# **3.3 Is the transmission of the AML message free to the caller (message `zero-rated')?**

- Yes
- No

Additional details:

#### 3.4 Which organisation maintains the AML end-point?

Integrated Control Centre of Freiburg

### 3.5 Are several AML messages received during the duration of the call?

	Yes	Νο
For Android	<b>v</b>	
For iOS		•
Additional details:		

# **3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?**

#### Seconds

For Android

0,15,30, then every 30 seconds

For iOS

Additional details:

Germany

# **3.7** Are AML positions presented directly to the call-taker's GIS and CAD display?

✓ Yes

No

Additional details:

API available to integrate in CAD

#### **3.8** How is the location information transmitted from the endpoint/PSAP receiving the AML to (other) PSAPs in the country?

- Automatically, over a data interface
- Manually, using voice communications
- Other (please specify)

### 4. AML & Other Evolutions

#### 4.1 Is AML activated for roaming?

		For Android	For iOS (Apple)
	Yes, using a long number		
	Yes, SMS to MCC + shortcode		
✓	Yes, but HTTPS only	~	
	Yes, Other (please specify)		
	No		

Additional details:

#### 4.2 Is AML working for SMS to Emergency Numbers?

	For Android	For iOS (Apple)
Yes, SMS-to-112		
Yes, SMS-to-other - shortcode(s) (please provide details below)		
✓ No		
Additional details: SMS to 112 not available	in Germany	

## Germany

#### 4.3 Is any additional data transmitted via AML?

		For Android	For iOS (Apple)
	Caller name		
	Caller medical info		
•	Caller phone language Automated	V	
	detections (e.g. fall, crash)		
	Other (Please specify)		
$\Box$	No		

Additional details:

### **4.4 Do you have plans to activate AML using HTTPS in the next 12 months?**

🗌 Yes

□ No If no, why not?

Additional details:

Already implementation

### **4.5** Are you evaluating any other transport methodologies for the provision of caller location information?

- $\Box$  Yes, using SIP messaging
- □ Yes, using HTML5
- □ Yes, using Network Induced Location Request (NI-LR)
- □ Yes, using other (please specify)
- 🗆 No

### Germany

### 5. Facts & Figures

#### 5.1 Can you please share some statistics for the full year 2022 on:

Total number of mobile originated emergency communications for 2022 (mobile calls + SMS-to-shortcode)	n/a	
% of mobile originated communications where network-provided location (e.g. Cell-ID, Timing advance etc) is received	100%	
% of mobile originated communications where an AML position is received	75%	
% of AML messages received within 60 seconds	99%	
% of AML messages received within 30 seconds	95%	
% of AML messages received within 15 seconds	60%	
% of AML messages with an accuracy below 100m	90%	
% of AML messages with an accuracy below 50m	80%	
% of AML messages with an accuracy below 30m	70%	
	Network	Handset
Average comparison (expressed in metres) between accuracy provided by network and accuracy provided by handset	1 - 25 km	3 - 30 m

### 5.2 Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

- $\square$  Yes, it is recorded and reported back by the emergency services If yes, please provide details of the process below
- $\square$  Yes, by carrying out periodic testing

If yes, please provide details (e.g. process, frequency) below

✓ No

If no, why not? Please provide details below.

Additional details:

Practice shows that the location data is usually correct. There are hardly any complaints about the data being incorrect.

### 6. Reporting

Germany

6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

Yes

□ No If no, why not?

Additional details:

#### 6.2 If yes, what is the frequency of these reports?

- □ Monthly
- □ Quarterly
- □ Annually

Additional details:

On demand

### 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

- Yes, I send a specific email to MNOs and OS providers when I notice unusual error rates
- Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)
- 🗌 No

### Germany

### 7. Others

### **7.1** Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

Of course, there are some special missions where AML has helped locate the scene at all. But AML speeds up the time it takes for emergency services to arrive in almost every emergency call.

### **7.2 List the companies/organisations that helped in deploying AML in your country**

Apple, Deutsche Telekom, Google, Telefonica, Vodafone

#### **Country:**

Greece

**Greece** Information provided by EENA based on information available

### **1.** AML coverage in the country

#### 1.1 Is AML operational in the whole country?

- Yes
- □ No If no, why not?

Additional details:

#### 1.2 For which operating systems is AML working in your country?

- Android
- ✓ iOS (Apple)
- □ Others (please specify)

Additional details:

### **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

- 🗆 Yes
- □ No If no, why not?

Additional details:

No information

### 1.4 In what year was AML activated in your country?

For Android	2020
For iOS (Apple)	2020
Additional details:	

#### **1.5 For which emergency service is AML working?**

Emergency Medical Service	
Fire & Rescue Service	
Police	
Coastguard	
$\Box$ Other (please specify) Additional details:	

## 1.6 For which emergency numbers is AML activated?NumberFor<br/>Android<br/>(Apple)112Image: Colspan="2">Image: Colspan="2" Image: Colspan="2">Image: Colspan="2">Image: Colspan="2" Image: Colspan="2">Image: Colspan="2" Image: Colspan="2" Image: Colspan="2" Image: Colspan="2">Image: Colspan="2" Image: Colspan="" Image: Colspan="2" Image: Colspan="2"

Additional details:

Greece



Greece

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

- Act 4662/2020 "National Crisis & Hazard Management Mechanism, Restructuring of the General Secretariat for Civil Protection, Upgrade of Civil Protection Volunteering, Restructuring of the Fire Corps and other policies" (National Register Vol. A, Iss. 27).
- Act 4727/2020 "Digital Governance (Transposition of Directive 2016/2012 (EU) and of Directive 2019/1024 (EU) to Greek Legislation) Electronic Communications (Transposition of Directive 2018/1972 (EU) to Greek Legislation) and other policies" (National Register Vol. A, Iss. 184).

### 3. End-point and transmission

#### **3.1 How are the AML messages transmitted to the end-point?**

Transmission Method	For Android	For iOS (Apple)
SMS to short number	•	<b>v</b>
SMS to long number		
HTTPS		

Additional details:

No information

Greece

### **3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?**

Not an issue. HTTPS messages always contain MSISDN
The HTTPS and SMS AML messages are matched using the IMEI/Time Stamp as a common identifier to find the MSISDN
The AML location information is pushed to the PSAP call taker even without the MSISDN
The AML message is discarded if the MSISDN cannot be obtained

Additional details:

### 3.3 Is the transmission of the AML message free to the caller (message `zero-rated')?

- Yes
- No

Additional details:

#### 3.4 Which organisation maintains the AML end-point?

General Secretariat for Civil Protection

### 3.5 Are several AML messages received during the duration of the call?

	Yes	Νο
For Android	V	
For iOS		
Additional details:		
No information for iOS		

### **3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?**

	Seconds
For Android	
For iOS	
Additional details:	
No information	

### **3.7 Are AML positions presented directly to the call-taker's GIS and CAD display?**

✓	Yes
---	-----

Greece

□ No

Additional details:

#### **3.8** How is the location information transmitted from the endpoint/PSAP receiving the AML to (other) PSAPs in the country?

- Automatically, over a data interface
- Manually, using voice communications
- Other (please specify)

#### No information

#### **AML & Other Evolutions** 4.

#### 4.1 Is AML activated for roaming?

		For Android	For iOS (Apple)
	Yes, using a long number		
•	Yes, SMS to MCC + shortcode	<b>v</b>	
	Yes, but HTTPS only		
	Yes, Other (please specify)		
	No		

Additional details:

Greece

#### 4.2 Is AML working for SMS to Emergency Numbers?

		For Android	For iOS (Apple)	
	Yes, SMS-to-112			
	Yes, SMS-to-other - shortcode(s) (please provide details below)			
✓	No			
Add	litional details:			

#### 4.3 Is any additional data transmitted via AML?

	For Android	For iOS (Apple)
Caller name		
Caller medical info		
Caller phone language		
Automated detections (e.g. fall, crash)		
Other (Please specify)		
No		

Additional details:

No information

Greece

### **4.4 Do you have plans to activate AML using HTTPS in the next 12 months?**

🗌 Yes

□ No If no, why not?

Additional details:

No information

### **4.5** Are you evaluating any other transport methodologies for the provision of caller location information?

- $\Box$  Yes, using SIP messaging
- □ Yes, using HTML5
- □ Yes, using Network Induced Location Request (NI-LR)
- $\Box$  Yes, using other (please specify)
- 🗆 No

Additional details:

#### No information

Greece

#### 5.1 Can you please share some statistics for the full year 2022 on:

Total number of mobile originated emergency communications for 2022 (mobile calls + SMS- n to-shortcode)

% of mobile originated communications where network-provided location (e.g. Cell-ID, Timing advance etc) is received

% of mobile originated communications where an AML position is received

% of AML messages received within 60 seconds n

% of AML messages received within 30 seconds

% of AML messages received within 15 seconds

% of AML messages with an accuracy below 100m

% of AML messages with an accuracy below 50m

% of AML messages with an accuracy below 30m

Average comparison (expressed in metres) between accuracy provided by network and accuracy provided by handset

n/a	
n/a	
Network	Handset
n/a	n/a

### 5.2 Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

Yes, it is recorded and reported back by the emergency services If yes, please provide details of the process below

Yes, by carrying out periodic testing If yes, please provide details (e.g. process, frequency) below

🗆 No

If no, why not? Please provide details below.



6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

🗆 Yes

□ No If no, why not?

Additional details:

No information

Greece

#### 6.2 If yes, what is the frequency of these reports?

- □ Monthly
- □ Quarterly
- □ Annually

Additional details:

No information

### 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

	Yes, I send a specific email to MNOs and OS providers when I notice unusual error rates Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)
	No
Additi	onal details:

#### No information



Greece

**7.1** Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

\_n/a

### **7.2 List the companies/organisations that helped in deploying AML in your country**

No information



**Country:** 

Hungary

### **1.** AML coverage in the country

#### 1.1 Is AML operational in the whole country?

Yes

□ No If no, why not?

Additional details:

#### 1.2 For which operating systems is AML working in your country?

- Android
- ✓ iOS (Apple)
- $\Box$  Others (please specify)

Additional details:

### **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

Yes

#### 1.4 In what year was AML activated in your country?

For Android	2020
For iOS (Apple)	2020
Additional details:	

#### **1.5 For which emergency service is AML working?**

Emergency Medical Service	
Fire & Rescue Service	
Police	
Coastguard	
$\Box$ Other (please specify)	
Additional details:	

## 1.6 For which emergency numbers is AML activated?NumberFor<br/>Android<br/>(Apple)112Image: Colspan="2">Image: Colspan="2" Image: Colspan="2">Image: Colspan="2" Image: Colspan="2">Image: Colspan="2" Image: Colspan="2">Image: Colspan="2" Image: Colspan="" Image: Colspan="2" Image: Colspan="2"

### 2. Legislation

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

Generally: Act C of 2003 on electronic communications In detail: National Media and Infocommunications Authority decree No. 8/2020.

### 3. End-point and transmission

#### **3.1** How are the AML messages transmitted to the end-point?

Transmission Method	For Android	For iOS (Apple)
SMS to short number	<b>v</b>	•
SMS to long number		
HTTPS		

Additional details:

Hungary

### **3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?**

	Not an issue. HTTPS messages always contain MSISDN
	The HTTPS and SMS AML messages are matched using the IMEI/Time Stamp as a common identifier to find the MSISDN
	The AML location information is pushed to the PSAP call taker even without the MSISDN
	The AML message is discarded if the MSISDN cannot be obtained
۸ dditia	and detailer

Additional details:

### **3.3 Is the transmission of the AML message free to the caller (message `zero-rated')?**

- Yes
- No

Additional details:

#### 3.4 Which organisation maintains the AML end-point?

Hungarian National Police

### 3.5 Are several AML messages received during the duration of the call?

	Yes	Νο
For Android	V	
For iOS		
Additional details:		
No information for iOS		

### **3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?**

	Seconds	
For Android	30 seconds	
For iOS	N/A	
Additional details:		

### **3.7** Are AML positions presented directly to the call-taker's GIS and CAD display?

✓	Yes
---	-----

Hungary

No

Additional details:

#### **3.8** How is the location information transmitted from the endpoint/PSAP receiving the AML to (other) PSAPs in the country?

- Automatically, over a data interface
- Manually, using voice communications
- Other (please specify)

### 4. AML & Other Evolutions

#### 4.1 Is AML activated for roaming?

		For Android	For iOS (Apple)
	Yes, using a long number		
	Yes, SMS to MCC + shortcode		
	Yes, but HTTPS only		
	Yes, Other (please specify)		
✓	No		

Additional details:

#### 4.2 Is AML working for SMS to Emergency Numbers?

		For Android	For iOS (Apple)	
•	Yes, SMS-to-112	<b>v</b>	•	
	Yes, SMS-to-other - shortcode(s) (please provide details below)			
	No			
Add	itional details:			

#### 4.3 Is any additional data transmitted via AML?

		For Android	For iOS (Apple)
	Caller name		
	Caller medical info		
	Caller phone language		
	Automated detections (e.g. fall, crash)		
	Other (Please specify)		
•	No		

Additional details:

### **4.4 Do you have plans to activate AML using HTTPS in the next 12 months?**

🗌 Yes

■ No If no, why not?

Additional details:

Need for renovation of PSAP systems. The current system does not support HTTPS.

### **4.5** Are you evaluating any other transport methodologies for the provision of caller location information?

- $\Box$  Yes, using SIP messaging
- □ Yes, using HTML5
- Yes, using Network Induced Location Request (NI-LR)
- □ Yes, using other (please specify)
- 🗆 No

### 5. Facts & Figures

#### 5.1 Can you please share some statistics for the full year 2022 on:

Total number of mobile originated emergency communications for 2022 (mobile calls + SMS-to-shortcode)	4,65 million	
% of mobile originated communications where network-provided location (e.g. Cell-ID, Timing advance etc) is received	97,14%	
% of mobile originated communications where an AML position is received	30%	
% of AML messages received within 60 seconds	96,74%	
% of AML messages received within 30 seconds	69,01%	
% of AML messages received within 15 seconds	81,07%	
% of AML messages with an accuracy below 100m	81,07%	
% of AML messages with an accuracy below 50m	69,01%	
% of AML messages with an accuracy below 30m	44,57%	
	Network	Handset
Average comparison (expressed in metres) between accuracy provided by network and accuracy provided by handset	n/a	n/a

### 5.2 Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

- ✓ Yes, it is recorded and reported back by the emergency services If yes, please provide details of the process below
- Yes, by carrying out periodic testing

If yes, please provide details (e.g. process, frequency) below

🗆 No

If no, why not? Please provide details below.

Additional details:

The call taker checks whether the AML position is included in the provider Cell-ID-based polygon.



6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

Yes

✓ No If no, why not?

Additional details:

Hungary

There was no need for it.

#### 6.2 If yes, what is the frequency of these reports?

- Monthly
- □ Quarterly
- □ Annually

Additional details:

### 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

- Yes, I send a specific email to MNOs and OS providers when I notice unusual error rates
- Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)
- No

### 7. Others

Hungary

**7.1** Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

n/a

### **7.2 List the companies/organisations that helped in deploying AML in your country**

NISZ National Infocommunications Service Company Limited by Shares, Hungary



Iceland

Iceland

### 1. AML coverage in the country

#### 1.1 Is AML operational in the whole country?

- Yes
- □ No If no, why not?

#### 1.2 For which operating systems is AML working in your country?

- Android
- ✓ iOS (Apple)
- □ Others (please specify)

Additional details:

### **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

🗆 Yes

☑ No If no, why not? Technical difficulty

## Iceland

#### 1.4 In what year was AML activated in your country?

For Android	2017
For iOS (Apple)	2019
Additional details:	

#### **1.5 For which emergency service is AML working?**

Emergency Medical Service	
Fire & Rescue Service	
Police	
Coastguard	
$\Box$ Other (please specify)	
Additional details:	

# 1.6 For which emergency numbers is AML activated?NumberFor<br/>Android<br/>(Apple)112Image: Colspan="3">Image: Colspan="3">Image: Colspan="3">For iOS<br/>Android<br/>(Apple)112Image: Colspan="3">Image: Colspan="3"Image: Colspan="3">Image: Colspan="3" Image: Colspan=





### 2. Legislation

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

The European Electronic Communications Code has been adapted into Law, effective sept.  $1^{st}$  2022. The MNO is required to send in handset location when an emergency number is dialed.

### 3. End-point and transmission

#### 3.1 How are the AML messages transmitted to the end-point?

Transmission Method	For Android	For iOS (Apple)
SMS to short number		
SMS to long number	<b>~</b>	•
HTTPS	✓	

Additional details:

Iceland

We recently started receiving HTTPS in addition to SMS from Google and are just starting to explore the benefits.

