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COMMUNICATIONS COMMITTEE

Working Document

Subject: **Implementation of the single European emergency number 112 – Results of the twelfth data-gathering round**

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EXECUTIVE SUMMARY

The data-gathering exercise based on Key Performance Indicators on the implementation of the European emergency number 112 was introduced with a view to implement performance measurements in order to get reliable data which would allow the assessment and optimisation of the access to emergency services at national level.

Quality of data

Member States were invited to follow the definitions of the measurements provided in the KPI reporting table. This year all Member States responded to the COCOM questionnaire. Several of the responses received, however, were not complete or indicated explicitly that certain data was not available.

The quality of the reported data allows a good overview of the 112 implementation in the EU. Member States, which are not yet in the position to perform KPI measurements, are encouraged to follow best practice in this area to progressively introduce the necessary capabilities, thus further increasing the quality of their data.

Main findings

- The share of emergency calls to the Single European Emergency Number "112" is rising, showing the increasing preference of Europeans to use the number in case of emergency. Calls to "112" increased 5% in one year, while the total number of emergency calls dropped 2.5%. Calls to "112" represented 48% of the calls placed in case of an emergency.

- Accuracy of caller location continued to improve in the reporting period. Advanced Mobile Location (AML) handset-based caller location solution took off in Malta and Slovenia. Currently AML is fully deployed in Belgium, Estonia, Finland, Ireland, Lithuania, Malta, Slovenia and the United Kingdom. The Commission contributes to this development by financing AML deployment in Germany, Denmark, France, Croatia, Hungary, Portugal and Sweden, thereby raising the number of AML countries to fifteen.

- The share of emergency calls placed through mobile phones is continuously growing. In the reporting period 73% of emergency calls were placed from a mobile phone, up 3% from last year. This confirms that a growing number of European citizens would benefit from handset-derived caller location, as mandated by the European Communications Code[1]

- 23 Member States reported less than 10 seconds for the answering time needed to get in contact with emergency services.

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[1] Directive (EU) 2018/1972 of the European parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code (OJ L 321, 17.12.2018, p. 36).

- Of those 27 Member States which reported the time needed to receive the caller location, the longest periods were reported in Greece (261 s). Austria did not report relevant data for this KPI. A number of Member State reported on the time needed to receive handset based location: Estonia (10s), Finland (5s), Ireland (10s), Lithuania (25s), Latvia (20s), Malta (8s), Slovenia (6s) and United Kingdom (15s).

- 23 Member States reported the implementation of alternative access to emergency services for users with disabilities through SMS. Meanwhile, some emergency applications deployed can provide much better location information and additional features. The information received from Member States reveals a number of potential implementation issues as regards equivalent disabled access to emergency services. In addition to the basic problem of lack of availability of any appropriate service that ensures two-way interactive communication (EL), there are Member States where solutions meeting minimum requirements are not deployed throughout the whole territory (PL, IT, ES) or are not available at all times of the day (CZ). In addition, user location information for disabled users is not available in 14 Member States[2].

- 26 Member States reported a currently deployed public warning system. The technologies deployed are: sirens in 16 Member States; TV, Radio or social media alerts in 10 Member States; specific applications in 5 Member States; SMS alert in 5 Member States and Cell Broadcast in 4 Member States

[2] CY, CZ, DE, EL, FR, IE, IT, LV, LT, HR, NL, PL, PT, ES.

Table of Contents

EXECUTIVE SUMMARY 2

INTRODUCTION 5

1. CALLS TO 112 6

2. ANSWERING TIME 9

3. CALL ABANDON RATE 10

4. LACK OF AVAILABILITY OF CALLER LOCATION 10

5. CALLER LOCATION ACCURACY AND RELIABILITY 10

6. AVERAGE TIME NEEDED FOR RECEIVING THE CALLER LOCATION BY THE 112 OPERATOR 12

7. ACCESS TO EMERGENCY SERVICES WHILE EU ROAMING 13

8. ACCESS TO EMERGENCY SERVICES FOR USERS WITH DISABILITIES 13

9. PUBLIC WARNING SYSTEMS 17

10. AWARENESS LEVELS OF 112 17

INTRODUCTION

This document provides an analysis of the replies submitted by Member States on the Key Performance Indicators (KPI) that reflect the implementation of emergency communications and the single European emergency number "112". These performance indicators were agreed by emergency experts to reflect the efficiency and effectiveness of access to 112 calls. This is the twelfth data gathering exercise following the previous exercises that are published on: http://ec.europa.eu/digital-agenda/en/eu-actions-112

The document is based on the data-gathering exercise on the implementation of the European emergency number "112" that was introduced in 2007. The goal of this exercise is to receive reliable data which would allow the assessment and optimisation of the access to emergency service when dialling "112" and equivalent access for end-users with disabilities at national level.

The data gathering relies on specific questions that serve to assess the level of implementation of EU law requirements and the improvement of national public safety answering point systems. In the current data gathering exercise these questions were amended to better reflect the legislation in force as well as the provisions of the European Communications Code[3] (Code). Under the revised EU legislative framework the Commission is bound to submit, within two years of the entry into force of the Code, and every two years thereafter, a report to the European Parliament and to the Council on the effectiveness of the implementation of the single European emergency number "112".

The current data gathering exercise is adapted to the exigencies of a more accurate overview of the implementation of the EU law provisions on emergency communications. Specific questions are introduced reflecting the various new provisions of the Code regarding access from private networks, handset based caller location, registration requirements for disabled end-users and public warning systems.

This document is based on the KPI reporting table which was submitted to Member States on 3 October 2018 (COCOM18-11) with a deadline for response on 19 November 2018. In order to provide the most recent data for the Key Performance Indicators, the reporting period was set for the quantitative data for 1 July 2017 – 30 June 2018.