### **3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?**

- Not an issue. HTTPS messages always contain MSISDN
- The HTTPS and SMS AML messages are matched using the IMEI/Time Stamp as a common identifier to find the MSISDN
- $\hfill \square$  The AML location information is pushed to the PSAP call taker even without the MSISDN
- The AML message is discarded if the MSISDN cannot be obtained

Additional details:

### **3.3 Is the transmission of the AML message free to the caller (message `zero-rated')?**

- Yes
- No

#### 3.4 Which organisation maintains the AML end-point?

### **3.5** Are several AML messages received during the duration of the call?

	Yes	No
For Android	V	
For iOS		✓

Additional details:

Iceland

No information on how this is handled in iOS

### **3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?**

	Seconds	
For Android	0 and 20 seconds	
For iOS	N/A	
Additional details:		

### **3.7 Are AML positions presented directly to the call-taker's GIS and CAD display?**

Yes

□ No

#### **3.8** How is the location information transmitted from the endpoint/PSAP receiving the AML to (other) PSAPs in the country?

- Automatically, over a data interface
- Manually, using voice communications
- Other (please specify)

Iceland

### 4. AML & Other Evolutions

#### 4.1 Is AML activated for roaming?

		For Android	For iOS (Apple)
	Yes, using a long number		
	Yes, SMS to MCC + shortcode		
	Yes, but HTTPS only		
	Yes, Other (please specify)		
✓	No		

Additional details:

Iceland

Being activated by Google.

#### 4.2 Is AML working for SMS to Emergency Numbers?

		For Android	For iOS (Apple)	
•	Yes, SMS-to-112	<b>v</b>		
	Yes, SMS-to-other - shortcode(s) (please provide details below)			
	No			
Add	Additional details:			

#### 4.3 Is any additional data transmitted via AML?

		For Android	For iOS (Apple)
	Caller name		
	Caller medical info		
	Caller phone language		
	Automated detections (e.g. fall, crash)		
	Other (Please specify)		
<b>~</b>	No		

Additional details:

Iceland

### **4.4 Do you have plans to activate AML using HTTPS in the next 12 months?**

🗌 Yes

□ No Additional details:

Already activated but not widely used as MSISDN is missing most of the time

### **4.5** Are you evaluating any other transport methodologies for the provision of caller location information?

- $\Box$  Yes, using SIP messaging
- □ Yes, using HTML5
- □ Yes, using Network Induced Location Request (NI-LR)
- □ Yes, using other (please specify)
- No

5.1 Can you please share some statistics for	the full year 2022 on:
Total number of mobile originated emergency communications for 2022 (mobile calls + SMS-to-shortcode)	129235
% of mobile originated communications where network-provided location (e.g. Cell-ID, Timing advance etc) is received	12,3%

% of mobile originated communications where an AML position is received

Iceland

5.

5

% of AML messages received within 60 seconds n

**Facts & Figures** 

% of AML messages received within 30 seconds

% of AML messages received within 15 seconds

% of AML messages with an accuracy below 100m

% of AML messages with an accuracy below 50m

% of AML messages with an accuracy below 30m

Average comparison (expressed in metres) between accuracy provided by network and accuracy provided by handset

12,3%	
97%	
n/a	
Network	Handset
n/a	n/a

### 5.2 Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

Yes, it is recorded and reported back by the emergency services If yes, please provide details of the process below

 $\square$  Yes, by carrying out periodic testing

If yes, please provide details (e.g. process, frequency) below

🗆 No

If no, why not? Please provide details below.

Additional details:

It is primarily reviewed if there is a discrepancy between the two.



6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

□ Yes

✓ No If no, why not? Not really seen the point

Additional details:

Iceland

#### 6.2 If yes, what is the frequency of these reports?

- □ Monthly
- □ Quarterly
- □ Annually

Additional details:

### 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

- Yes, I send a specific email to MNOs and OS providers when I notice unusual error rates
- Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)
- 🗌 No

Additional details:

Were I to observe unusual errors, I would send a note to my personal contact at the  $\ensuremath{\mathsf{MNOs}}$ 



Iceland

0

**7.1** Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

**7.2** List the companies/organisations that helped in deploying AML in your country

Samsýn



Ireland

Ireland

### 1. AML coverage in the country

#### 1.1 Is AML operational in the whole country?

Yes

□ No If no, why not?

#### 1.2 For which operating systems is AML working in your country?

- Android
- ✓ iOS (Apple)
- □ Others (please specify)

Additional details:

### **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

Yes

□ No If no, why not?

Additional details:

Using IMEI only. iOS anonymises IMEI, Android does not.

## Ireland

#### 1.4 In what year was AML activated in your country?

For Android	2017
For iOS (Apple)	2019
Additional details:	

#### **1.5** For which emergency service is AML working?

-

# **1.6 For which emergency numbers is AML activated?**NumberForFor iOSNumberImage: Android (Apple)112Image: Android (Apple)0ther:999Image: Android (Apple)

### 2. Legislation

Ireland

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

Permitted under Data Protection legislation.

#### 3. End-point and transmission

#### **3.1 How are the AML messages transmitted to the end-point?**

Transmission Method	For Android	For iOS (Apple)
SMS to short number	<b>~</b>	<b>v</b>
SMS to long number		
HTTPS		

Additional details:

Ireland

### **3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?**

	Not an issue. HTTPS messages always contain MSISDN
	The HTTPS and SMS AML messages are matched using the IMEI/Time Stamp as a common identifier to find the MSISDN
	The AML location information is pushed to the PSAP call taker even without the MSISDN
	The AML message is discarded if the MSISDN cannot be obtained
Additic	onal details:

### **3.3 Is the transmission of the AML message free to the caller (message `zero-rated')?**

- Yes
- No

Additional details:

#### 3.4 Which organisation maintains the AML end-point?

Emergency Calls Answering Service – Ireland's Stage-1 PSAP

### 3.5 Are several AML messages received during the duration of the call?

	Yes	Νο
For Android	<b>v</b>	
For iOS		•
Additional details:		

### **3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?**

Seconds

For Android

Ireland

Immediate, 10s, 15s, 25s

For iOS

Additional details:

### **3.7 Are AML positions presented directly to the call-taker's GIS and CAD display?**

<b>v</b>	Yes
----------	-----

□ No

Additional details:

#### **3.8** How is the location information transmitted from the endpoint/PSAP receiving the AML to (other) PSAPs in the country?

- Automatically, over a data interface
- Manually, using voice communications
- Other (please specify)

### 4. AML & Other Evolutions

#### 4.1 Is AML activated for roaming?

Ireland

		For Android	For iOS (Apple)
	Yes, using a long number		
•	Yes, SMS to MCC + shortcode	V	
	Yes, but HTTPS only		
	Yes, Other (please specify)		
	No		

Additional details: Some networks currently. Other networks implementing the solution.

#### 4.2 Is AML working for SMS to Emergency Numbers?

		For Android	For iOS (Apple)
•	Yes, SMS-to-112	<b>v</b>	•
	Yes, SMS-to-other - shortcode(s) (please provide details below)		
	No		
Add	itional details:		

#### 4.3 Is any additional data transmitted via AML?

		For Android	For iOS (Apple)
	Caller name		
	Caller medical info		
	Caller phone language		
	Automated detections (e.g. fall, crash)		
	Other (Please specify)		
•	No		

Additional details:

Ireland

### **4.4 Do you have plans to activate AML using HTTPS in the next 12 months?**

🗌 Yes

🗹 No

Additional details:

Development resource constraints vs marginal enhancement in available data over HTTPS.

### **4.5** Are you evaluating any other transport methodologies for the provision of caller location information?

- ✓ Yes, using SIP messaging
- □ Yes, using HTML5
- □ Yes, using Network Induced Location Request (NI-LR)
- □ Yes, using other (please specify)
- 🗆 No

#### 5. Facts & Figures

Ireland

#### 5.1 Can you please share some statistics for the full year 2022 on:

Total number of mobile originated emergency communications for 2022 (mobile calls + SMS-to-shortcode)	n/a	
% of mobile originated communications where network-provided location (e.g. Cell-ID, Timing advance etc) is received	n/a	
% of mobile originated communications where an AML position is received	n/a	
% of AML messages received within 60 seconds	n/a	
% of AML messages received within 30 seconds	n/a	
% of AML messages received within 15 seconds	n/a	
% of AML messages with an accuracy below 100m	n/a	
% of AML messages with an accuracy below 50m	n/a	
% of AML messages with an accuracy below 30m	n/a	
	Network	Handset
Average comparison (expressed in metres) between accuracy provided by network and accuracy provided by handset	n/a	n/a

### 5.2 Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

- □ Yes, it is recorded and reported back by the emergency services If yes, please provide details of the process below
- Yes, by carrying out periodic testing

If yes, please provide details (e.g. process, frequency) below

✓ No

If no, why not? Please provide details below.

Additional details:

Actual location if the caller is not recorded at stage 1 PSAP. This is recorded at stage 2 and not available.

### 6. Reporting

6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

Yes

Ireland

□ No If no, why not?

Additional details: Shared with MNOs and regulator. Not shared routinely with handset OS providers.

#### 6.2 If yes, what is the frequency of these reports?

□ Monthly

☑ Quarterly

□ Annually

Additional details:

### 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

- Yes, I send a specific email to MNOs and OS providers when I notice unusual error rates
- Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)
- ✓ No

#### 7. Others

**7.1** Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

n/a

Ireland

**7.2 List the companies/organisations that helped in deploying AML in your country** 

No information available



Italy

Italy

#### 1. AML coverage in the country

#### 1.1 Is AML operational in the whole country?

- Yes
- □ No If no, why not?
- Additional details:

#### 1.2 For which operating systems is AML working in your country?

- Android
- ☑ iOS (Apple)
- □ Others (please specify)

Additional def	tails:
----------------	--------

No information from Huawei regarding the relations of its operational system

### **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

- Yes
- □ No If no, why not?

#### 1.4 In what year was AML activated in your country?

For Android

Italy

June 2022

For iOS (Apple)

October 2021

Additional details:

#### **1.5** For which emergency service is AML working?

#### **1.6** For which emergency numbers is AML activated?

Number		For Android	For iOS (Apple)
	112	<b>v</b>	<b>v</b>
Other:	113 (police)	<b>v</b>	<b>v</b>
Other:	115 (fire & rescue)	V	V
Other:	118 (emergency medical services)	V	~
Other:	1530	•	<b>v</b>

### 2. Legislation

Italy

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

Paragraph 5, Art. 98-vicies bis Law Decree number 207/2021. https://www.gazzettaufficiale.it/eli/gu/2021/12/09/292/so/43/sg/pdf

#### 3. End-point and transmission

#### **3.1 How are the AML messages transmitted to the end-point?**

Transmission Method	For Android	For iOS (Apple)
SMS to short number		
SMS to long number	✓	•
HTTPS	•	
Additional details:		

3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?

- Not an issue. HTTPS messages always contain MSISDN
- The HTTPS and SMS AML messages are matched using the IMEI/Time Stamp as a common identifier to find the MSISDN
- The AML location information is pushed to the PSAP call taker even without the MSISDN
- The AML message is discarded if the MSISDN cannot be obtained

Additional details:

Italy

### **3.3 Is the transmission of the AML message free to the caller (message `zero-rated')?**

- Yes
- 🗆 No

Additional details:

The cost of data connection for HTTPS message can use data consumption of costumer's contract



#### 3.4 Which organisation maintains the AML end-point?

Ministry of Interior -	CED Interforze
------------------------	----------------

### **3.5** Are several AML messages received during the duration of the call?

	Yes	No
For Android	<b>v</b>	
For iOS	<b>v</b>	
Additional details:		

### **3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?**

	Seconds
For Android	The first message after 10 sec from call; the second after 25 from call and then every 60 sec
	up to the end of call
For iOS	The first message after 20 sec from call and then every time the caller is moving

Additional details:

### **3.7 Are AML positions presented directly to the call-taker's GIS and CAD display?**

Yes

✓ No

Additional details:

In every PSAP a system to display a AML position is available (provided from the CED Interforze AML platform)



- Automatically, over a data interface
- Manually, using voice communications
- Other (please specify)

Italy

Also with the manual system envisaged by the CED Interforze up to the complete coverage of the CUR (Single Response Centre)

### 4. AML & Other Evolutions

#### 4.1 Is AML activated for roaming?

		For Android	For iOS (Apple)
	Yes, using a long number		
	Yes, SMS to MCC + shortcode		
	Yes, but HTTPS only		
	Yes, Other (please specify)		
•	No		

Additional details:

Italy

Not yet. At the moment Italy is starting to extend AML also roaming inbound

#### 4.2 Is AML working for SMS to Emergency Numbers?

		For Android	For iOS (Apple)
	Yes, SMS-to-112		
	Yes, SMS-to-other - shortcode(s) (please provide details below)		
✓	No		
Additional details:			

#### 4.3 Is any additional data transmitted via AML?

		For Android	For iOS (Apple)
	Caller name		
	Caller medical info		
	Caller phone language		
	Automated detections (e.g. fall, crash)		
•	Other (Please specify)	V	<b>v</b>
	No		

Additional details:

Smartphone model and ICCCD

### **4.4 Do you have plans to activate AML using HTTPS in the next 12 months?**

🗆 Yes

Italy

□ No If no, why not?

Additional details:

Already activated

### **4.5** Are you evaluating any other transport methodologies for the provision of caller location information?

- □ Yes, using SIP messaging
- □ Yes, using HTML5
- □ Yes, using Network Induced Location Request (NI-LR)
- □ Yes, using other (please specify)
- 🗹 No

### 5. Facts & Figures

Italy

#### 5.1 Can you please share some statistics for the full year 2022 on:

Total number of mobile originated emergency communications for 2022 (mobile calls + SMS-to-shortcode)	The CED Interforze systems receive the location requests (RLoc) from the first level PSAPs. • From Google: 37 million • From Apple: 15 million. Data to be compared between those of the SMSHub and those of the PSAP1 with regards to respect for the total number of emergency calls from the mobile network.
% of mobile originated communications where network-provided location (e.g. Cell-ID, Timing advance etc) is received	n/a
% of mobile originated communications where an AML position is received	n/a
% of AML messages received within 60 seconds	n/a
% of AML messages received within 30 seconds	n/a
% of AML messages received within 15 seconds	n/a
% of AML messages with an accuracy below 100m	Around 96%
% of AML messages with an accuracy below 50m	Around 82%
% of AML messages with an accuracy below 30m	Around 67%
	NetworkHandsetOn averageOn average, a
Average comparison (expressed in metres) between accuracy provided by network and accuracy provided by handset	several few tens of hundred meters meters in the uniformly network- throughout based case in the national the case of territory (both metropolitan in areas up to a metropolitan few thousand areas and in meters in the rural areas)

case of rural areas

### 5.2 Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

- Yes, by carrying out periodic testing If yes, please provide details (e.g. process, frequency) below
- ✓ No

Italy

If no, why not? Please provide details below. Additional details:

The AML location is sent to the emergency response organisation and there is no provision for feedbacks about the accuracy. In the event of anomalies, the PSAPs send the appropriate reports to the CED.



6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

Yes

Italy

□ No If no, why not?

Additional details:

#### 6.2 If yes, what is the frequency of these reports?

- Monthly
- □ Quarterly
- □ Annually

Additional details:

### 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

- Yes, I send a specific email to MNOs and OS providers when I notice unusual error rates
- Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)
- 🗌 No

### 7. Others

**7.1** Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

n/a

Italy

### **7.2 List the companies/organisations that helped in deploying AML in your country**

No information available



**Country:** 

Latvia

### 1. AML coverage in the country

#### 1.1 Is AML operational in the whole country?

Yes

□ No If no, why not?

#### 1.2 For which operating systems is AML working in your country?

- Android
- ✓ iOS (Apple)
- □ Others (please specify)

Additional details:

### **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

- Yes
- □ No If no, why not?

#### 1.4 In what year was AML activated in your country?

Latvia

For Android	2020
For iOS (Apple)	2020
Additional details:	

#### **1.5 For which emergency service is AML working?**

Emergency Medical Service	
Fire & Rescue Service	
Police	
Coastguard	
Other (please specify) Additional details:	Natural Gas Service

#### **1.6** For which emergency numbers is AML activated?

Ν	umber	For Android	For iOS (Apple)	
	112	•	<b>v</b>	
Other:	110 (Police) 113	•		
Other: (Emergency Medical Services)		<b>v</b>		
114 Other: (Natural Gas Service)		V		
Other:	115 (Maritime Rescue Coordination Centre)	<b>v</b>		
Additiona	al details:			

163

#### 2. Legislation

Latvia

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

#### 1. Article 98 of the Law on Electronic Communications

https://likumi.lv/ta/id/334345-elektronisko-sakaru-likums (This document has not been officially translated by the <u>State Language</u> <u>Centre</u>.)

(9) lekšlietu ministrijas Informācijas centrs veido un uztur valsts informācijas sistēmu — izsaucēja atrašanās vietas informācijas datubāzi. Ministru kabinets nosaka izsaucēja atrašanās vietas informācijas datubāzē iekļaujamās ziņas, ziņu iekļaušanas prasības un glabāšanas termiņus, kā arī uz ārkārtas gadījumiem reaģējošās institūcijas, kurām piešķir piekļuvi datubāzē iekļautajām ziņām.

The Information Center of the Ministry of the Interior creates and maintains the state information system - the caller's location information database. The Cabinet of Ministers determines the information to be included in the caller's location information database, the requirements for including information and storage terms, as well as the institutions responding to emergency situations, which are granted access to the information included in the database.

**2. Rules for the processing of caller location data** (Cabinet of Ministers) https://likumi.lv/ta/id/337970-noteikumi-par-izsauceja-atrasanas-vietasdatu-apstradi (This document has not been officially translated by the <u>State</u> Language Centre.)

3. Centram ir tiesības saņemt un apstrādāt izsaucēja atrašanās vietas datus arī no pakalpojumu sniedzējiem, kas nav uzskatāmi par elektronisko sakaru komersantiem <u>Elektronisko sakaru likuma</u> izpratnē, bet ar kuriem ir vienošanās par izsaucēja atrašanās vietas datu nodošanu centram.

3. The center has the right to receive and process the caller's location data also from service providers who are not considered electronic communications merchants in the sense of the Electronic Communications Law, but with whom there is an agreement on the transfer of the caller's location data to the center.

#### 3. End-point and transmission

#### **3.1 How are the AML messages transmitted to the end-point?**

Transmission Method	For Android	For iOS (Apple)
SMS to short number	<b>~</b>	<b>v</b>
SMS to long number		
HTTPS		

Additional details:

Latvia

### **3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?**

	Not an issue. HTTPS messages always contain MSISDN
	The HTTPS and SMS AML messages are matched using the IMEI/Time Stamp as a common identifier to find the MSISDN
	The AML location information is pushed to the PSAP call taker even without the MSISDN
	The AML message is discarded if the MSISDN cannot be obtained
۸dditia	anal datailer

Additional details:

### **3.3 Is the transmission of the AML message free to the caller (message `zero-rated')?**

- Yes
- 🗌 No

Additional details:

#### 3.4 Which organisation maintains the AML end-point?

Information Centre, Ministry of the Interior, Republic of Latvia

### 3.5 Are several AML messages received during the duration of the call?

	Yes	No
For Android	<b>v</b>	
For iOS		<b>v</b>
Additional details:		

### **3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?**

	Seconds
For Android	Location will be reported at 60s interval until the call ends.
For iOS	

Additional details:

Latvia

### **3.7 Are AML positions presented directly to the call-taker's GIS and CAD display?**

<u>۲</u>
----------

□ No

Additional details:

#### **3.8** How is the location information transmitted from the endpoint/PSAP receiving the AML to (other) PSAPs in the country?

- Automatically, over a data interface
- Manually, using voice communications
- Other (please specify)

### 4. AML & Other Evolutions

#### 4.1

Latvia

		For Android	For iOS (Apple)	For Other (Please specify)
	Yes, using a long number			
	Yes, SMS to MCC + shortcode			
	Yes, but HTTPS only			
	Yes, Other (please specify)			
•	No			
Add	itional details:			

#### **4.2 Is AML working for SMS to Emergency Numbers?**

		For Android	For iOS (Apple)
	Yes, SMS-to-112		
	Yes, SMS-to-other - shortcode(s) (please provide details below)		
✓	No		
Add	litional details:		

#### 4.3 Is any additional data transmitted via AML?

		For Android	For iOS (Apple)
	Caller name		
	Caller medical info		
	Caller phone language		
	Automated detections (e.g. fall, crash)		
	Other (Please specify)		
<b>v</b>	No		

Additional details:

### **4.4 Do you have plans to activate AML using HTTPS in the next 12 months?**

🗌 Yes

Latvia

■ No If no, why not?

Additional details:

No advantage identified

### **4.5** Are you evaluating any other transport methodologies for the provision of caller location information?

- $\Box$  Yes, using SIP messaging
- □ Yes, using HTML5
- □ Yes, using Network Induced Location Request (NI-LR)
- □ Yes, using other (please specify)
- 🗹 No

#### 5. Facts & Figures

Latvia

#### 5.1 Can you please share some statistics for the full year 2022 on:

Total number of mobile originated emergency communications for 2022 (mobile calls + SMS-to-shortcode)	n/a	
% of mobile originated communications where network-provided location (e.g. Cell-ID, Timing advance etc) is received	n/a	
% of mobile originated communications where an AML position is received	n/a	
% of AML messages received within 60 seconds	100%	
% of AML messages received within 30 seconds	99%	
% of AML messages received within 15 seconds	98 %	
% of AML messages with an accuracy below 100m	20-99m: 65%	
% of AML messages with an accuracy below 50m	n/a	
% of AML messages with an accuracy below 30m	<20m: 20%	
	Network	Handset
Average comparison (expressed in metres) between accuracy provided by network and accuracy provided by handset	n/a	n/a

### 5.2 Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

- Yes, by carrying out periodic testing
  - If yes, please provide details (e.g. process, frequency) below
- ✓ No

If no, why not? Please provide details below. Additional details:



6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

Yes

Latvia

✓ No If no, why not?

Additional details:

#### 6.2 If yes, what is the frequency of these reports?

- □ Monthly
- □ Quarterly
- □ Annually

Additional details:

### 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

•		•	email	to	MNOs	and O	S providers	when I	notic	e
unus	sual error	rates								
	-									-

- Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)
- 🗌 No



7.1 Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

n/a

Latvia

**7.2** List the companies/organisations that helped in deploying AML in your country

LMT, TET, CSC telecom.



**Country:** 

Lithuania

### 1. AML coverage in the country

#### 1.1 Is AML operational in the whole country?

🗹 Yes

□ No If no, why not?

Additional details:

#### 1.2 For which operating systems is AML working in your country?

- Android
- ✓ iOS (Apple)
- □ Others (please specify)

Additional details:

### **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

Yes

# Lithuania

#### 1.4 In what year was AML activated in your country?

For Android	2016	
For iOS (Apple)	2018	
Additional details:		

#### **1.5** For which emergency service is AML working?

# 1.6 For which emergency numbers is AML activated?NumberFor<br/>Android<br/>(Apple)112Image: Colspan="2">Image: Colspan="2" Image: Colspan="2">Image: Colspan="2">Image: Colspan="2" Image: Colspan="2">Image: Colspan="2" Image: Colspan="2" Image: Colspan="2" Image: Colspan="2">Image: Colspan="2" Image: Colspan="" Image: Colspan="2" Image: Colspan="2"



### 2. Legislation

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

Law on Emergency Response Centre (link) Law on Electronic Communications (link) Bylaws of the Information System of the Emergency Response Centre (link)

#### 3. End-point and transmission

#### **3.1** How are the AML messages transmitted to the end-point?

Transmission Method	For Android	For iOS (Apple)
SMS to short number	•	•
SMS to long number		
HTTPS		

Additional details:

Lithuania

### **3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?**

	Not an issue. HTTPS messages always contain MSISDN
	The HTTPS and SMS AML messages are matched using the IMEI/Time Stamp as a common identifier to find the MSISDN
	The AML location information is pushed to the PSAP call taker even without the MSISDN
	The AML message is discarded if the MSISDN cannot be obtained
۸ dditia	anal dataila.

Additional details:

### **3.3 Is the transmission of the AML message free to the caller (message `zero-rated')?**

- Yes
- No

Additional details:

#### 3.4 Which organisation maintains the AML end-point?

Emergency Response Centre

### **3.5** Are several AML messages received during the duration of the call?

	Yes	Νο
For Android		•
For iOS		•
Additional details:		

### **3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?**

Seconds

For Android

Lithuania

For iOS

Additional details:

### **3.7 Are AML positions presented directly to the call-taker's GIS and CAD display?**

✓	Yes
---	-----

□ No

Additional details:

#### **3.8** How is the location information transmitted from the endpoint/PSAP receiving the AML to (other) PSAPs in the country?

- Automatically, over a data interface
- Manually, using voice communications
- Other (please specify)

# Lithuania

### 4. AML & Other Evolutions

#### 4.1 Is AML activated for roaming?

		For Android	For iOS (Apple)
	Yes, using a long number		
	Yes, SMS to MCC + shortcode		
	Yes, but HTTPS only		
	Yes, Other (please specify)		
•	No		

Additional details:

#### 4.2 Is AML working for SMS to Emergency Numbers?

		For Android	For iOS (Apple)	
•	Yes, SMS-to-112	<b>v</b>		
	Yes, SMS-to-other - shortcode(s) (please provide details below)			
	No			
Add	itional details:			

# Lithuania

#### 4.3 Is any additional data transmitted via AML?

		For Android	For iOS (Apple)
	Caller name		
	Caller medical info		
	Caller phone language		
	Automated detections (e.g. fall, crash)		
	Other (Please specify)		
•	No		

Additional details:

## **4.4 Do you have plans to activate AML using HTTPS in the next 12 months?**

🗌 Yes

No

If no, why not? **Need for additional development of HTTPS based endpoint** 

Additional details:

# 4.5 Are you evaluating any other transport methodologies for the provision of caller location information?

- ✓ Yes, using SIP messaging
- ✓ Yes, using HTML5
- □ Yes, using Network Induced Location Request (NI-LR)
- $\Box$  Yes, using other (please specify)
- 🗆 No

Additional details:



### 5. Facts & Figures

#### 5.1 Can you please share some statistics for the full year 2022 on:

Total number of mobile originated emergency communications for 2022 (mobile calls + SMS-to-shortcode)	Calls from mot 2.144.960 112SMS 40.62	
% of mobile originated communications where network-provided location (e.g. Cell-ID, Timing advance etc) is received	~95-98%	
% of mobile originated communications where an AML position is received	73%	
% of AML messages received within 60 seconds	89%	
% of AML messages received within 30 seconds	62%	
% of AML messages received within 15 seconds	12%	
% of AML messages with an accuracy below 100m	86%	
% of AML messages with an accuracy below 50m	75%	
% of AML messages with an accuracy below 30m	70%	
	Network	Handset
Average comparison (expressed in metres) between accuracy provided by network and accuracy provided by handset	300-5000m.	30m.

## **5.2** Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

- Yes, it is recorded and reported back by the emergency services If yes, please provide details of the process below
- Yes, by carrying out periodic testing If yes, please provide details (e.g. process, frequency) below
- No No

If no, why not? Please provide details below. Additional details:



### 6. Reporting

6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

Yes

□ No If no, why not?

Additional details:

#### 6.2 If yes, what is the frequency of these reports?

- Monthly
- □ Quarterly
- □ Annually

Additional details:

## 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

- Yes, I send a specific email to MNOs and OS providers when I notice unusual error rates
- Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)
- 🗌 No

Additional details:



### 7. Others

**7.1** Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

n/a

**7.2 List the companies/organisations that helped in deploying AML in your country** 

Innoseven Technologies



**Country:** 

Moldova

### 1. AML coverage in the country

#### 1.1 Is AML operational in the whole country?

Yes

□ No If no, why not?

Additional details:

#### 1.2 For which operating systems is AML working in your country?

- Android
- ✓ iOS (Apple)
- □ Others (please specify)

Additional details:

# **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

Yes

Additional details:

# 

#### 1.4 In what year was AML activated in your country?

For Android	2018
For iOS (Apple)	2020
Additional details:	

#### **1.5** For which emergency service is AML working?

Emergency Medical Service	
Fire & Rescue Service	
Police	
Coastguard	
<ul><li>Other (please specify)</li><li>Additional details:</li></ul>	

#### 1.6 For which emergency numbers is AML activated?

Nu	mber	For Android	For iOS (Apple)
1	12	<b>v</b>	<b>~</b>
Other:	901 (old _number)	V	
Other:	902 (old 	V	
Other:	903 (old _number)_	V	

Additional details: 901, 902, 903 will be removed as emergency numbers in the near future

J,

Moldova



### 2. Legislation

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

**1.** Law about creation of 112 service in Moldova: <u>http://lex.justice.md/index.php?action=view&view=doc&lang=1&id=354310</u>

**2.** Government decision about creation of 112 service in Moldova <u>http://lex.justice.md/index.php?action=view&view=doc&lang=1&id=363673</u>

**3.** Government decision of technical concept of informatic system 112 <u>http://lex.justice.md/index.php?action=view&view=doc&lang=1&id=363674</u>

**4.** Decision of regulatory authority in communication about caller location in emergency calls

http://www.anrceti.md/files/filefield/hca-nr.%2031din%2022.12.2016%20ct%20localiz-serv%20112.pdf

The documents are not available in English.

### 3. End-point and transmission

#### **3.1** How are the AML messages transmitted to the end-point?

Transmission Method	For Android	For iOS (Apple)
SMS to short number	•	•
SMS to long number		
HTTPS		

Additional details:

Moldova

### **3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?**

	Not an issue. HTTPS messages always contain MSISDN
	The HTTPS and SMS AML messages are matched using the IMEI/Time Stamp as a common identifier to find the MSISDN
	The AML location information is pushed to the PSAP call taker even without the MSISDN
	The AML message is discarded if the MSISDN cannot be obtained
۸dditia	anal datailer

Additional details:

# **3.3 Is the transmission of the AML message free to the caller (message `zero-rated')?**

- Yes
- No

Additional details:

#### 3.4 Which organisation maintains the AML end-point?

SNUAU 112

### 3.5 Are several AML messages received during the duration of the call?

	Yes	Νο
For Android	V	
For iOS		V
Additional details:		

### **3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?**

	Seconds	
For Android	60 seconds	
For iOS		_
Additional details:		

## **3.7 Are AML positions presented directly to the call-taker's GIS and CAD display?**

✓	Yes
---	-----

Moldova

□ No

Additional details:

#### **3.8** How is the location information transmitted from the endpoint/PSAP receiving the AML to (other) PSAPs in the country?

- Automatically, over a data interface
- Manually, using voice communications
- Other (please specify)



#### 4.1 Is AML activated for roaming?

		For Android	For iOS (Apple)
	Yes, using a long number		
	Yes, SMS to MCC + shortcode		
	Yes, but HTTPS only		
	Yes, Other		
	No		
ام ۸	itional dataila.		

Additional details:

No information

#### 4.2 Is AML working for SMS to Emergency Numbers?

		For Android	For iOS (Apple)	
	Yes, SMS-to-112			
	Yes, SMS-to-other - shortcode(s) (please provide details below)			
<b>~</b>	No			
Add	itional details:			

# Moldova

#### 4.3 Is any additional data transmitted via AML?

		For Android	For iOS (Apple)
	Caller name		
	Caller medical info		
	Caller phone language		
	Automated detections (e.g. fall, crash)		
	Other (Please specify)		
•	No		

Additional details:

# **4.4 Do you have plans to activate AML using HTTPS in the next 12 months?**

🗌 Yes

■ No If no, why not?

Additional details:

Plan to activate in the next 24 months

## **4.5** Are you evaluating any other transport methodologies for the provision of caller location information?

- □ Yes, using SIP messaging
- □ Yes, using HTML5
- □ Yes, using Network Induced Location Request (NI-LR)
- $\Box$  Yes, using other (please specify)
- 🗆 No

Additional details:

#### No information

# Moldova



### 5. Facts & Figures

#### 5.1 Can you please share some statistics for the full year 2022 on:

Total number of mobile originated emergency communications for 2022 (mobile calls + SMS-to-shortcode)	875.802	
% of mobile originated communications where network-provided location (e.g. Cell-ID, Timing advance etc) is received	82,19%	
% of mobile originated communications where an AML position is received	58,92%	
% of AML messages received within 60 seconds	97,36%	
% of AML messages received within 30 seconds	93,98%	
% of AML messages received within 15 seconds	90,43%	
% of AML messages with an accuracy below 100m	94,13%	
% of AML messages with an accuracy below 50m	85,26%	
% of AML messages with an accuracy below 30m	78,98%	
	Network	Handset
Average comparison (expressed in metres) between accuracy provided by network and accuracy provided by handset	n/a	n/a

## 5.2 Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

- Yes, by carrying out periodic testing If yes, please provide details (e.g. process, frequency) below
- ✓ No
- If no, why not? Please provide details below.





### 6. Reporting

6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

Yes

□ No If no, why not?