The document follows the structure of the KPI reporting table. The KPIs reflect the provisions of Article 26 of the Universal Service Directive concerning access to 112 for users with disabilities, provision of caller location and the accuracy and reliability of caller location information.

The document covers information submitted by all Member States. As agreed, the COCOM observers from Candidate and EEA Countries were also invited to submit replies to the questionnaire. Member States are called on to develop their measuring tools for monitoring these indicators in order to optimise their 112 systems.

This document was published on 11 February 2019, (more information on the Commission's '112' website: www.112.eu). On the '112' website country-specific information is also published.

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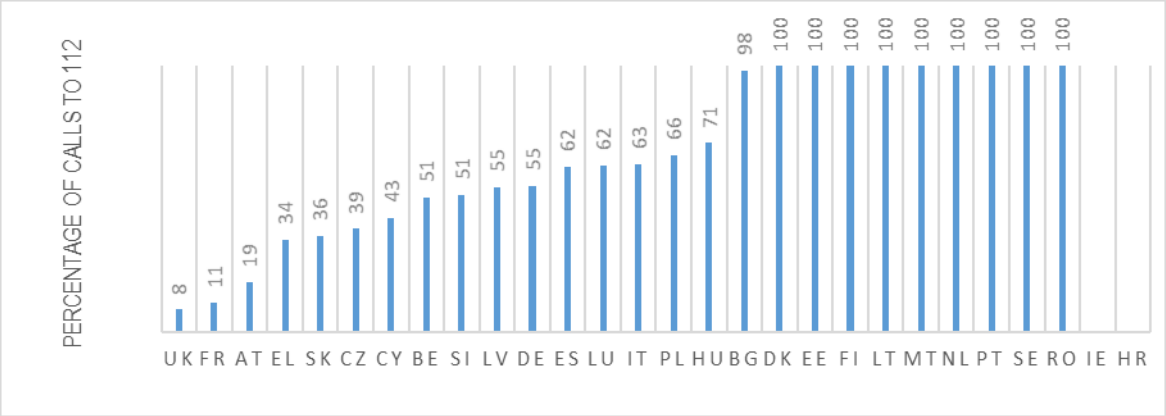
[3] Directive (EU) 2018/1972 of the European parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code (OJ L 321, 17.12.2018, p. 36).

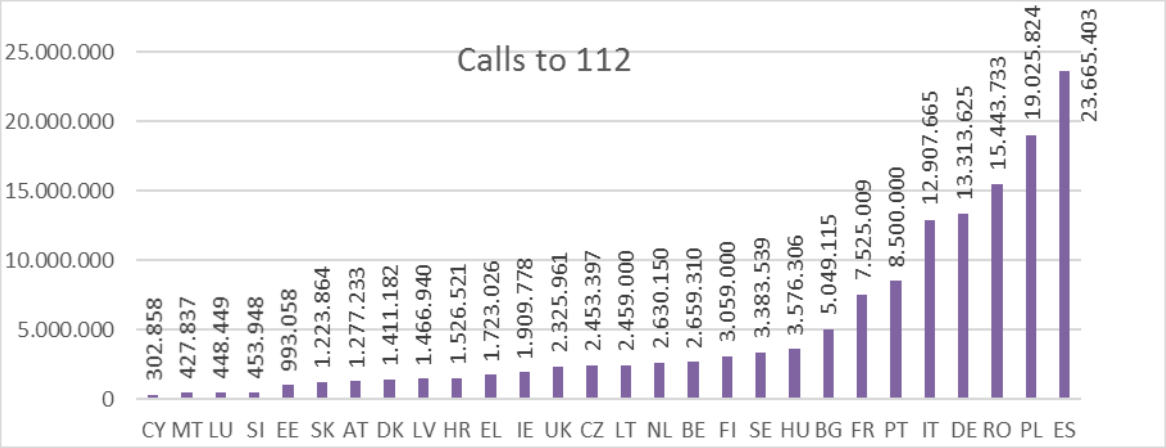
TWELFTH REPORT ON THE IMPLEMENTATION OF 112

1. CALLS TO 112

Calls in the EU to the Single European Emergency Number "112" increased 5% since the year before reaching 141.141.731. Meanwhile the total number of emergency calls dropped 2.5% to 293.510.378. Calls to "112" represented 48% of the calls placed in case of an emergency.