Additional details: Only with Google

#### 6.2 If yes, what is the frequency of these reports?

- Monthly
- □ Quarterly
- Annually

Additional details:

# 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

- Yes, I send a specific email to MNOs and OS providers when I notice unusual error rates
- Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)
- No

Additional details:

### 7. Others

Moldova

### **7.1** Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

In November 2022, the 112 Service received a call from a lady who could not speak, she was actually choking, but she was aware that she could react with interjections to the operator's questions. Thanks to AML, the person's house was identified and the ambulance crew was sent.

It turned out that the lady was suffering from a severe asthma attack. The lady received medical care and was very grateful.

### **7.2 List the companies/organisations that helped in deploying AML in your country**

Google, Apple, Ericsson, CSAM Health.

Montenegro

Information provided by EENA based on information available

**Country:** 

### 1. AML coverage in the country

#### 1.1 Is AML operational in the whole country?

Yes

□ No If no, why not?

Additional details:

#### 1.2 For which operating systems is AML working in your country?

- Android
- □ iOS (Apple)
- □ Others (please specify)

Additional details:

# **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

🗆 Yes

□ No If no, why not?

Additional details:

No information

6

# Montenegro

#### 1.4 In what year was AML activated in your country?

For Android	2022
Additional details:	

#### **1.5 For which emergency service is AML working?**

1.6 For which emergency numbe	ers is AML activated?
No information	
Additional details:	
□ Other (please specify)	
Coastguard	
Police	
□ Fire & Rescue Service	
Emergency Medical Service	

#### **1.6 For which emergency numbers is AML activated? Number** 112 **III**

Additional details:

### 2. Legislation

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

### 3. End-point and transmission

#### 3.1 How are the AML messages transmitted to the end-point?

Transmission Method	For Android
SMS to short number	
SMS to long number	
HTTPS	
Additional details:	
No information	

Montenegro

## **3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?**

	Not an issue. HTTPS messages always contain MSISDN
	The HTTPS and SMS AML messages are matched using the IMEI/Time Stamp as a common identifier to find the MSISDN
	The AML location information is pushed to the PSAP call taker even without the MSISDN
	The AML message is discarded if the MSISDN cannot be obtained
Additio	nal details:
No info	ormation

## **3.3 Is the transmission of the AML message free to the caller (message 'zero-rated')?**

	Yes
--	-----

🗌 No

Additional details:

No information

#### 3.4 Which organisation maintains the AML end-point?

	Yes	Νο
For Android		
Additional details:		

## 3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?

Seconds

H.

For Android

No information

Additional details:

#### No information

# **3.7 Are AML positions presented directly to the call-taker's GIS and CAD display?**

Yes

□ No

Additional details:

No information

#### **3.8** How is the location information transmitted from the endpoint/PSAP receiving the AML to (other) PSAPs in the country?

Automatically, over a data interface

Manually, using voice communications

Other (please specify)

#### 4.1 Is AML activated for roaming?

Montenegro

	For Android
Yes, using a long number	
Yes, SMS to MCC + shortcode	
Yes, but HTTPS only	
Yes, Other (please specify)	
No	

Additional details:

#### 4.2 Is AML working for SMS to Emergency Numbers?

		For Android
	Yes, SMS-to-112	
	Yes, SMS-to-other - shortcode(s) (please provide details below)	
	No	
Add	itional details:	
No i	nformation	

#### 4.3 Is any additional data transmitted via AML?

	For Android
Caller name	
Caller medical info	
Caller phone language	
Automated detections (e.g. fall, crash)	
Other (Please specify)	
No	

Additional details:

No information

# **4.4 Do you have plans to activate AML using HTTPS in the next 12 months?**

🗌 Yes

□ No If no, why not?

Additional details:

No information

# **4.5** Are you evaluating any other transport methodologies for the provision of caller location information?

- □ Yes, using SIP messaging
- □ Yes, using HTML5
- □ Yes, using Network Induced Location Request (NI-LR)
- $\Box$  Yes, using other (please specify)
- 🗆 No

Additional details:

Montenegro

### 5. Facts & Figures

#### 5.1 Can you please share some statistics for the full year 2022 on:

Total number of mobile originated emergency communications for 2022 (mobile calls + SMS-to-shortcode)	n/a	
% of mobile originated communications where network-provided location (e.g. Cell-ID, Timing advance etc) is received	n/a	
% of mobile originated communications where an AML position is received	n/a	
% of AML messages received within 60 seconds	n/a	
% of AML messages received within 30 seconds	n/a	
% of AML messages received within 15 seconds	n/a	
% of AML messages with an accuracy below 100m	n/a	
% of AML messages with an accuracy below 50m	n/a	
% of AML messages with an accuracy below 30m	n/a	
	Network	Handset
Average comparison (expressed in metres) between accuracy provided by network and accuracy provided by handset	n/a	n/a

## 5.2 Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

□ Yes, it is recorded and reported back by the emergency services If yes, please provide details of the process below

Yes, by carrying out periodic testing

If yes, please provide details (e.g. process, frequency) below

🗆 No

If no, why not? Please provide details below. Additional details:

No information

×.

### 6. Reporting

6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

🗆 Yes

□ No If no, why not?

Additional details:

No information

#### 6.2 If yes, what is the frequency of these reports?

- □ Monthly
- □ Quarterly
- □ Annually
- □ Other (please

Additional details:

No information

## 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

Yes, I send a specific email to MNOs and OS providers when I notice
unusual error rates
Veg. Twee spethod to inform MNOs and OC providers when T

- Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)
- 🗌 No

Additional details:

Montenegro

### 7. Others

**7.1** Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

n/a

**7.2** List the companies/organisations that helped in deploying AML in your country



**Country:** 

Netherlands

### **1.** AML coverage in the country

#### 1.1 Is AML operational in the whole country?

Yes

□ No If no, why not?

Additional details:

#### 1.2 For which operating systems is AML working in your country?

- Android
- ✓ iOS (Apple)
- ☑ Others (please specify)

Additional details:

HarmonyOS (Huawei)

# **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

🗌 Yes

✓ No If no, why not?

Additional details:

Technically we could, but we don't differentiate this in our reporting

#### 1.4 In what year was AML activated in your country?

For Android	2019
For iOS (Apple)	2019
For HarmonyOS (Huawei)	2022
Additional details:	

#### **1.5 For which emergency service is AML working?**

Emergency Medical Service	
Fire & Rescue Service	
Police	
Coastguard	
$\Box$ Other (please specify)	
Additional details:	

#### 1.6 For which emergency numbers is AML activated?

Num	ber	For Android	For iOS (Apple)	For Harmony OS (Huawei)
11	2	✓	✓	V
Other:	911	<b>v</b>	•	<b>v</b>

Additional details:

911 is not publicly communicated, but works just like 112 on mobile phones in the Netherlands

### 2. Legislation

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

Dutch legislation: <u>Staatsblad 2022, 95 | Overheid.nl > Officiële</u> <u>bekendmakingen (officielebekendmakingen.nl)</u> This is related to "telecommunicatiewet": <u>wetten.nl - Regeling -</u> <u>Telecommunicatiewet - BWBR0009950 (overheid.nl)</u>, Article 11.10.

### 3. End-point and transmission

#### 3.1 How are the AML messages transmitted to the end-point?

Transmission Method	For Android		For Harmony( (Huawei)	DS
SMS to short number	•	•	•	
SMS to long number				
HTTPS				In preparation
Additional details:				

## 3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?

	Not an issue.	HTTPS	messages	alwavs	contain	MSISDN
· · · · · ·	1100 411 100 401		meeeagee	annayo	concann	1010011

- The HTTPS and SMS AML messages are matched using the IMEI/Time Stamp as a common identifier to find the MSISDN
- $\hfill \square$  The AML location information is pushed to the PSAP call taker even without the MSISDN
- The AML message is discarded if the MSISDN cannot be obtained

Additional details:

Netherlands

## **3.3 Is the transmission of the AML message free to the caller (message `zero-rated')?**

	No
--	----

Additional details:

#### If transmitted by SMS to short code

#### 3.4 Which organisation maintains the AML end-point?

Politie, Eenheid LMS (Landelijke Meldkamer Samenwerking), using a commercial SMS service provider

### **3.5** Are several AML messages received during the duration of the call?

	Yes	No
For Android	<b>v</b>	
For iOS	<b>v</b>	
For HarmonyOS	<b>v</b>	
Additional details:		

## **3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?**

	Seconds
For Android	Google: Sampling Delta 20 sec, Tracking period : 1 min.
For iOS	
For HarmonyOS	

Additional details:

# **3.7** Are AML positions presented directly to the call-taker's GIS and CAD display?

Yes

✓ No

Additional details:

AML position data can be shown on GIS and CAD if needed by a single push of a button.

#### **3.8** How is the location information transmitted from the endpoint/PSAP receiving the AML to (other) PSAPs in the country?

- Automatically, over a data interface
- Manually, using voice communications
- Other (please specify)

### 4. AML & Other Evolutions

#### 4.1 Is AML activated for roaming?

		For Android	For iOS (Apple)	For HarmonyOS (Huawei)
	Yes, using a long number			
	Yes, SMS to MCC + shortcode			
	Yes, but HTTPS only			
	Yes, Other (please specify)			
✓	No			

Additional details:

The way roaming for international users can be implemented is subject of investigation (e.g. the "Belgium" solution which needs investments at each of the three Dutch network providers).

#### 4.2 Is AML working for SMS to Emergency Numbers?

		For Android	For iOS (Apple)	For HarmonyOS (Huawei)
•	Yes, SMS-to-112	•	•	
	Yes, SMS-to-other - shortcode(s) (please provide details below)			
$\Box$	No			
Add	litional details:			

#### 4.3 Is any additional data transmitted via AML?

	For Android	For iOS (Apple)	For HarmonyOS (Huawei)
Caller name			
Caller medical info			
Caller phone language			
Automated detections (e.g. fall, crash)			
Other (Please specify)			
No			

Additional details:

Additional available data is transmitted and presented to the PSAP agent, but as far as it is about AML SMS we only use location info. Future implementation of additional data will be for AML HTTP payload. Other sources for the PSAP agent are data on name/address of the subscriber/owner of the mobile number, location info from the mobile network infrastructure, etc.

# 4.4 Do you have plans to activate AML using HTTPS in the next 12 months?

Yes

□ No If no, why not?

Additional details:

## **4.5** Are you evaluating any other transport methodologies for the provision of caller location information?

- ✓ Yes, using SIP messaging
- □ Yes, using HTML5
- Yes, using Network Induced Location Request (NI-LR)
- $\Box$  Yes, using other (please specify)

### 5. Facts & Figures

#### 5.1 Can you please share some statistics for the full year 2022 on:

n/a	
n/a	
Network	Handset
n/a	n/a
	n/a n/a n/a n/a n/a n/a n/a n/a n/a Network

## 5.2 Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

Yes, it is recorded and reported back by the emergency services If yes, please provide details of the process below

- Yes, by carrying out periodic testing
  - If yes, please provide details (e.g. process, frequency) below
- ✓ No

If no, why not? Please provide details below.



Additional details:

There is no urgent need to spend our capacity on this.

### 6. Reporting

6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

□ Yes

✓ No If no, why not?

Additional details:

Our reporting does not provide adequate info yet

#### 6.2 If yes, what is the frequency of these reports?

□ Monthly

□ Quarterly

□ Annually

Additional details:

# 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

- Yes, I send a specific email to MNOs and OS providers when I notice unusual error rates
- Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)
- No

Additional details:

# Netherlands

## 7. Others

## **7.1** Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

n/a

## **7.2 List the companies/organisations that helped in deploying AML in your country**

The Politie organisation has it's own IT capacities. For SMS handling we contracted a SMSC provider. For arranging toll free shortcode and implementing this we work together with COIN (joined Dutch provider platform) and our Ministery.



**Country:** 

North Macedonia

## **1.** AML coverage in the country

#### 1.1 Is AML operational in the whole country?

Yes

□ No If no, why not?

Additional details:

#### 1.2 For which operating systems is AML working in your country?

- Android
- ☑ iOS (Apple)
- □ Others (please specify)

Additional details:

# **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

🗌 Yes

■ No If no, why not?

Additional details:

We receive same location data



#### 1.4 In what year was AML activated in your country?

For Android	2022
For iOS (Apple)	2023
Additional details:	

#### **1.5** For which emergency service is AML working?

Emergency Medical Service	
Fire & Rescue Service	
Police	
Coastguard	
$\Box$ Other (please specify)	
Additional details:	

#### 1.6 For which emergency numbers is AML activated?

Ν	umber	For Android	For iOS (Apple)	
	112	•	<b>v</b>	
Other:	195 (Crisis Management Centre)	V	<b>v</b>	
Other:	192 (Police)	•		Activated in May 2023
Other:	193 (Fire and Rescue)			Activated in May 2023
Other:	194 (Emergency Medical Services)	V		Activated in May 2023



## 2. Legislation

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

<u>https://aek.mk/wp-</u> <u>content/uploads/2015/10/k2 attachments 20151029 pravilnik za edinstveni</u> <u>ot evropski broj za itni povici 112.pdf</u>



### 3. End-point and transmission

#### **3.1 How are the AML messages transmitted to the end-point?**

Transmission Method	For Android	For iOS (Apple)
SMS to short number	<b>v</b>	•
SMS to long number		
HTTPS		

Additional details:

## **3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?**

	Not an issue. HTTPS messages always contain MSISDN
	The HTTPS and SMS AML messages are matched using the IMEI/Time Stamp as a common identifier to find the MSISDN
	The AML location information is pushed to the PSAP call taker even without the MSISDN
	The AML message is discarded if the MSISDN cannot be obtained
Additio	onal details:

# **3.3 Is the transmission of the AML message free to the caller (message 'zero-rated')?**

- Yes
- No

Additional details:

#### 3.4 Which organisation maintains the AML end-point?

Crisis Management Centre, 112 Centre



## 3.5 Are several AML messages received during the duration of the call?

	Yes	Νο
For Android		V
For iOS		V
Additional details:		

## **3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?**

Seconds

For Android

For iOS

Additional details:

# **3.7 Are AML positions presented directly to the call-taker's GIS and CAD display?**

✓	Yes
---	-----

□ No

Additional details:

#### **3.8** How is the location information transmitted from the endpoint/PSAP receiving the AML to (other) PSAPs in the country?

- Automatically, over a data interface
- Manually, using voice communications
- Other (please specify)



## 4. AML & Other Evolutions

#### 4.1 Is AML activated for roaming?

		For Android	For iOS (Apple)
•	Yes, using a long number	V	<b>v</b>
	Yes, SMS to MCC + shortcode		
	Yes, but HTTPS only		
	Yes, Other (please specify)		
	No		

Additional details:

#### 4.2 Is AML working for SMS to Emergency Numbers?

		For Android	For iOS (Apple)	
✓	Yes, SMS-to-112	<b>v</b>		
	Yes, SMS-to-other - shortcode(s) (please provide details below)			
	No			
Add	itional details:			
Sho	uld be available soon fo	or Apple iOS		



	For Android	For iOS (Apple)
Caller name		
Caller medical info		
Caller phone language		
Automated detections (e.g. fall, crash)		V
Other (Please specify)		
No		

Additional details:

## 4.4 Do you have plans to activate AML using HTTPS in the next 12 months?

Yes

□ No If no, why not?

Additional details:

With 2<sup>nd</sup> phase of upgrade

## 4.5 Are you evaluating any other transport methodologies for the provision of caller location information?

- ✓ Yes, using SIP messaging
- □ Yes, using HTML5
- □ Yes, using Network Induced Location Request (NI-LR)
- □ Yes, using other (please specify)
- 🗆 No

Additional details:

#### Plan to implement SIP Location services with Apple and Macedonian Telecom



### 5. Facts & Figures

#### 5.1 Can you please share some statistics for the full year 2022 on:

Total number of mobile originated emergency communications for 2022 (mobile calls + SMS-to-shortcode)	n/a	
% of mobile originated communications where network-provided location (e.g. Cell-ID, Timing advance etc) is received	n/a	
% of mobile originated communications where an AML position is received	n/a	
% of AML messages received within 60 seconds	n/a	
% of AML messages received within 30 seconds	n/a	
% of AML messages received within 15 seconds	n/a	
% of AML messages with an accuracy below 100m	n/a	
% of AML messages with an accuracy below 50m	n/a	
% of AML messages with an accuracy below 30m	n/a	
	Network	Handset
Average comparison (expressed in metres) between accuracy provided by network and accuracy provided by handset	n/a	n/a

## **5.2** Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

- Yes, it is recorded and reported back by the emergency services If yes, please provide details of the process below
- Yes, by carrying out periodic testing If yes, please provide details (e.g. process, frequency) below
- ✓ No

If no, why not? Please provide details below. Additional details:





## 6. Reporting

6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

Yes

□ No If no, why not?

Additional details:

#### 6.2 If yes, what is the frequency of these reports?

□ Monthly

☑ Quarterly

□ Annually

Additional details:

## 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

- Yes, I send a specific email to MNOs and OS providers when I notice unusual error rates
- Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)
- ✓ No



### 7. Others

**7.1** Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

n/a

**7.2 List the companies/organisations that helped in deploying AML in your country** 

Beta 80, ICS Consulting, A1, Macedonian Telecom.



**Country:** 

Norway

## **1.** AML coverage in the country

#### 1.1 Is AML operational in the whole country?

Yes

□ No If no, why not?

Additional details:

#### 1.2 For which operating systems is AML working in your country?

- Android
- ✓ iOS (Apple)
- □ Others (please specify)

Additional details:

# **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

🗌 Yes

✓ No If no, why not?

#### 1.4 In what year was AML activated in your country?

For Android	2018
For iOS (Apple)	2019
Additional details:	

#### **1.5** For which emergency service is AML working?

Emergency Medical Service	
Fire & Rescue Service	
Police	
Coastguard	
<ul><li>Other (please specify)</li><li>Additional details:</li></ul>	

## 1.6 For which emergency numbers is AML activated?

Number		Android	(Apple)
	112	•	•
Other:	110 (Fire and Rescue)	V	•
Other:	113 (Emergency Medical Services)	V	V
Other:	1412		•

Additional details:

Norway





## 2. Legislation

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

AML not specifically regulated but there are requirements on accuracy that require handset technology.

### 3. End-point and transmission

#### **3.1 How are the AML messages transmitted to the end-point?**

Transmission Method	For Android	For iOS (Apple)
SMS to short number	•	•
SMS to long number		
HTTPS		

Additional details:

Norway

## **3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?**

	Not an issue. HTTPS messages always contain MSISDN
	The HTTPS and SMS AML messages are matched using the IMEI/Time Stamp as a common identifier to find the MSISDN
	The AML location information is pushed to the PSAP call taker even without the MSISDN
	The AML message is discarded if the MSISDN cannot be obtained
۸dditia	anal datailer

Additional details:

# **3.3 Is the transmission of the AML message free to the caller (message `zero-rated')?**

- Yes
- 🗌 No

Additional details:

#### 3.4 Which organisation maintains the AML end-point?

Nasjonal Referansedatabase - NRDB (portabilty database)

## 3.5 Are several AML messages received during the duration of the call?

	Yes	Νο
For Android	<b>v</b>	
For iOS		•
Additional details:		

## **3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?**

	Seconds
For Android	0 second; 10 seconds; every 30 seconds
For iOS	

#### Additional details:

Norway

## **3.7 Are AML positions presented directly to the call-taker's GIS and CAD display?**

Y Y
-----

□ No

Additional details:

#### **3.8** How is the location information transmitted from the endpoint/PSAP receiving the AML to (other) PSAPs in the country?

- Automatically, over a data interface
- Manually, using voice communications
- Other (please specify)

#### **AML & Other Evolutions** 4.

#### 4.1 Is AML activated for roaming?

		For Android	For iOS (Apple)
•	Yes, using a long number	•	
	Yes, SMS to MCC + shortcode		
	Yes, but HTTPS only		
	Yes, Other (please specify)		
	No		

Additional details:

Norway

#### 4.2 Is AML working for SMS to Emergency Numbers?

		For Android	For iOS (Apple)	
•	Yes, SMS-to-112	<b>v</b>		
•	Yes, SMS-to-other - shortcode(s) (please provide details below)	<b>v</b>		110; 113
	No			
Add	itional details:			

#### 4.3 Is any additional data transmitted via AML?

		For Android	For iOS (Apple)
	Caller name		
	Caller medical info		
	Caller phone language		
	Automated detections (e.g. fall, crash)		
	Other (Please specify)		
_			

No

Norway

Additional details:

Caller name and address is received on each call, but not via AML.

## **4.4 Do you have plans to activate AML using HTTPS in the next 12 months?**

🗌 Yes

■ No If no, why not?

Additional details: The success rates with SMS are good enough.

## **4.5** Are you evaluating any other transport methodologies for the provision of caller location information?

- $\Box$  Yes, using SIP messaging
- $\Box$  Yes, using HTML5
- □ Yes, using Network Induced Location Request (NI-LR)
- $\Box$  Yes, using other (please specify)
- 🗹 No



Norway

#### 5.1 Can you please share some statistics for the full year 2022 on:

Total number of mobile originated emergency communications for 2022 (mobile calls + SMS- n/a to-shortcode)

% of mobile originated communications where network-provided location (e.g. Cell-ID, Timing r advance etc) is received

% of mobile originated communications where an AML position is received

% of AML messages received within 60 seconds

% of AML messages received within 30 seconds

% of AML messages received within 15 seconds

% of AML messages with an accuracy below 100m

% of AML messages with an accuracy below 50m

% of AML messages with an accuracy below 30m

Average comparison (expressed in metres) between accuracy provided by network and accuracy provided by handset

n/a	
emergency se	ervices, where
n/a	
n/a	
n/a	
n/a	
About 90%	
n/a	
Network	Handset
n/a	n/a
	Around 80% emergency se over 70% is ac n/a n/a n/a n/a n/a About 90% n/a <b>Network</b>

## 5.2 Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

- $\square$  Yes, it is recorded and reported back by the emergency services If yes, please provide details of the process below
- Yes, by carrying out periodic testing

If yes, please provide details (e.g. process, frequency) below

🗆 No

If no, why not? Please provide details below.



6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

Yes

□ No If no, why not?

Additional details:

Norway

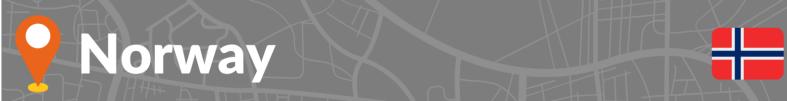
#### 6.2 If yes, what is the frequency of these reports?

- Monthly
- □ Quarterly
- Annually

Additional details:

# 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

- Yes, I send a specific email to MNOs and OS providers when I notice unusual error rates
- Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)
- No



### 7. Others

**7.1** Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

n/a

**7.2 List the companies/organisations that helped in deploying AML in your country** 

No information available



**Country:** 

Portugal

## 1. AML coverage in the country

#### 1.1 Is AML operational in the whole country?

🗹 Yes

□ No If no, why not?

Additional details:

#### 1.2 For which operating systems is AML working in your country?

- Android
- ✓ iOS (Apple)
- □ Others (please specify)

Additional details:

# **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

Yes

□ No If no, why not?

# Portugal



#### 1.4 In what year was AML activated in your country?

For Android	2020
For iOS (Apple)	2020
Additional details:	

#### **1.5** For which emergency service is AML working?

Emergency Medical Service	
Fire & Rescue Service	
Police	
Coastguard	
$\Box$ Other (please specify)	
Additional details: AML is received in the 112 Operatio	nal Centres (stage 1 PSAP) for all services

AML is received in the 112 Operational Centres (stage 1 PSAP) for all services and after processing, the location is sent to the 2nd level PSAPs in accordance with the operational protocols in force

#### 1.6 For which emergency numbers is AML activated?

Number		For Android	For iOS (Apple)
	112	<b>v</b>	•
Other:	911	<b>v</b>	•



## 2. Legislation

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

Electronic Communications Law See link : <u>ANACOM - Law No 16/2022</u>

# Portugal



### 3. End-point and transmission

#### 3.1 How are the AML messages transmitted to the end-point?

Transmission Method	For Android	For iOS (Apple)
SMS to short number		
SMS to long number	✓	<b>v</b>
HTTPS	•	

Additional details:

## **3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?**

	Not an issue. HTTPS messages always contain MSISDN
•	The HTTPS and SMS AML messages are matched using the IMEI/Time Stamp as a common identifier to find the MSISDN
	The AML location information is pushed to the PSAP call taker even without the MSISDN
	The AML message is discarded if the MSISDN cannot be obtained

Additional details:

# 3.3 Is the transmission of the AML message free to the caller (message `zero-rated')?

- Yes
- No

Additional details:

#### 3.4 Which organisation maintains the AML end-point?

General Secretariat of the ministry of Internal Administration



## 3.5 Are several AML messages received during the duration of the call?

	Yes	Νο
For Android	V	
For iOS		V
Additional details:		

## **3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?**

	Seconds
For Android	First fix, 15, 25
For iOS	20 seconds
Additional details:	

## **3.7 Are AML positions presented directly to the call-taker's GIS and CAD display?**

✓	Yes
---	-----

No

Additional details:

#### **3.8** How is the location information transmitted from the endpoint/PSAP receiving the AML to (other) PSAPs in the country?

- Automatically, over a data interface
- Manually, using voice communications
- Other (please specify)



## 4. AML & Other Evolutions

#### 4.1 Is AML activated for roaming?

		For Android	For iOS (Apple)
•	Yes, using a long number	<b>v</b>	
	Yes, SMS to MCC + short code		
	Yes, but HTTPS only		
	Yes, Other (please specify)		
	No		

Additional details:

AML was activated for roaming on March  $3^{rd}$  2023 (using a long number SMS and also for HTTPS)

#### **4.2 Is AML working for SMS to Emergency Numbers?**

	-	For Android	For iOS (Apple)
	Yes, SMS-to-112		
	Yes, SMS-to-other - short code(s) (please provide details below)		
✓	No		
Adc	litional details:		

# Portugal



#### 4.3 Is any additional data transmitted via AML?

		For Android	For iOS (Apple)
	Caller name		
	Caller medical info		
	Caller phone language		
	Automated detections (e.g. fall, crash)		
	Other (Please specify)		
•	No		

Additional details:

## 4.4 Do you have plans to activate AML using HTTPS in the next 12 months?

🗌 Yes

□ No If no, why not?

Additional details:

HTTPS already in use

## **4.5** Are you evaluating any other transport methodologies for the provision of caller location information?

- ✓ Yes, using SIP messaging
- □ Yes, using HTML5
- □ Yes, using Network Induced Location Request (NI-LR)
- $\Box$  Yes, using other (please specify)
- 🗌 No

# Portugal



### 5. Facts & Figures

#### 5.1 Can you please share some statistics for the full year 2022 on:

Total number of mobile originated emergency communications for 2022 (mobile calls + SMS-to-shortcode)	4.537.689 (Mobile Calls)
% of mobile originated communications where network-provided location (e.g. Cell-ID, Timing advance etc) is received	97,53% (Cell ID)
% of mobile originated communications where an AML position is received	39,70%
% of AML messages received within 60 seconds	88,76%
% of AML messages received within 30 seconds	84,47%
% of AML messages received within 15 seconds	65,36%
% of AML messages with an accuracy below 100m	81,72%
% of AML messages with an accuracy below 50m	67,94%
% of AML messages with an accuracy below 30m	36,15%
	Network Handset
Average comparison (expressed in metres) between accuracy provided by network and accuracy provided by handset	7.360m. 229m.

## 5.2 Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

 $\hfill \ensuremath{\square}$  Yes, it is recorded and reported back by the emergency services If yes, please provide details of the process below

Yes, by carrying out periodic testing
 If yes, please provide details (e.g. process, frequency) below

□ No

If no, why not? Please provide details below. Additional details:

Making 112 test calls and comparing the results of AML with data obtained through a high sensitivity GNSS device





## 6. Reporting

6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

Yes

□ No If no, why not?

Additional details:

#### 6.2 If yes, what is the frequency of these reports?

- Monthly
- □ Quarterly
- Annually

Additional details:

# 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

- Yes, I send a specific email to MNOs and OS providers when I notice unusual error rates
- Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)
- No

# Portugal



### 7. Others

**7.1** Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

n/a

**7.2 List the companies/organisations that helped in deploying AML in your country** 

No information available



**Country:** 

Romania

## **1.** AML coverage in the country

#### 1.1 Is AML operational in the whole country?

Yes

□ No If no, why not?

Additional details:

#### 1.2 For which operating systems is AML working in your country?

- Android
- ✓ iOS (Apple)
- ☑ Others (please specify)

Additional details:

HarmonyOS (Huawei)

# **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

Yes

□ No If no, why not?

# Romania

#### 1.4 In what year was AML activated in your country?

For Android	17.03.2020
For iOS (Apple)	27.03.2020
For HarmonyOS (Huawei)	HarmonyOS (Huawei)
Additional details:	

#### **1.5** For which emergency service is AML working?

- Emergency Medical Service
- ☑ Fire & Rescue Service
- Police
- □ Coastguard
- ✓ Other (please specify)

Gendarmerie, SPP (Protection and Guard Service), Counter-terrorism, TMC (Traffic Management Centre under National Company of Motorways and National Roads in Romania), AFER (Romanian Railway Authority), Ministry of National Defence, Labour Protection

Additional details:

The messages reach the AML endpoints administered by STS and inserted in the AML database. From this point the location is made available for all emergency services involved in managing the case.

1.6 For which emergency numbers is AML activated?					
Number	For Android	For iOS (Apple)	For HarmonyOS (Huawei)		
112	$\checkmark$	<b>v</b>	V		
Other: 113 (sms)	~		<b>v</b>		
Additional details:					

Romania

## 2. Legislation

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

- O.U.G. no. 34/2008 regarding the organisation and functioning of the National System for Emergency Calls, with the subsequent amendments and completions.
- Decision of the President of the National Authority for Communications no. 1023/2008 on establishing communications to the National Unique System for Emergency Calls, with the subsequent amendments and completions.

### 3. End-point and transmission

#### 3.1 How are the AML messages transmitted to the end-point?

Transmission Method	For Android		For HarmonyOS (Huawei)
SMS to short number	<b>~</b>	<b>~</b>	<b>v</b>
SMS to long number			
HTTPS	<b>v</b>		<b>v</b>

Additional details:

Romania

Data SMS for Android, Text SMS for iOS and Huawei. HTTPS for Android and Huawei.

## 3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?

- Not an issue. HTTPS messages always contain MSISDN
- The HTTPS and SMS AML messages are matched using the IMEI/Time Stamp as a common identifier to find the MSISDN
- The AML location information is pushed to the PSAP call taker even without the MSISDN
- The AML message is discarded if the MSISDN cannot be obtained

Additional details:

We are able to associate the IMSI code of the caller's SIM card with the caller's MSISDN by interrogating the subscriber database, and we can then extract the AML messages based on the IMSI information.

## **3.3 Is the transmission of the AML message free to the caller (message `zero-rated')?**

Yes

	No
--	----

#### **3.4 Which organisation maintains the AML end-point?**

Special Telecommunications Service (STS)

## **3.5** Are several AML messages received during the duration of the call?

	Yes	No
For Android	V	
For iOS		<b>v</b>
For HarmonyOS		•

Additional details:

Only the first position is sent for HarmonyOS and iOS.

## **3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?**

	Seconds
For Android	First Fix, 15 sec, 34 sec, every 60 sec.
For iOS	First Fix
For HarmonyOS	Only the first position is sent

Additional details:

# **3.7** Are AML positions presented directly to the call-taker's GIS and CAD display?

Yes

✓ No

Additional details:

The location is extracted from the AML database by the GIS/CAD using the CLI.

## Romania

#### **3.8** How is the location information transmitted from the endpoint/PSAP receiving the AML to (other) PSAPs in the country?

- Automatically, over a data interface
- Manually, using voice communications
- Other (please specify)

All AML location information is stored in a centralised database and is used to provide location responses to all requests sent by stage 1 and stage 2 PSAP clients, using the MLP Protocol.

## 4. AML & Other Evolutions

#### 4.1 Is AML activated for roaming?

		For Android	For iOS (Apple)	For HarmonyOS (Huawei)
	Yes, using a long number			
•	Yes, SMS to MCC + shortcode	V		
	Yes, but HTTPS only			
	Yes, Other (please specify)			
	No			
Add	itional details:			

#### 4.2 Is AML working for SMS to Emergency Numbers?

		For Android	For iOS (Apple)	For HarmonyOS (Huawei)
	Yes, SMS-to-112			
•	Yes, SMS-to-other - shortcode(s) (please provide details below)	<b>v</b>		<b>v</b>
	No			

Additional details:

The Emergency SMS Number is 113 and AML is supported for Android and Huawei. iOS doesn't support it yet.

#### 4.3 Is any additional data transmitted via AML?

	For Android	For iOS (Apple)	For HarmonyOS (Huawei)
Caller name			
Caller medical info			
Caller phone language			
Automated detections (e.g. fall, crash)			



Other (Please specify)			
------------------------	--	--	--

No

Additional details:

## 4.4 Do you have plans to activate AML using HTTPS in the next 12 months?

🗌 Yes

□ No If no, why not?

Additional details:

AML using HTTPS (not for iOS) is already active since the launch in 2020.