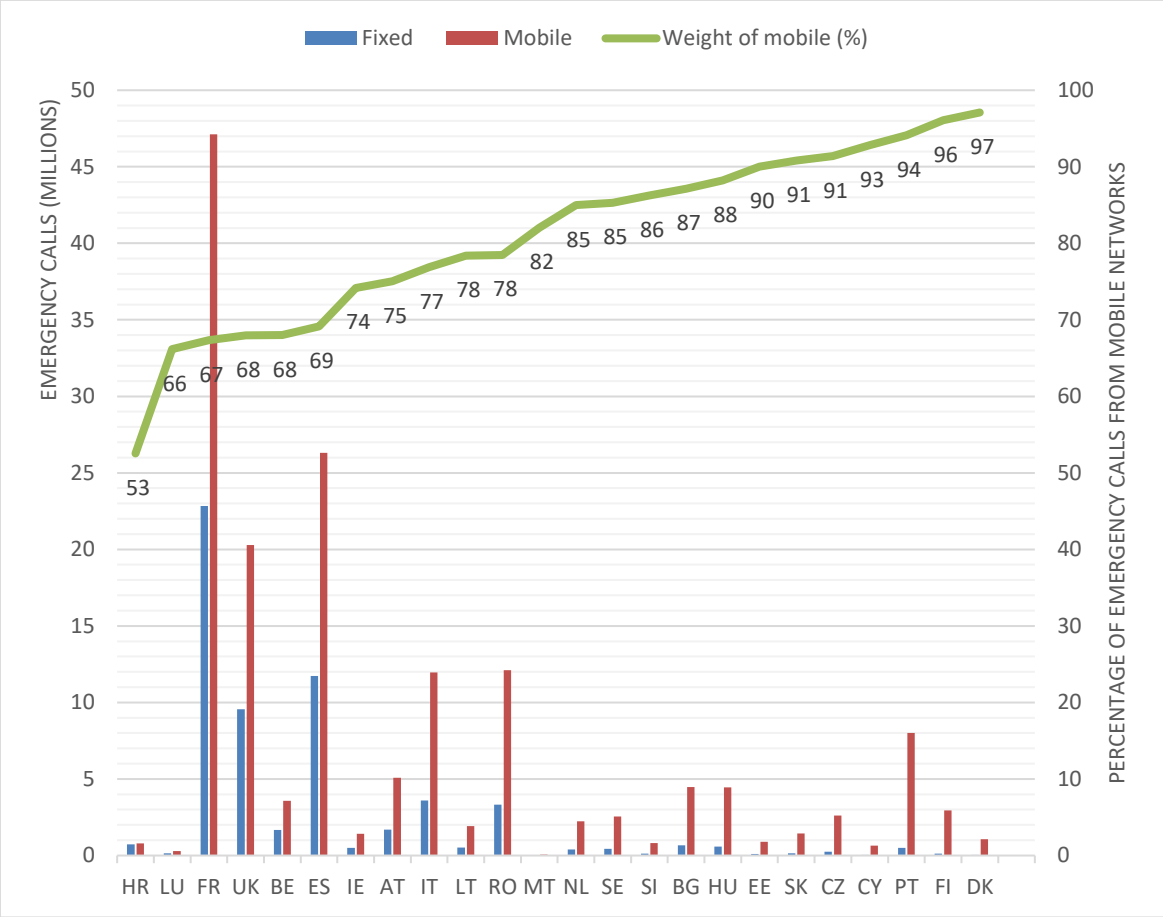


112 is the single emergency number in Denmark, Estonia, Finland, Malta, the Netherlands, Portugal, Romania and Sweden. However, only 25% of the calls to 112 in the EU are placed in these countries. The large majority of calls to 112 are placed in Member States where national numbers are still in use. In these Member States the use of the Single European emergency number varies largely, from 8% in the UK to 98% in Bulgaria[4].



[4] No data is available for HR and IE.

Calls from mobile phones largely outweighed the number of calls from fixed phones. 25 Member States reported the number of emergency calls that arrived from fixed and mobile networks in the reporting period[5]. On the basis of the available data 73% of the calls were placed from a mobile phone, up 3% from last year. However, the use of the mobile phones for emergency communication purposes varies significantly across Member States from 53% in Croatia to 96% in Finland and 97% in Denmark.

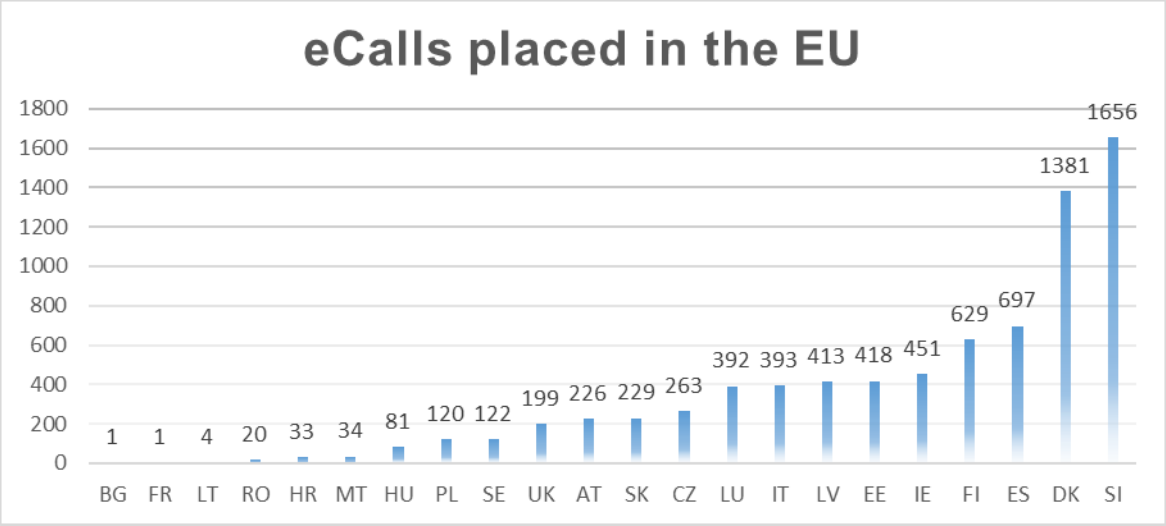


eCalls originated in cars capable of placing a 112 emergency call should be handled by national Public Safety Answering Points in case of an accident. The relevant eCall legislation became effective in the reporting period. Member States had to ensure that their PSAP system is ready to receive eCalls as of 1 October 2017[6]. As of 31 March 2018 car