## **4.5** Are you evaluating any other transport methodologies for the provision of caller location information?

- ✓ Yes, using SIP messaging
- ✓ Yes, using HTML5
- □ Yes, using Network Induced Location Request (NI-LR)
- ✓ Yes, using other (please specify)
- 🗆 No

Additional details:

Geolocation solution based on HTML5 is implemented since 2019, and the possibility to implement an enhanced network-based location solution is currently under investigation. Also, the possibility to receive cell location information for SIP calls over 4G is being tested with MNOs.

Romania

### 5. Facts & Figures

#### 5.1 Can you please share some statistics for the full year 2022 on:

Total number of mobile originated emergency communications for 2022 (mobile calls + SMS-to-shortcode)

% of mobile originated communications where network-provided location (e.g. Cell-ID, Timing advance etc) is received

% of mobile originated communications where an AML position is received

% of AML messages received within 60 seconds

% of AML messages received within 30 seconds

% of AML messages received within 15 seconds

% of AML messages with an accuracy below 100m

% of AML messages with an accuracy below 50m

% of AML messages with an accuracy below 30m

Average comparison (expressed in metres) between accuracy provided by network and accuracy provided by handset

All mobile calls+SMS to 113: 933.776 Only emergency mobile calls+emergency SMSs: 5.463.633

99,971%

•	53.64% from a					
	70.02% from emergency					
	mobile calls	mobile calls				
ls	AML SMS: 95,9	96%				
15	AML HTTPS: 94,38%					
1	AML SMS: 88,3	33%				
ls	AML HTTPS: 84	AML HTTPS: 84,61%				
1-	AML SMS: 80,4	16%				
ls	AML HTTPS: 61,95%					
	AML SMS: 81,0	)3%				
	AML HTTPS: 82					
	AML SMS: 67,8	39%				
	AML HTTPS: 69,75%					
	AML SMS: 40,4	46%				
	5,24%					
	Network	Handset				
		AML SMS:				
	7600.00 m	348,71 m				
	7609,08 m	AML HTTPS:				
		302,79 m				

## 5.2 Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

- $\square$  Yes, it is recorded and reported back by the emergency services If yes, please provide details of the process below
- ─ Yes, by carrying out periodic testing

If yes, please provide details (e.g. process, frequency) below



🔽 No

If no, why not? Please provide details below. Additional details:

There is no automatic mechanism implemented to retrieve the actual incident location from the emergency services on the field. At the first level PSAP we validate the AML location during the interview with the caller when possible.

## 6. Reporting

6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

Yes

□ No If no, why not?

Additional details:

Romania

In order to analyse the AML error rate reported by Google, we extract statistics to support our testing. To support Huawei in implementing their proprietary solution, we provided testing support and analysed the received messages.

#### 6.2 If yes, what is the frequency of these reports?

Monthly	/
---------	---

□ Quarterly
-------------

Additional details:

There is no specific interval for the reports. After the first year from the launch, we provided metrics to Google and statistics to the MNOs to identify together ways to improve the error rate.

## 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

- Yes, I send a specific email to MNOs and OS providers when I notice unusual error rates
- Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)
- 🗌 No



Additional details:

We have established a multi level contact list with each MNO in order to report problems. We also exchange official papers between the management of STS and the CEOs of the MNOs to report critical issues and to request corrective measures to be taken. The national regulator is always informed about these actions.

## Romania

## 7. Others

## **7.1** Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

#### Story #1 Vaslui County

On October 23, 2022, 6:56 pm, a 45-second call made by a child, with associated subscription data from Braila county was received in the 112 Call center in Vaslui county with AML location from Bogdanesti, Vaslui county. The call was interrupted and the 112 call-taker redialled the number twice, but without success. The operator indexed the case under the UNIDENTIFIED CALL TYPE index node and called the main agencies. The child called again after 7 minutes when the emergency crews arrived at the location indicated in the AML messages where the child's father was being assaulted.

#### Story#2 Maramures County

At the Maramureș 112 Call Center, on October 9<sup>th</sup> 2022, a call was received about a 12 year boy that fell in a crevasse in the Gutâi mountains while riding a motocross bike. The call was located due to AML messages in a 30m radius in a forest area. The boy was extracted with the helicopter and transported to the hospital.

#### Story #3 Suceava County

On the night of the 3<sup>rd</sup> of October, a call from a Ukrainian phone number was received at the 112 Callcenter in Suceava. The man had crossed the border illegally to escape the war zone in his country and got lost in the mountains. The interview with the agencies was mediated in Russian by a 112 call-taker from a different county. The man was alone in the woods and he could hear wild animals close by. He was scared and said he didn't want to go back to his country. Due to having implemented AML for roamers in the Romanian emergency system, several DataSMS messages were received for this call, positioning the caller within a 23 meters radius, not far from the border. All emergency agencies were alerted and the man was found safe and sound.

## **7.2 List the companies/organisations that helped in deploying AML in your country**

ANCOM Telekom Romania Mobile Orange Romania Vodafone Romania Digi Mobile Romania Google LLC Apple Inc Huawei Romania



**Country:** 

Slovakia

## 1. AML coverage in the country

#### 1.1 Is AML operational in the whole country?

- Yes
- □ No If no, why not?

Additional details:

#### 1.2 For which operating systems is AML working in your country?

- Android
- ✓ iOS (Apple)
- ☑ Others (please specify)

Additional details:

HarmonyOS (Huawei)

## **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

- Yes
- □ No If no, why not?

Additional details:

## 1.4 In what year was AML activated in your country?

Slovakia

For Android	2022
For iOS (Apple)	2022
For HamonyOS (Huawei)	2021
Additional details:	

#### **1.5** For which emergency service is AML working?

Emergency Medical Service	
Fire & Rescue Service	
Police	
Coastguard	
$\Box$ Other (please specify)	
Additional details:	

#### **1.6 For which emergency numbers is AML activated?**

N	umber	For Android	For iOS (Apple)	For HarmonyOS (Huawei)
	112	✓	✓	<b>v</b>
Other:	150 (Fire & Rescue services)	V	V	V
Other:	155 (emergency medical services)	Y	V	V
Other:	158 (police)	V	V	V
Addition	al details:			

+





## 2. Legislation

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

Art. 111 section 7 of Act no. 452/2021 on emergency communications – MNOs are obliged to transfer caller location, including caller location originating from handset to the PSAP free of charge during emergency call (no. 112, 150, 155, 158).

### 3. End-point and transmission

#### 3.1 How are the AML messages transmitted to the end-point?

Transmission Method	For Android		For HarmonyOS (Huawei)
SMS to short number	<b>~</b>	•	<b>v</b>
SMS to long number			
HTTPS			
Additional details:			
SMS to 112 number			

## **3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?**

	Not an issue. HTTPS messages always contain MSISDN
	The HTTPS and SMS AML messages are matched using the IMEI/Time Stamp as a common identifier to find the MSISDN
	The AML location information is pushed to the PSAP call taker even without the MSISDN
	The AML message is discarded if the MSISDN cannot be obtained
Additic	onal details:

## **3.3 Is the transmission of the AML message free to the caller (message `zero-rated')?**

- Yes
- No

Additional details:

Slovakia

#### 3.4 Which organisation maintains the AML end-point?

Ministry of Interior of the Slovak Republic

	Yes	Νο
For Android	V	
For iOS	V	
For HarmonyOS		<b>v</b>
Additional details:		

## **3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?**

	Seconds
For Android	10s, 30s, then each 60s
For iOS	iOS defined - 20s (only if handset is moving)
For HarmonyOS	1x AML SMS in 5s-20s interval

Additional c	letails:
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Slovakia

## **3.7 Are AML positions presented directly to the call-taker's GIS and CAD display?**

Yes

□ No

Additional details:

#### **3.8** How is the location information transmitted from the endpoint/PSAP receiving the AML to (other) PSAPs in the country?

- Automatically, over a data interface
- Manually, using voice communications
- Other (please specify)

#### 4.1 Is AML activated for roaming?

Slovakia

		For Android	For iOS (Apple)	For HarmonyOS (Huawei)
	Yes, using a long number			
	Yes, SMS to MCC + shortcode			
	Yes, but HTTPS only			
	Yes, Other (please specify)			
✓	No			
Add	itional details:			

#### 4.2 Is AML working for SMS to Emergency Numbers?

		For Android	For iOS (Apple)	For HarmonyOS (Huawei)
<b>~</b>	Yes, SMS-to-112	<b>v</b>	•	
	Yes, SMS-to-other - shortcode(s) (please provide details below)			
	No			
Add	litional details:			

(<del>†</del>)

## Slovakia

#### 4.3 Is any additional data transmitted via AML?

		For Android	For iOS (Apple)	For HarmonyOS (Huawei)
	Caller name			
	Caller medical info			
	Caller phone language			
	Automated detections (e.g. fall, crash)			
	Other (Please specify)			
•	No			
Add	itional details:			

## **4.4 Do you have plans to activate AML using HTTPS in the next 12 months?**

🗌 Yes

■ No If no, why not?

Additional details:

Expecting standard supported by both iOS and Android, ideally including AML roaming

## **4.5** Are you evaluating any other transport methodologies for the provision of caller location information?

- ✓ Yes, using SIP messaging
- □ Yes, using HTML5
- □ Yes, using Network Induced Location Request (NI-LR)
- □ Yes, using other (please specify)
- 🗆 No

Additional details: As a long term evolution

## Slovakia

## 5. Facts & Figures

#### 5.1 Can you please share some statistics for the full year 2022 on:

Total number of mobile originated emergency communications for 2022 (mobile calls + SMS-to-shortcode)	n/a	
% of mobile originated communications where network-provided location (e.g. Cell-ID, Timing advance etc) is received	n/a	
% of mobile originated communications where an AML position is received	n/a	
% of AML messages received within 60 seconds	n/a	
% of AML messages received within 30 seconds	n/a	
% of AML messages received within 15 seconds	n/a	
% of AML messages with an accuracy below 100m	n/a	
% of AML messages with an accuracy below 50m	n/a	
% of AML messages with an accuracy below 30m	n/a	
	Network	Handset
Average comparison (expressed in metres) between accuracy provided by network and accuracy provided by handset	n/a	n/a

## 5.2 Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

- $\Box$  Yes, by carrying out periodic testing
  - If yes, please provide details (e.g. process, frequency) below
- ✓ No

If no, why not? Please provide details below. Additional details:





## 6. Reporting

6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

🗌 Yes

✓ No If no, why not?

Additional details:

#### 6.2 If yes, what is the frequency of these reports?

- □ Monthly
- □ Quarterly
- □ Annually

Additional details:

## 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

- Yes, I send a specific email to MNOs and OS providers when I notice unusual error rates
- Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)
- 🗌 No

Additional details:

Error are dealt with on case by case basis when they are noticed





**7.1** Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

n/a

7.2 List the companies/organisations that helped in deploying AML in your country

Apple, Google, Huawei, Ericsson, Orange, Slovak Telecom, O2 and SWAN

ŧ





**Slovenia** Information provided by EENA based on information available

## **1.** AML coverage in the country

#### 1.1 Is AML operational in the whole country?

- Yes
- □ No If no, why not?

Additional details:

AML working for three of four mobile operators

#### 1.2 For which operating systems is AML working in your country?

- Android
- ✓ iOS (Apple)
- □ Others (please specify)

Additional details:

## **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

🗆 Yes

□ No If no, why not?

Additional details:

No information

## Slovenia

#### 1.4 In what year was AML activated in your country?

For Android	2018
For iOS (Apple)	2020
Additional details:	

#### **1.5** For which emergency service is AML working?

Emergency Medical Service	
Fire & Rescue Service	
Police	
Coastguard	
□ Other (please specify)	
Additional details:	

# 1.6 For which emergency numbers is AML activated?NumberFor<br/>Android<br/>(Apple)112Image: Colspan="3">Image: Colspan="3">Image: Colspan="3">For iOS<br/>Android<br/>(Apple)112Image: Colspan="3">Image: Colspan="3"Image: Colspan="3">Image: Colspan="3" Image: Colspan=

Additional details:



## 2. Legislation

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

No information

## 3. End-point and transmission

#### **3.1** How are the AML messages transmitted to the end-point?

Transmission Method	For Android	For iOS (Apple)
SMS to short number	•	•
SMS to long number		
HTTPS		

Additional details:

Slovenia

## **3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?**

	Not an issue. HTTPS messages always contain MSISDN
	The HTTPS and SMS AML messages are matched using the IMEI/Time Stamp as a common identifier to find the MSISDN
	The AML location information is pushed to the PSAP call taker even without the MSISDN
	The AML message is discarded if the MSISDN cannot be obtained
۸ dditia	anal dataila

Additional details:

## **3.3 Is the transmission of the AML message free to the caller (message `zero-rated')?**

- Yes
- No

Additional details:

#### 3.4 Which organisation maintains the AML end-point?

Administration for Civil Protection and Disaster Relief, Ministry of Defence

## 3.5 Are several AML messages received during the duration of the call?

	Yes	Νο
For Android		
For iOS		
Additional details:		
No information		

## **3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?**

Seconds

For Android

For iOS

Additional c	letails:
--------------	----------

Slovenia

## **3.7 Are AML positions presented directly to the call-taker's GIS and CAD display?**

✓ Yes

No

Additional details:

#### **3.8** How is the location information transmitted from the endpoint/PSAP receiving the AML to (other) PSAPs in the country?

- Automatically, over a data interface
- Manually, using voice communications
- Other (please specify)

#### No information

## 4. AML & Other Evolutions

#### 4.1 Is AML activated for roaming?

		For Android	For iOS (Apple)	For Other (Please specify)
	Yes, using a long number			
	Yes, SMS to MCC + shortcode			
	Yes, but HTTPS only			
	Yes, Other (please specify)			
<b>~</b>	No			

Additional details:

#### 4.2 Is AML working for SMS to Emergency Numbers?

		For Android	For iOS (Apple)	
	Yes, SMS-to-112			
	Yes, SMS-to-other - shortcode(s) (please provide details below)			
✓	No			
Add	itional details:			

## Slovenia

#### 4.3 Is any additional data transmitted via AML?

		For Android	For iOS (Apple)
	Caller name		
	Caller medical info		
	Caller phone language		
	Automated detections (e.g. fall, crash)		
	Other (Please specify)		
•	No		

Additional details:

## **4.4 Do you have plans to activate AML using HTTPS in the next 12 months?**

🗌 Yes

□ No If no, why not?

Additional details:

No information

## **4.5** Are you evaluating any other transport methodologies for the provision of caller location information?

- □ Yes, using SIP messaging
- □ Yes, using HTML5
- □ Yes, using Network Induced Location Request (NI-LR)
- $\Box$  Yes, using other (please specify)
- 🗆 No

Additional details:

#### No information

## Slovenia

## 5. Facts & Figures

#### 5.1 Can you please share some statistics for the full year 2022 on:

Total number of mobile originated emergency communications for 2022 (mobile calls + SMS-to-shortcode)	n/a	
% of mobile originated communications where network-provided location (e.g. Cell-ID, Timing advance etc) is received	n/a	
% of mobile originated communications where an AML position is received	n/a	
% of AML messages received within 60 seconds	n/a	
% of AML messages received within 30 seconds	n/a	
% of AML messages received within 15 seconds	n/a	
% of AML messages with an accuracy below 100m	n/a	
% of AML messages with an accuracy below 50m	n/a	
% of AML messages with an accuracy below 30m	n/a	
	Network	Handset
Average comparison (expressed in metres) between accuracy provided by network and accuracy provided by handset	n/a	n/a

## **5.2** Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

 $\hfill\square$  Yes, it is recorded and reported back by the emergency services If yes, please provide details of the process below

 $\Box$  Yes, by carrying out periodic testing

If yes, please provide details (e.g. process, frequency) below

🗆 No

If no, why not? Please provide details below. Additional details:

#### No information



6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

□ Yes

□ No If no, why not?

Additional details:

Slovenia

No information available

#### 6.2 If yes, what is the frequency of these reports?

- □ Monthly
- □ Quarterly
- □ Annually

Additional details:

## 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

- Yes, I send a specific email to MNOs and OS providers when I notice unusual error rates
- Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)
- 🗌 No

Additional details:

#### No information available



Slovenia

**7.1** Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

n/a

**7.2** List the companies/organisations that helped in deploying AML in your country

No information available



Spain

Spain

## 1. AML coverage in the country

#### 1.1 Is AML operational in the whole country?

Yes

□ No If no, why not?

Additional details:

#### 1.2 For which operating systems is AML working in your country?

- Android
- ✓ iOS (Apple)
- □ Others (please specify)

Additional details:

## **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

Yes

🗆 No	If no, why not?
------	-----------------

Additional details:

ĨĽI

#### 1.4 In what year was AML activated in your country?

For Android	2021
For iOS (Apple)	2022
Additional details:	

#### **1.5** For which emergency service is AML working?

Emergency Medical Service	
Fire & Rescue Service	
Police	
Coastguard	
$\Box$ Other (please specify)	
Additional details:	

## 1.6 For which emergency numbers is AML activated?NumberFor<br/>Android<br/>(Apple)112Image: Colspan="2">Image: Colspan="2"112Image: Colspan="2">Image: Colspan="2">Image: Colspan="2"

Additional details:

Spain

## 2. Legislation

Spain

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

Draft regulation (Real Decreto) on the 112 Emergency Service updating the current Real Decreto 903/1997 (pending publication)

### 3. End-point and transmission

#### **3.1** How are the AML messages transmitted to the end-point?

For Android	For iOS (Apple)
<b>v</b>	<b>v</b>
•	
	Android

Additional details:

Spain

## **3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?**

	Not an issue. HTTPS messages always contain MSISDN
•	The HTTPS and SMS AML messages are matched using the IMEI/Time Stamp as a common identifier to find the MSISDN
	The AML location information is pushed to the PSAP call taker even without the MSISDN
	The AML message is discarded if the MSISDN cannot be obtained

Additional details:

## **3.3 Is the transmission of the AML message free to the caller (message `zero-rated')?**

- Yes
- No

Additional details:

#### 3.4 Which organisation maintains the AML end-point?

Ministry of the Interior and 112 Valencia

Ľ

## 3.5 Are several AML messages received during the duration of the call?

	Yes	Νο
For Android	V	
For iOS	<b>v</b>	
Additional details:		

## **3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?**

Seconds	5
---------	---

For Android

Spain

When available, 20, 60, 60, ... When available, 60, 60, ...

For iOS

Additional details:

## **3.7 Are AML positions presented directly to the call-taker's GIS and CAD display?**

✓	Yes
---	-----

□ No

Additional details:

#### **3.8** How is the location information transmitted from the endpoint/PSAP receiving the AML to (other) PSAPs in the country?

- Automatically, over a data interface
- Manually, using voice communications
- Other (please specify)

## 4. AML & Other Evolutions

#### 4.1 Is AML activated for roaming?

		For Android	For iOS (Apple)
	Yes, using a long number		
	Yes, SMS to MCC + shortcode		
	Yes, but HTTPS only		
	Yes, Other (please specify)		
✓	No		

Additional details:

Spain

#### 4.2 Is AML working for SMS to Emergency Numbers?

		For Android	For iOS (Apple)	
	Yes, SMS-to-112			
	Yes, SMS-to-other - shortcode(s) (please provide details below)			
<b>v</b>	No			
Add	itional details:			

ICI -

#### 4.3 Is any additional data transmitted via AML?

		For Android	For iOS (Apple)
	Caller name		
	Caller medical info		
	Caller phone language		
	Automated detections (e.g. fall, crash)		
	Other (Please specify)		
•	No		

Additional details:

## **4.4 Do you have plans to activate AML using HTTPS in the next 12 months?**

🗌 Yes

Spain

✓ No If no, why not?

Additional details:

Already activated

## **4.5** Are you evaluating any other transport methodologies for the provision of caller location information?

- $\Box$  Yes, using SIP messaging
- □ Yes, using HTML5
- □ Yes, using Network Induced Location Request (NI-LR)
- □ Yes, using other (please specify)
- No

### **Facts & Figures**

Spain

#### 5.1 Can you please share some statistics for the full year 2022 on:

## *NB:* These data are valid for the Valencia Region, which represents 10,62% of the Spanish population.

Total number of mobile originated emergency communications for 2022 (mobile calls + SMS-to-shortcode)	723.800	
% of mobile originated communications where network-provided location (e.g. Cell-ID, Timing advance etc) is received	86,3%	
% of mobile originated communications where an AML position is received	62,8%	
% of AML messages received within 60 seconds	97,3%	
% of AML messages received within 30 seconds	93,5%	
% of AML messages received within 15 seconds	82,1%	
% of AML messages with an accuracy below 100m	91,2%	
% of AML messages with an accuracy below 50m	83,8%	
% of AML messages with an accuracy below 30m	76,2%	
	Network	Handset
Average comparison (expressed in metres) between accuracy provided by network and accuracy provided by handset	1.556,2m.	34,7m.

IC.

## 5.2 Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

 $\hfill\square$  Yes, it is recorded and reported back by the emergency services If yes, please provide details of the process below

Yes, by carrying out periodic testing If yes, please provide details (e.g. process, frequency) below

□ No

Spain

If no, why not? Please provide details below. Additional details:

The AML location is contrasted with the location data received from the mobile network, and then by protocol the address is requested and verified by the call taker with the caller (in the CAD display).

#### 5. Reporting

6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

Yes

**Spain** 

✓ No If no, why not?

Additional details:

No formal process defined yet

#### 6.2 If yes, what is the frequency of these reports?

- □ Monthly
- □ Quarterly
- □ Annually

Additional details:

## 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

- Yes, I send a specific email to MNOs and OS providers when I notice unusual error rates
- Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)
- No

Additional details:

ĨĽI

#### 6. Others

Spain

### 7.1 Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

*Story 1*: Rescue in mountainous environment of 50-year-old male who got lost, without the strength to return. Positioned AML, rescued by helicopter. Accuracy: Network: 1050m, AML: 11m.

*Story 2*: Rescue in a river. Caller, a very nervous 10-year-old girl, reports that her father has jumped into the river to try to save a boy who was drowning, and now he can't get out either. He reports that he cannot breathe. Caller only indicates that they are in the river, at the entrance. With the help of the AML can be located with high accuracy. The emergency services manage to reach the exact place and rescue the two people. Accuracy: Network: 1500m, AML: 1m.

*Story 3*: Rescue of a disabled person. He does not determine whether intellectually or physically. He does not know where he is, disoriented. With the help of the AML can be located with high accuracy. Accuracy: Network: 500m, AML: 12m.

*Story 4*: Rescue of unconscious person, male 45-50 years old. Caller found him unconscious in a workshop, he has pulse. Caller doesn't provide address, only that they are in a polygon, little location data. With the help of the AML can be located with high accuracy. Accuracy: Network: 900m, AML: 10m.

## **7.2 List the companies/organisations that helped in deploying AML in your country**

- Google and Apple, upgrading their mobile OS to generate the AML messages
- the four major MNOs in Spain: Movistar, Vodafone, Orange, MasMovil, ensuring that their networks handle AML messages correctly
- the 19 Regional 112 Services, upgrading their systems to receive and display the AML data (with 112-Valencia taking the lead in the design, development and roll-out of the end-point, and supporting its connection to the 112 services)
- the Ministry of Economics and Digital Transformation, providing:
  - a. the SMS collection system
  - b. the coordination with the MNOs
- the Ministry of the Interior, providing:
  - a. the end-point HW infrastructure
  - b. overall project coordination



**Country:** 

Sweden

#### **1.** AML coverage in the country

#### 1.1 Is AML operational in the whole country?

Yes

□ No If no, why not?

Additional details:

#### 1.2 For which operating systems is AML working in your country?

- Android
- ✓ iOS (Apple)
- □ Others (please specify)

Additional details:

## **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

Yes

□ No If no, why not?

#### 1.4 In what year was AML activated in your country?

For Android	2019
For iOS (Apple)	2019
Additional details:	

#### **1.5** For which emergency service is AML working?

Emergency Medical Service	
Fire & Rescue Service	
Police	
Coastguard	

✓ Other (please specify)

Sea/Air Rescue (Joint Rescue Coordination Centre)

Additional details:

Sweden

Location from the incoming AML is received by PSAP organisation SOS Alarm and forwarded to involved emergency service(s)

#### **1.6 For which emergency numbers is AML activated?**

Number	For Android	For iOS (Apple)
112	•	



Sweden

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

Electronic Communications Act (only available in Swedish): Lag (2022:482) om elektronisk kommunikation Svensk författningssamling 2022:2022:482 t.o.m. SFS 2022:1086 - Riksdagen

#### 3. End-point and transmission

#### **3.1 How are the AML messages transmitted to the end-point?**

Transmission Method	For Android	For iOS (Apple)
SMS to short number		
SMS to long number	✓	<b>v</b>
HTTPS		

Additional details:

Sweden

## **3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?**

	Not an issue. HTTPS messages always contain MSISDN
	The HTTPS and SMS AML messages are matched using the IMEI/Time Stamp as a common identifier to find the MSISDN
	The AML location information is pushed to the PSAP call taker even without the MSISDN
	The AML message is discarded if the MSISDN cannot be obtained
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Additional details:

## **3.3 Is the transmission of the AML message free to the caller (message `zero-rated')?**

- Yes
- No

Additional details:

#### 3.4 Which organisation maintains the AML end-point?

PSAP organisation SOS Alarm (via third party provider)

### 3.5 Are several AML messages received during the duration of the call?

	Yes	No
For Android	<b>v</b>	
For iOS		<b>v</b>
Additional details:		

Two AML messages for Android just to be sure to get the best location

## **3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?**

	Seconds
For Android	7 & 25 seconds
For iOS	
Additional details:	

## **3.7 Are AML positions presented directly to the call-taker's GIS and CAD display?**

<b>v</b>	Yes

Sweden

□ No

Additional details:

#### **3.8** How is the location information transmitted from the endpoint/PSAP receiving the AML to (other) PSAPs in the country?

- Automatically, over a data interface
- Manually, using voice communications
- Other (please specify)

#### 4. AML & Other Evolutions

#### 4.1 Is AML activated for roaming?

		For Android	For iOS (Apple)
•	Yes, using a long number	•	•
	Yes, SMS to MCC + shortcode		
	Yes, but HTTPS only		
	Yes, Other (please specify)		
	No		

Additional details:

Sweden

#### 4.2 Is AML working for SMS to Emergency Numbers?

		For Android	For iOS (Apple)	
	Yes, SMS-to-112			
	Yes, SMS-to-other - shortcode(s) (please provide details below)			
•	No			
Add	itional details:			

#### 4.3 Is any additional data transmitted via AML?

		For Android	For iOS (Apple)
	Caller name		
	Caller medical info		
	Caller phone language		
	Automated detections (e.g. fall, crash)		
	Other (Please specify)		
~	No		

Additional details:

Sweden

## **4.4 Do you have plans to activate AML using HTTPS in the next 12 months?**

🗌 Yes

■ No If no, why not?

Additional details:

We do not see the real benefit of switching (yet)

## **4.5** Are you evaluating any other transport methodologies for the provision of caller location information?

- □ Yes, using SIP messaging
- ✓ Yes, using HTML5
- □ Yes, using Network Induced Location Request (NI-LR)
- $\Box$  Yes, using other (please specify)
- 🗆 No

Additional details:

Using HTML 5 since 2017

#### 5. Facts & Figures

Sweden

#### 5.1 Can you please share some statistics for the full year 2022 on:

Total number of mobile originated emergency communications for 2022 (mobile calls + SMS-to-shortcode)	3.074.795	
% of mobile originated communications where network-provided location (e.g. Cell-ID, Timing advance etc) is received	Approx. 99 %	
% of mobile originated communications where an AML position is received	82 %	
% of AML messages received within 60 seconds	n/a	
% of AML messages received within 30 seconds	n/a	
% of AML messages received within 15 seconds	n/a	
% of AML messages with an accuracy below 100m	92,7%	
% of AML messages with an accuracy below 50m	77,5%	
% of AML messages with an accuracy below 30m	53,2%	
	Network	Handset
Average comparison (expressed in metres) between accuracy provided by network and accuracy provided by handset	n/a	n/a

## 5.2 Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

- Yes, it is recorded and reported back by the emergency services If yes, please provide details of the process below
- Yes, by carrying out periodic testing If yes, please provide details (e.g. process, frequency) below

No If no, why not? Please provide details below. Additional details:

The actual final location is not reported by the dispatched resources = makes it impossible to compare



6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

Yes

✓ No If no, why not?

Additional details:

Sweden

We haven  $\dot{}t$  seen the need for this and there has been no demand from the MNOs

#### 6.2 If yes, what is the frequency of these reports?

□ Monthly

□ Quarterly

□ Annually

Additional details:

### 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

- Yes, I send a specific email to MNOs and OS providers when I notice unusual error rates
- Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)
- 🗌 No

#### 7. Others

Sweden

## **7.1** Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

Nothing to share since AML nowadays is so integrated in everyday call taking that it is no longer noticed when AML is a contributory factor

## **7.2 List the companies/organisations that helped in deploying AML in your country**

Mobile Network Operators: Telia, Tele2, Hi3GAccess, Telenor. CAD Vendor: CSAM



**Country:** 

Switzerland

#### 1. AML coverage in the country

#### 1.1 Is AML operational in the whole country?

Yes

□ No If no, why not?

Additional details:

#### 1.2 For which operating systems is AML working in your country?

- Android
- ✓ iOS (Apple)
- ☑ Others (please specify)

Additional details:

HarmonyOS (Huawei)

## **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

Yes

□ No If no, why not?

#### 1.4 In what year was AML activated in your country?

For Android	01 July 2022
For iOS (Apple)	01 July 2022
For HarmonyOS (Huawei)	Q1/2023
Additional details:	

#### **1.5** For which emergency service is AML working?

- Emergency Medical Service
- ✓ Fire & Rescue Service
- Police
- □ Coastguard
- ☑ Other (please specify)

Children (suicide prevention line), Poison, mental-health, Air Rescue, Transport Police

1.6 For which emergency numbers is AML activated?					
Ν	umber	For Android	For iOS (Apple)	For HarmonyOS (Huawei)	
	112	•	•	V	
Other:	117	✓	<b>v</b>	V	
Other:	118	✓	<b>v</b>	V	
Other:	143	✓	<b>v</b>	V	
Other:	144	•	<b>v</b>	V	
Other:	145	•	<b>v</b>	V	
Other:	147	•	<b>v</b>	V	
Other:	1414	•	<b>v</b>	V	
Other:	0800117117	•	<b>v</b>	V	
Other:	911	<b>v</b>	<b>v</b>	V	
Additional details:					



### 2. Legislation

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

Regulation > OFCOM FMG Art. 20, FDV Art. 29a, TAV SR 784.101.113/1.3: All MNOs (Mobile Network Operator) forward the AML-SMS to the ECSP (Emergency Call Service Operator). The ESCP converts the AML-SMS into a PIDF-LO and stores it in an LIS. The PIDF-LO can be obtained by the PSAP for 4 hours.

#### 3. End-point and transmission

#### 3.1 How are the AML messages transmitted to the end-point?

Transmission Method	For Android		For HarmonyOS (Huawei)
SMS to short number			
SMS to long number	•	•	V
HTTPS			

Additional details:

Switzerland

Centralised AML endpoint is operated by Swisscom on behalf of all MNOs in Switzerland

## 3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?

	Not an issue. HTTPS messages always contain MSISDN
	The HTTPS and SMS AML messages are matched using the IMEI/Time Stamp as a common identifier to find the MSISDN
	The AML location information is pushed to the PSAP call taker even without the MSISDN
	The AML message is discarded if the MSISDN cannot be obtained
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Additional details:

## **3.3 Is the transmission of the AML message free to the caller (message `zero-rated')?**

Yes

No

#### **3.4 Which organisation maintains the AML end-point?**

Swisscom operates the AML end-point for all MNOs

### **3.5** Are several AML messages received during the duration of the call?

	Yes	No
For Android	<b>v</b>	
For iOS	<b>v</b>	
For HarmonyOS		•

Additional details:

## **3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?**

	Seconas
For Android	Usually every 30 seconds
For iOS	Usually every 10 seconds
For HarmonyOS	
Additional details:	

## **3.7** Are AML positions presented directly to the call-taker's GIS and CAD display?

Yes

✓ No

Additional details:

Call takers GIS and CAD systems are fetching network provided and device provided (e.g. AML) location information from centralized LIS (Location Information Systeme) operated by Swisscom through a LIS-Proxy.



#### **3.8** How is the location information transmitted from the endpoint/PSAP receiving the AML to (other) PSAPs in the country?