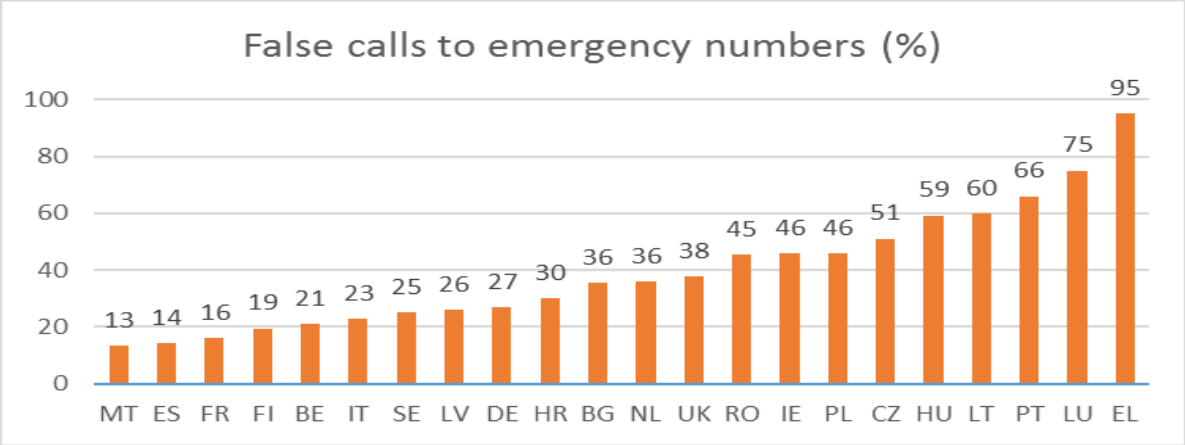
[5] No data reported from Germany, Greece and Latvia.

[6] Decision No 585/2014/EU, adopted on 3 June 2014, provides for the mandatory deployment, no later than 1 October 2017, of the necessary public safety answering points (PSAPs) infrastructure necessary to receive and handle 112 eCalls in the EU, in accordance with the specifications laid down by Delegated Regulation (EU) No 305/2013.

manufacturers[7] should fit the112-based eCall in-vehicle system on all new types of M1 (passengers cars) and N1 (light commercial vehicles). As the relevant regulation targets only new types of vehicles that need to go through a type-approval process – hence not all the newly built vehicles –, its effects should begin to be felt only as from 2019. The data reported by 22 Member States indicates that the eCall system is deployed. However, the data reported does not separate, in some cases, test calls from real-life emergencies.



Only 13 Member States[8] provided updated information on false calls[9]. Data from previous years is available from a further 10 Member States. The ratio of false calls to the total number of calls still appears to vary considerably among the Member States, reaching 95% in Greece.



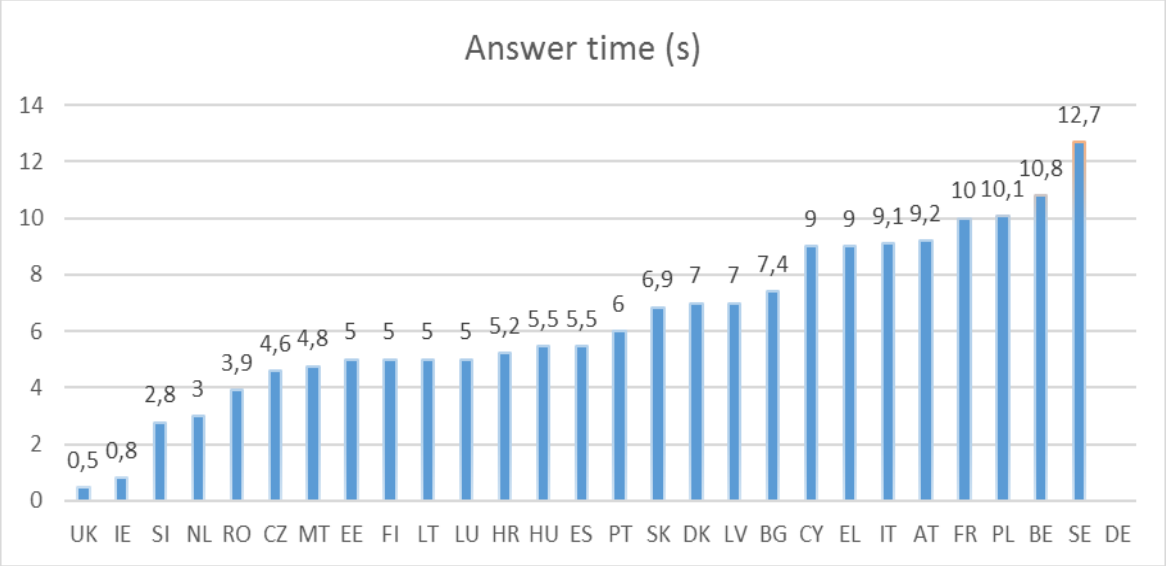
[7] Regulation (EU) 2015/758 establishes the general requirements for the EC type-approval of vehicles in respect of the 112-based eCall in-vehicle systems, and of 112-based eCall in-vehicle systems, components and separate technical units.

[8] BE, BG, CZ, ES, FI, HR, HU, IT, MT, NL, PL, RO, SE, UK

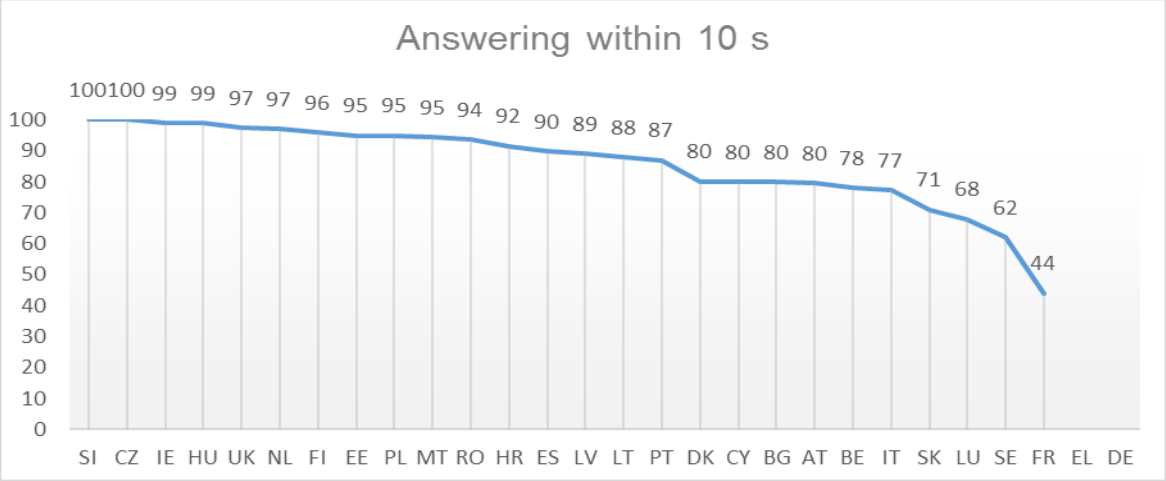
[9] False calls are calls which are not followed up with intervention or assistance from the PSAP or the emergency services. Calls that report an emergency event which has already triggered intervention or assistance from the part of the PSAP, therefore not triggering separate intervention or assistance, will not be considered false calls. Abandoned calls, as defined in KPI no. 4 are excluded from the category of false calls.

2. ANSWERING TIME[10]

People in distress are often in desperate need to get in contact with the emergency services operator. 23 Member States reported less than 10 seconds for the average answering time needed to get in contact with the emergency services. DE did not provide an answer.



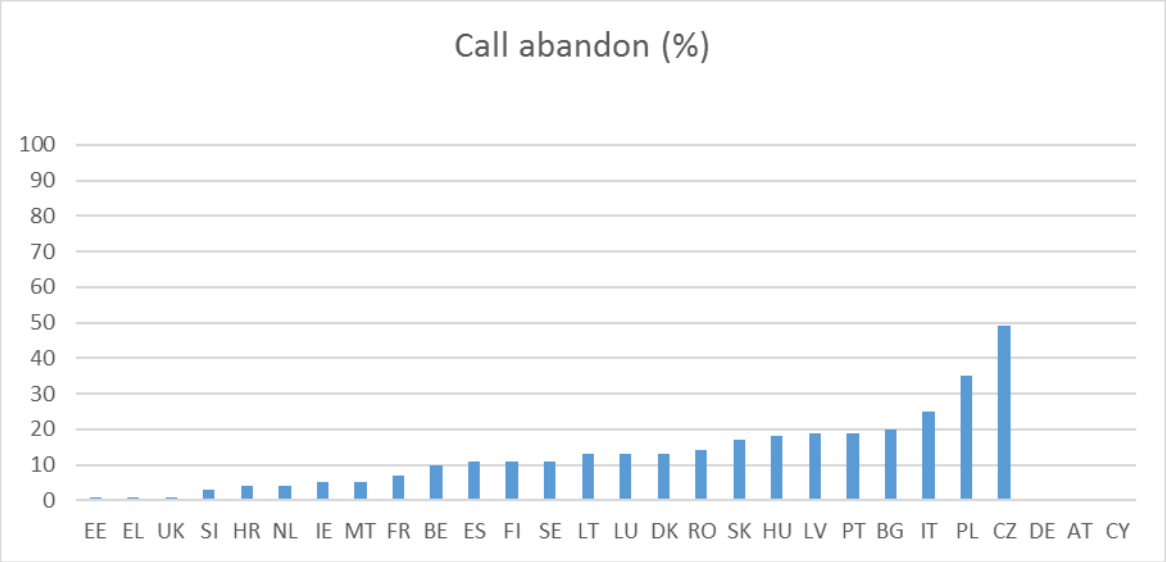
Meanwhile more than 90% of the calls are answered within 10 seconds in 13 Member States. DE and EL did not provide an answer.



[10] The time period between the moment the emergency call is presented to the stage 1 PSAP switch and the moment the call is being answered by a PSAP human operator.

3. CALL ABANDON RATE

The respondents were invited to report on the calls that are presented to the PSAP switches but terminate prior to an answer by a human operator. 25 Member States reported relevant information. Call abandons may be caused by network problems, call congestion, etc. DE, AT and CY did not report this data.



4. LACK OF AVAILABILITY OF CALLER LOCATION

Article 26(5) of the Universal Service Directive provides for the obligation of telecom operators to make caller location available as soon as the call reaches the authority handling the emergency call. However, there are cases, where due to technical problems in the networks or on the PSAP side, caller location information cannot be determined automatically or on request in both "push" and "pull" systems. The Electronic Communications Code will make handset derived location mandatory in order to make available to the Public Safety Answering Point more accurate caller location.

Only 16 Member States reported this data. In most Member States the lack of availability of caller location occurs in less than 10% of the calls. Higher rates of failure to provide caller location were reported for Belgium (33%), Croatia (31%), Latvia (25%) and Poland (21%).

The availability of handset derived location is improving, in particular the Advanced Mobile Location (AML), as more handsets and operating systems - Android and IoS as of March 2018 – support AML. Availability of AML type of location was reported by Estonia (32%), Ireland (26%) Lithuania (82,5%) and the UK (50%).

5. CALLER LOCATION ACCURACY AND RELIABILITY

Article 26 paragraph 5, second sentence of the Universal Service Directive asks Member States to lay down caller location accuracy and reliability criteria. In addition to the network-based solutions that the current legislation is providing for, the Electronic Communications Code lays down in Article 109 (6) the obligation for Member States to

ensure that network- and handset-based location is provided to the most appropriate PSAP. Member States will have to continue to set caller location accuracy and reliability criteria, if necessary after consulting BEREC.