- Automatically, over a data interface
- Manually, using voice communications
- Other (please specify)

Stored from end-point over interface <ic> to centralized LIS and received from PSAP via LIS-Proxy over interface <im>



#### 4.1 Is AML activated for roaming?

		For Android	For iOS (Apple)	For HarmonyOS (Huawei)
	Yes, using a long number			
	Yes, SMS to MCC + shortcode			
	Yes, but HTTPS only			
	Yes, Other (please specify)			
•	No			

Additional details:

Plan to be addressed with AML via SIP

#### **4.2 Is AML working for SMS to Emergency Numbers?**

		For Android	For iOS (Apple)	For HarmonyOS (Huawei)
	Yes, SMS-to-112			
	Yes, SMS-to-other - shortcode(s) (please provide details below)			
<b>v</b>	No			
Add	litional details:			

#### 4.3 Is any additional data transmitted via AML?

		For Android	For iOS (Apple)	For HarmonyOS (Huawei)
	Caller name			
	Caller medical info			
	Caller phone language			
	Automated detections (e.g. fall, crash)			
	Other (Please specify)			
✓	No			
Add	itional details:			

## **4.4 Do you have plans to activate AML using HTTPS in the next 12 months?**

🗌 Yes

✓	No	If no,	why not?
---	----	--------	----------

Additional details: Waiting for AML@SIP (using PIDF-LO)

## **4.5** Are you evaluating any other transport methodologies for the provision of caller location information?

- ✓ Yes, using SIP messaging
- $\Box$  Yes, using HTML5
- □ Yes, using Network Induced Location Request (NI-LR)
- $\Box$  Yes, using other (please specify)
- 🗆 No



#### 5. Facts & Figures

#### 5.1 Can you please share some statistics for the full year 2022 on:

Total number of mobile originated emergency communications for 2022 (mobile calls + SMS-to-shortcode)	n/a	
% of mobile originated communications where network-provided location (e.g. Cell-ID, Timing advance etc) is received	>95%	
% of mobile originated communications where an AML position is received	80%	
% of AML messages received within 60 seconds	n/a	
% of AML messages received within 30 seconds	91%	
% of AML messages received within 15 seconds	87%	
% of AML messages with an accuracy below 100m	90%	
% of AML messages with an accuracy below 50m	80%	
% of AML messages with an accuracy below 30m	n/a	
	Network	Handset
Average comparison (expressed in metres) between accuracy provided by network and accuracy provided by handset	n/a	n/a

## 5.2 Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

- $\square$  Yes, it is recorded and reported back by the emergency services If yes, please provide details of the process below
- ☐ Yes, by carrying out periodic testing
  - If yes, please provide details (e.g. process, frequency) below
- ✓ No

If no, why not? Please provide details below. Additional details:



The PSAP gets the network-based location and the device-based location (AML) together and verifies the plausibility.

### 6. Reporting

6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

Yes

✓ No If no, why not?

Additional details:

#### 6.2 If yes, what is the frequency of these reports?

□ Monthly

□ Quarterly

□ Annually

Additional details:

## 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

- $\hfill \ensuremath{\square}$  Yes, I send a specific email to MNOs and OS providers when I notice unusual error rates
- Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)
- No

Additional details:

So far we have not seen significant errors



#### 7. Others

**7.1** Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

n/a

**7.2 List the companies/organisations that helped in deploying AML in your country** 

No information available



Questionnaire answered by EENA based on information available

#### 1. AML coverage in the country

#### 1.1 Is AML operational in the whole country?

Yes

**Country:** 

□ No If no, why not?

Additional details:

No information

#### 1.2 For which operating systems is AML working in your country?

- Android
- ✓ iOS (Apple)
- □ Others (please specify)

Additional details:

## **1.3 Can you differentiate between AML messages received from devices with different operating systems?**

🗌 Yes

□ No If no, why not?

Additional details:

No information



For Android	2016
For iOS (Apple)	2018

Additional details:

First deployed for a small number of handsets in 2014

#### 1.5 For which emergency service is AML working?

#### 1.6 For which emergency numbers is AML activated?

Number		For Android	For iOS (Apple)	
11	2	<b>v</b>	✓	
Other:	999	V	•	



### 2. Legislation

2.1 What is the legislative framework in your country to receive AML locations (privacy rules, rules on emergency caller location...)? Please provide a short summary and include links (preferably in English) if available.

- Ofcom general conditions
- Privacy and Electronic Communications Regulations 2003 (SI 2003/2426)



#### 3. End-point and transmission

#### **3.1 How are the AML messages transmitted to the end-point?**

Transmission Method	For Android	For iOS (Apple)
SMS to short number	•	•
SMS to long number		
HTTPS		

Additional details:

## **3.2 If HTTPS transmission is used (Q.3.1 above), how do you handle messages which do not contain a valid phone number (i.e. MSISDN)?**

	Not an issue. HTTPS messages always contain MSISDN
	The HTTPS and SMS AML messages are matched using the IMEI/Time Stamp as a common identifier to find the MSISDN
	The AML location information is pushed to the PSAP call taker even without the MSISDN
	The AML message is discarded if the MSISDN cannot be obtained
۸ dditia	anal dataila

Additional details:

## 3.3 Is the transmission of the AML message free to the caller (message `zero-rated')?

- Yes
- No

Additional details:

#### 3.4 Which organisation maintains the AML end-point?

BT Stage 1 PSAP



## 3.5 Are several AML messages received during the duration of the call?

	Yes	No
For Android		
For iOS		
Additional details:		
No information		

## **3.6 If "Yes" to question 3.5 above, what are the time intervals defined to receive AML positions?**

Seconds

For Android

For iOS

Additional details:

No information

## **3.7 Are AML positions presented directly to the call-taker's GIS and CAD display?**

Yes

□ No

Additional details:

No information

#### 3.8 How is the location information transmitted from the endpoint/PSAP receiving the AML to (other) PSAPs in the country?

- Automatically, over a data interface
- Manually, using voice communications
- Other (please specify)

#### No information



#### 4.1 Is AML activated for roaming?

		For Android	For iOS (Apple)
•	Yes, using a long number	V	
	Yes, SMS to MCC + shortcode		
	Yes, but HTTPS only		
	Yes, Other (please specify)		
	No		

Additional details:

4.

#### 4.2 Is AML working for SMS to Emergency Numbers?

		For Android	For iOS (Apple)
	Yes, SMS-to-112		
	Yes, SMS-to-other - shortcode(s) (please provide details below)		
	No		
Addi	itional details:		
No i	nformation		



	For Android	For iOS (Apple)
Caller name		
Caller medical info		
Caller phone language		
Automated detections (e.g. fall, crash)		
Other (Please specify)		
No		

Additional details:

No information

## **4.4 Do you have plans to activate AML using HTTPS in the next 12 months?**

🗌 Yes

□ No If no, why not?

Additional details:

No information

## **4.5** Are you evaluating any other transport methodologies for the provision of caller location information?

- □ Yes, using SIP messaging
- □ Yes, using HTML5
- □ Yes, using Network Induced Location Request (NI-LR)
- $\Box$  Yes, using other (please specify)

🗆 No
------

Ado	ditional	details:
No	informa	ation



#### 5. Facts & Figures

#### 5.1 Can you please share some statistics for the full year 2022 on:

Total number of mobile originated emergency communications for 2022 (mobile calls + SMS-to-shortcode)	n/a	
% of mobile originated communications where network-provided location (e.g. Cell-ID, Timing advance etc) is received	n/a	
% of mobile originated communications where an AML position is received	n/a	
% of AML messages received within 60 seconds	n/a	
% of AML messages received within 30 seconds	n/a	
% of AML messages received within 15 seconds	n/a	
% of AML messages with an accuracy below 100m	n/a	
% of AML messages with an accuracy below 50m	n/a	
% of AML messages with an accuracy below 30m	n/a	
	Network	Handset
Average comparison (expressed in metres) between accuracy provided by network and accuracy provided by handset	n/a	n/a

## 5.2 Do you evaluate the veracity of the location provided in the AML message with the actual location of the caller/emergency incident?

□ Yes, it is recorded and reported back by the emergency services If yes, please provide details of the process below

 $\Box$  Yes, by carrying out periodic testing

If yes, please provide details (e.g. process, frequency) below

🗆 No

If no, why not? Please provide details below. Additional details:

No information



#### 6. Reporting

6.1 Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?

🗆 Yes

□ No If no, why not?

Additional details:

No information available

#### 6.2 If yes, what is the frequency of these reports?

- □ Monthly
- □ Quarterly
- □ Annually

Additional details:

No information available

## 6.3 Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?

- Yes, I send a specific email to MNOs and OS providers when I notice unusual error rates
- Yes, I use another method to inform MNOs and OS providers when I notice unusual error rates (please specify)
- No

Additional details:

No information available



#### 7. Others

**7.1** Please share some notable success stories that occurred in 2022 where the availability of AML was a contributory factor

n/a

**7.2 List the companies/organisations that helped in deploying AML in your country** 

EE HTC Vodafone Three O2 CLX (SMS Aggregation Service)

## **Operational Use of AML**

	Android	iOS (Apple)	HarmonyOS (Huawei)	Jolla
Austria	X	ios (Apple)	(nuawer)	Jona
Belgium	x	x		
Bulgaria	X	x		
Croatia	x	x		
Czech Republic	x	x		
Denmark	x	x		
Estonia	x	x		
Finland	х	x	x	х
France	x	х		
Germany	x	x		
Greece	х	х		
Hungary	х	х		
Iceland	х	x		
Ireland	х	х		
Italy	x	x		
Latvia	x	х		
Lithuania	x	x		
Moldova	x	х		
Montenegro	x			
Netherlands	х	х	х	
North Macedonia	x	x		
Norway	x	х		
Portugal	x	x		
Romania	x	x	x	
Slovakia	x	х	x	
Slovenia	x	х		
Spain	х	х		
Sweden	x	х		
Switzerland	x	x	x	
United Kingdom	x	х		

## **Transmission of AML**

	Transmission method
Austria	- SMS to a long number (Android only) - HTTPS (Android only)
Belgium	- SMS to a short number
Bulgaria	- SMS to a long number
Duigana	- SMS to a short number
Croatia	- SMS to a long number
Czech Republic	- SMS to a short number - SMS to a long number (Android only)
Denmark	- SMS to a long number
Estonia	- SMS to a short number
Finland	- SMS to a short number
France	- SMS to a long number
Germany	- SMS to a short number - HTTPS (Android only)
Greece	- SMS to a short number
Hungary	- SMS to a short number
Iceland	- SMS to a long number - HTTPS (Android only)
Ireland	- SMS to a short number
Italy	- SMS to a long number - HTTPS (Android only)
Latvia	- SMS to a short number
Lithuania	- SMS to a short number
Moldova	- SMS to a short number
Montenegro	n/a
Netherlands	- SMS to a short number
North Macedonia	- SMS to a short number
Norway	- SMS to a short number
Portugal	- SMS to a long number - HTTPS (Android only)
Romania	- SMS to short number - HTTPS (for Android & HarmonyOS)
Slovakia	- SMS to a short number
Slovenia	- SMS to a short number
Spain	- SMS to a long number - HTTPS (Android only)
Sweden	- SMS to a long number
Switzerland	- SMS to a long number
United Kingdom	- SMS to a short number

# **Other Features**

	Roaming (Android only)	SMS to Emergency numbers
Austria	No	No
Belgium	Yes, using SMS to MCC + shortcode	Yes, for SMS to 8101 & SMS to 8112
Bulgaria	No	No
Croatia	Yes, using a long number	Yes, for SMS to 112
Czech Republic	Yes, using a long number	Yes, for SMS to 112, SMS to 150, SMS to 155 & SMS to 158
Denmark	Yes, using a long number	No
Estonia	Yes, using SMS to MCC + shortcode	Yes, for SMS to 112
Finland	Yes, using SMS to MCC + shortcode	Yes, for SMS to 112 (Android only)
France	n/a	n/a
Germany	Yes, using HTTPS	No
Greece	Yes, using SMS to MCC + shortcode	No
Hungary	No	Yes, for SMS to 112
Iceland	No	Yes, for SMS to 112
Ireland	Yes, using SMS to MCC + shortcode	Yes, for SMS to 112
Italy	No	No
Latvia	No	No
Lithuania	No	Yes, for SMS to 112
Moldova	n/a	No
Montenegro	n/a	n/a
Netherlands	No	Yes, for SMS to 112
North Macedonia	Yes, using a long number	Yes, for SMS to 112
Norway	Yes, using a long number	Yes, for SMS to 112, SMS to 110 & SMS to 113
Portugal	Yes, using a long number	No
Romania	Yes, using SMS to MCC + shortcode	Yes, for SMS to 113 (Android & HarmonyOS only)
Slovakia	No	Yes, for SMS to 112
Slovenia	No	No
Spain	No	No
Sweden	Yes, using a long number	No
Switzerland	No	No
United Kingdom	Yes, using a long number	n/a

# **Figures B-E**

	% of mobile originated communications where an AML position is received	% of AML messages received within 60 seconds	% of AML messages received within 30 seconds	% of AML messages received within 15 seconds
Austria	n/a	n/a	n/a	n/a
Belgium	n/a	n/a	n/a	n/a
Bulgaria	46.42%	79.13%	81.96%	56.56%
Croatia	n/a	n/a	n/a	n/a
Czech Republic	Around 52%	96%	95%	94%
Denmark	71%	99%	99%	94%
Estonia	56.30%	96.90%	95.90%	34.60%
Finland	n/a	n/a	n/a	n/a
France	n/a	n/a	n/a	n/a
Germany	75%	99%	95%	60%
Greece	n/a	n/a	n/a	n/a
Hungary	30%	96.74%	69.01%	81.07%
Iceland	97%	n/a	n/a	n/a
Ireland	n/a	n/a	n/a	n/a
Italy	n/a	n/a	n/a	n/a
Latvia	n/a	100%	99%	98%
Lithuania	73%	89%	62%	12%
Moldova	58.92%	97.36%	93.98%	90.43%
Montenegro	n/a	n/a	n/a	n/a
Netherlands	n/a	n/a	n/a	n/a
North Macedonia	n/a	n/a	n/a	n/a
Norway	Around 80%	n/a	n/a	n/a
Portugal	39.70%	88,76%£	84.47%	65.36%
Romania	- From all mobile calls: 53,64% - For all emergency mobile calls: 70,02%	- via SMS: 95,96% - via HTTPS: 94,38%	- via SMS: 88,33% - via HTTPS: 84,61%	- via SMS: 80,46% - via HTTPS: 61,95%
Slovakia	n/a	n/a	n/a	n/a
Slovenia	n/a	n/a	n/a	n/a
Spain	62.80%	97.30%	93.50%	82.10%
Sweden	82%	n/a	n/a	n/a
Switzerland	80%	n/a	91%	82%
United Kingdom	n/a	n/a	n/a	n/a

# **Figures F-H**

	% of AML messages with an accuracy below 100m	% of AML messages with an accuracy below 50m	% of AML messages with an accuracy below 30m
Austria	n/a	n/a	n/a
Belgium	n/a	n/a	n/a
Bulgaria	86.07%	76.45%	66.87%
Croatia	n/a	n/a	n/a
Czech Republic	85.50%	75.60%	66.40%
Denmark	92%	82%	73%
Estonia	94.90%	81%	72.20%
Finland	n/a	n/a	n/a
France	n/a	n/a	n/a
Germany	90%	80%	70%
Greece	n/a	n/a	n/a
Hungary	81.07%	69.01%	44.57%
Iceland	n/a	n/a	n/a
Ireland	n/a	n/a	n/a
Italy	96%	82%	67%
Latvia	n/a	n/a	n/a
Lithuania	86%	75%	70%
Moldova	94.13%	85.26%	78.98%
Montenegro	n/a	n/a	n/a
Netherlands	n/a	n/a	n/a
North Macedonia	n/a	n/a	n/a
Norway	n/a	Around 90%	n/a
Portugal	81.72%	67.94%	36.15%
Romania	-via SMS: 81,03% - via HTTPS: 82,50%	- via SMS: 67,89% - via HTTPS: 69,75%	- via SMS: 40,46% - via HTTPS: 36,24%
Slovakia	n/a	n/a	n/a
Slovenia	n/a	n/a	n/a
	91.20%	83.80%	76.20%
Spain Sweden	92.70%	77.50%	53.20%
Switzerland	90%	80%	n/a
	n/a	n/a	n/a
United Kingdom	nya	iya	178

# Reporting

	Do you compile AML statistics and share them with mobile network operators and handset OS providers to help ensure consistent performance?	Do you flag AML errors to mobile network operators and OS providers? If yes, how do you flag them?
Austria	n/a	n/a
Belgium	No	No
Bulgaria	Yes	Yes
Croatia	n/a	n/a
Czech Republic	Yes, annually	Yes
Denmark	No	No
Estonia	Yes	Yes
Finland	No	Yes
France	n/a	n/a
Germany	Yes, on demand	Yes
Greece	n/a	n/a
Hungary	No	No
Iceland	No	Yes
Ireland	Yes, quarterly	No
Italy	Yes, monthly	Yes
Latvia	No	Yes
Lithuania	Yes, monthly	Yes
Moldova	Yes, annually	No
Montenegro	n/a	n/a
Netherlands	No	Yes
North Macedonia	Yes, quarterly	No
Norway	Yes, annually	No
Portugal	Yes, annually	Yes
Romania	Yes	Yes
Slovakia	No	Yes
Slovenia	n/a	n/a
Spain	No	Yes
Sweden	No	Yes
Switzerland	No	No
United Kingdom	n/a	n/a