In view of these legislative provisions that will have to be transposed into national legislation within the next two years, Member States were asked to provide information on both network- and, where already available, handset-derived location solutions deployed. Where statistical data was available it was requested to provide the level of accuracy and reliability provided through network and handset based location solutions.

Network-based location

In all Member States the location of the caller from *fixed networks* is given by the installation address, street/mailing/billing address of the calling party, STD Code match or county match. This location technology is deemed reliable by the respondents.

All Member States reported that for calls from *mobile networks* the location is given by the Cell/sector ID providing a high reliability of the data transmitted to the PSAP operator. The accuracy reported ranges from 500 to 40000 meters, depending in the density of the network, i.e: urban or rural area.

More accurate mobile network-based location solutions used are Timing advance, Round trip time, Sector ID. These positioning methods substantially improve the accuracy of network-based location.

Handset-based location solutions

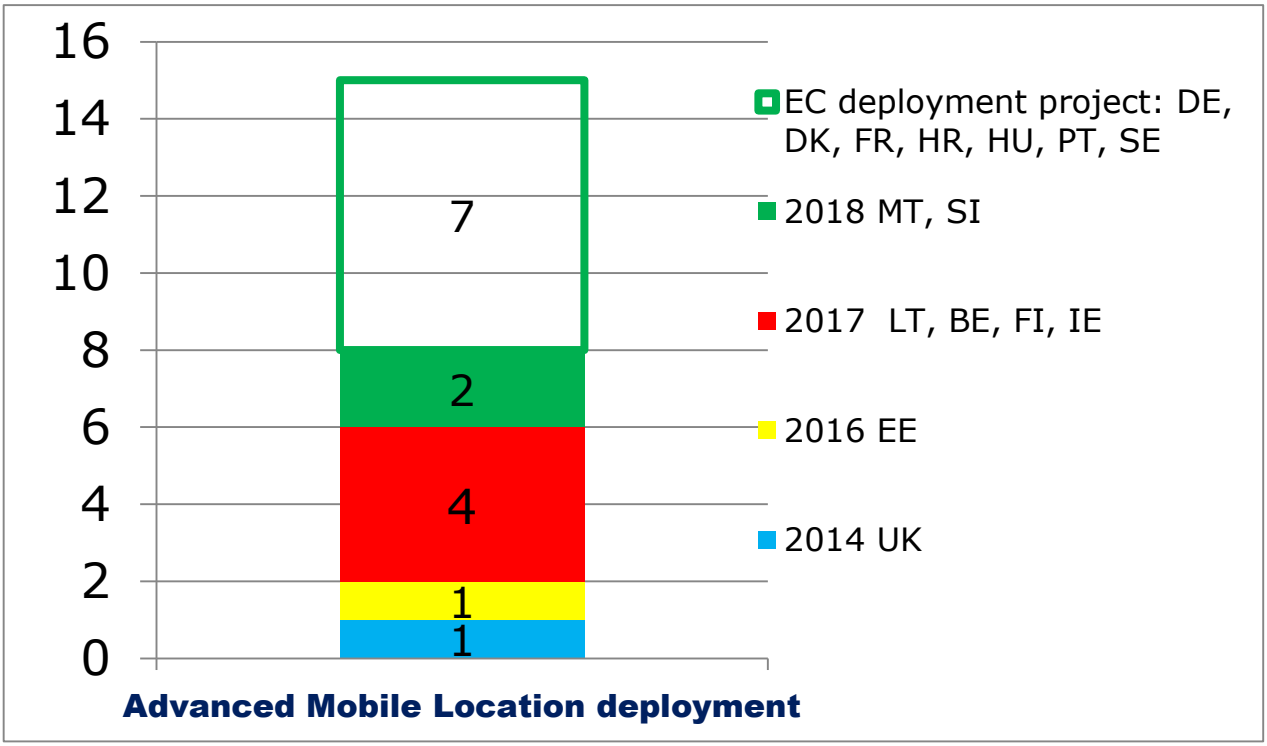
In terms of handset-based location solutions Member States reported two types of implementation:

a) Advanced Mobile Location (AML) solution

AML, first deployed in the United Kingdom, can improve accuracy levels to up to 4000 times providing accuracy under 100m. The solution does not ignore the Cell-Id information but rather supplements it with either GNSS information or Wifi information derived from the handset. In order to bring GNSS location, in particular provided by EU's Galileo satellite system, in the service of EU citizens in November 2018 the European Commission signed and launched the deployment project of handset-based Advanced Mobile Location[11] known as the HELP112 II. The wining consortium includes 7 countries as direct partners of the joint bid, namely Croatia, Denmark, France, Germany, Hungary, Portugal, and Sweden. The handset-based location solutions already deployed in Member States are used as a complement to network-based location data.

It is expected that by 2020 more than half of Member State would have fully deployed AML handset-based location technology:

[11] When an emergency call is made with a smartphone that is AML enabled, the phone automatically activates its location capability (GNSS or Wifi) during 20 seconds to establish its position and sends this information via a text message to the emergency services. The radius is of 50 meters or less for 85% of the calls. This is a life-saving improvement when compared with Cell ID location that can have a radius of tens of kilometres in rural areas.



b) Implementation of an emergency application for more accurate caller location

Emergency applications may be deployed to ensure more accurate handset based location using the GNSS or Wifi capability of the smartphone.

Emergency applications are being deployed at a Member State or regional level for the purpose of delivering more accurate caller location than that provided through network-based solutions.

These applications require prior action by the citizen – as opposed to AML – as it has to be downloaded. The transmission of location data is possible only when an active data connection is available. These applications can provide a much more accurate GNSS/Wifi location than network-based location solutions.

Member states that reported the deployment of an emergency application for more accurate caller location are: Belgium (112.be launched in July 2017), Denmark ("112app"), Italy ("Where Are U" in Lombardia and Rome, "FlagMii" in Piemonte), Finland (112 Suomi) and Latvia ("My safety" App). Web based services are deployed in Malta and Sweden.

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

Article 26(5) of the Universal Service Directive as amended by the "Citizens' Rights" Directive requires instant provision of the caller location to the authority handling emergency calls.

Due to the implementation of the "push" system or the automatic "pull" system, near instant times (up to 10 seconds) were reported for the provision on *network based caller location* by Belgium, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Denmark, Estonia, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg,

Malta, the Netherlands, Poland, Portugal, Romania, Slovenia, Spain, Sweden and the United Kingdom.

Much more time is needed to receive the caller location in Greece (261 s). Austria and did not report relevant data for this Key Performance Indicator.

Due to its inherent architecture, handset-based location technologies rely on the speed of the handset capabilities to derive relevant location parameters from GNSS or WIFI signals. A number of Member State reported on the time needed to receive *handset-based location*: Estonia (10s), Finland (5s), Ireland (10s), Lithuania (25s), Latvia (20s), Malta (8s), Slovenia (6s) and United Kingdom (15s).

7. ACCESS TO EMERGENCY SERVICES WHILE EU ROAMING

All Member States reported the availability of access to 112 and caller location in case of roaming calls, although in Belgium, Greece and Croatia caller location is not available for every national emergency call.

The United Kingdom reported that for intra-EU roaming calls caller location is not available for the majority of EU roamers.

8. ACCESS TO EMERGENCY SERVICES FOR USERS WITH DISABILITIES

The current regulatory framework provides for the obligations of Member States to ensure that users with disabilities enjoy equivalent access to emergency services. Member States were invited to provide information on their measures, which ensure that users with disabilities enjoy tailored solutions for equal access to emergency services taking into account aspects such as availability, type of access, number of accesses or user location. The recently adopted European Communications Code mandates measures for users with disabilities that maximise interoperability, avoid pre-registration, where feasible, for access to alternative means of emergency communication, and inform everybody about the availability of the existing means of equivalent access to emergency communication services when travelling to another EU country.

The principle of equivalence implies that disabled end-users should be able to access emergency services through electronic communication services in a way functionally equivalent to the access to emergency services ensured to other end-users through electronic communication services by way of calling the "112" number.

Against this legal background, Member States have to implement accessibility solutions that replicate (are equivalent to) the two-way communication ensured in the case of a voice call to 112, through text- or video-based solutions available at all times and places in their territory to disabled users of fixed and mobile devices, including travellers, and incorporating effective caller location.

The technical accessibility solutions deployed by Member States to enable the access of disabled end users to emergency services reported are quite varied. Some Member States have deployed a portfolio of technologies aiming to optimise the effective accessibility to emergency services, e.g. specific fixed solutions complemented by mobile SMS or app-based solutions.

The technology that is most deployed is SMS. Deployed in 23 Member States[12], SMS allows a two-way, text-based interaction between the person alerting the emergency services and the Public Safety Answering Point (PSAP) response service. The end-user sending an SMS may be located by identifying the mobile antenna coverage of the cell where he or she is initiating the communication. This may typically range from 500 m to 40 km depending on the density of the network, and corresponds to the cellular network-based location technology most commonly used by mobile network operators to locate callers to 112 response services.

State of the art solutions available today can provide much better location and other features than SMS. Emergency application platforms are increasingly deployed that rely on initiating legacy calls or SMS communication, but send a much more accurate handset-based location based on GNSS positioning data (5-100 m) through the data channel, complementing the Cell ID location[13]. Web-based services and advanced emergency applications may also complement the legacy solutions with real-time text and video communication. However, certain app solutions do not meet minimum standards, e.g. if they only allow limited uni-directional signals to be sent by users, without further interaction with the PSAP.

Relay services for disabled users may also relay a request to access emergency services. In such cases, user location is not yet implemented in Member States but this should be technically feasible.

Specialised devices at fixed locations can ensure a two-way, interactive communication with the PSAP operator. The location of these devices is determined by the installation address. Such solutions can ensure equivalence of access at the places where they are located but are, however, insufficient by themselves to meet the requirement of ubiquitous disabled end-user access to emergency services. These may have to be complemented with solutions that cater for mobile users with disabilities.

However, while fax is deployed in a number of Member States, it does not ensure the swift two-way communication that is required in case of emergency, in contrast with the effectiveness of a 112 call. Similarly, an e-mail, which is also mentioned as an accessibility solution in some circumstances, does not allow the provision of automatic user location to the PSAP.

The information received from Member States reveals a number of potential implementation issues as regards equivalent disabled end-user access to emergency services. In addition to the basic problem of lack of availability of any appropriate service that ensures two-way interactive communication (EL), there are Member States where solutions meeting minimum requirements are not deployed throughout the whole territory (PL, IT, ES) or are not available at all times of the day (CZ). In addition, user location information for disabled users is not available in 14 Member States[14]. In a significant

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[12] AT, BE, CY, DK, EE, ES, FI, FR, HR, HU, IE, IT, LT, LU, LV, MT, PL, PT, RO, SE, SI, SK, UK

[13] There is growing interest in deployment of such Advanced Mobile Location (AML) solutions to complement cellular network-based solutions.

[14] CY, CZ, DE, EL, FR, IE, IT, LV, LT, HR, NL, PL, PT, ES.

number of Member States the deployed solution is not accessible to travellers from other Member States[15]. The table below is an overview of the alternative means of access for end-users with disabilities currently deployed in the EU.

	Means of access	Interactive	All territory	24/7	User location	Registration	Free	Number of access[16]
AT	SMS to 0800-133133	No[17]	Yes	Yes	Yes	No	Yes	89
	Fax to 0800-133133	No	Yes	Yes	Yes	No	Yes	
	gehoerlosennotruf@polizei.gv.at	Yes	Yes	Yes	No	No	Yes	
BE	SMS to short number	Yes	Yes	Yes	Yes	No	Yes	N/A
	112.be application	Yes	Yes	Yes	Yes	No	Yes	N/A
	Fax to 112 or 101	Yes	Yes	Yes	Yes	No	Yes	N/A
BG	Help112 application	Yes	Yes	Yes	Yes	Yes	Yes	N/A
CY	Fax to 1408 or 1409	No	Yes	Yes	No	N/A	N/A	N/A
	SMS to 8112	Yes	Yes	Yes	No	No	Yes	N/A
CZ	relay service	N/A	Yes	No	No	N/A	Yes	N/A
DE	Fax to 112 or 100	No	Yes	Yes	N/A	Yes	Yes	N/A
	Relay service	Yes	Yes	Yes	No	Yes	Yes	N/A
DK	SMS to long number	Yes	Yes	Yes	No	Yes	Yes	N/A
	Emergency application	No	Yes	Yes	Yes	No	Yes	N/A
EE	SMS to 112	Yes	Yes	Yes	Yes	Yes	Yes	11
EL	-	-	-	-	-	-	-	-
ES[18]	Relay services to 112	-	No	Yes	Yes	-	-	
	SMS to long numbers	-	No	Yes	No	-	-	
	Fax to long numbers	-	No	Yes	No	-	-	
	Emergency apps	-	No	Yes	Yes	-	-	
	Fax	-	No	Yes	Yes	-	-	
FI	SMS to 112	Yes	Yes	Yes	Yes	Yes	Yes	N/A
FR	SMS to 114	Yes	Yes	Yes	No	No	Yes	102.771
	Fax to 114	Yes	Yes	Yes	Yes	No	Yes	262
	E-mail	N/A	Yes	Yes	No	No	N/A	N/A

[15] This is typically the case of SMS services to short numbers such as 112, 113 or 114, as text messages from roaming users are re-routed, under currently applicable standards, to the corresponding number in the user's domestic network. Such short-number SMS services are deployed in BE, CY, EE, FI, FR, HR, IE, LV, LT, RO, SK, SI, SE, UK. In some Member States, alternative means of access have been deployed that are available to travelling end-users e.g. emergency application, SMS to long number.

[16] Number of communications

[17] Only two out of three operators ensure interactive two way SMS communication

[18] Different solution for each region

	Means of access	Interactive	All territory	24/7	User location	Registration	Free	Number of access[16]
HR	SMS to 112	No	Yes	Yes	No	No	Yes	14
	Fax to 112	No	Yes	Yes	No	No	Yes	0
HU	SMS to 112	Yes	Yes	Yes	No	No	Yes	682
	112-SOS application	Yes	Yes	Yes	Yes	Yes	Yes	73
IE	SMS to 112	Yes	Yes	Yes	No	Yes	Yes	369
IT	SMS - long number[19]	No	No	Yes	No	No	No	N/A
	Flag Mii app	Yes	No	Yes	Yes	Yes	No	N/A
	Where ARE U App	No	No	Yes	Yes	Yes	No	N/A
	E-mail[20]	No	No	Yes	Yes	No	No	N/A
LT	SMS to 112	Yes	Yes	Yes	No	No	No	42.042
LU	SMS to 112 and long number	Yes	Yes	Yes	Yes	No	Yes	4.408
LV	SMS to 112	Yes	Yes	Yes	No	No	Yes	210
	Emergency application	Yes	Yes	Yes	Yes	No	Yes	N/A
MT	112.mt application	Yes	Yes	Yes	No	Yes	Yes	N/A
	SMS to long number	Yes	Yes	Yes	Yes	No	No	1
	Flag mii web service	Yes	Yes	Yes	Yes	Yes	Yes	N/A
NL	Emergency application	Yes	Yes	Yes	No	Yes	Yes	457
	Web based emergency access	Yes	Yes	Yes	No	Yes	Yes	N/A
	Relay services	Yes	Yes	Yes	No	Yes	Yes	189
PL	Deaf help application	Yes	No	Yes	No	Yes	Yes	N/A
	SMS to Police	Yes	No	No	No	Yes	Yes	N/A
PT	SMS to long number	Yes	Yes	Yes	No	No	No	703
RO	SMS to 113	Yes	Yes	Yes	Yes	Yes	Yes	115
SE	SMS to 112	Yes	Yes	Yes	Yes	Yes	Yes	166
	Text telephony – fixed	Yes	Yes	Yes	Yes	No	N/A	7
	Relay service	Yes	Yes	Yes	No	No	Yes	270
SI	SMS to 112	Yes	Yes	Yes	Yes	No	Yes	24.650
	WAP 112	Yes	Yes	Yes	No	No	Yes	N/A
SK	SMS to 112	Yes	Yes	Yes	Yes	No	Yes	23
UK	Text relay app	Yes	Yes	Yes	Yes	No	Yes	N/A
	SMS to 112/999	Yes	Yes	Yes	Yes	Yes	Yes	N/A
	Text relay on textphones	Yes	Yes	Yes	Yes	No	Yes	N/A

[19] Different number for each region/locality
[20] Different address for each region/locality

9. PUBLIC WARNING SYSTEMS

All Member States reported a deployed public warning system except in Malta and Greece.

The following public warning systems are deployed in EU Member States:

- Sirens in 16 Member States: AT, BG, CY, CZ, DE, DK, FI, FR, HR, HU, LT, LV, NL, PL, SI, SK.
- TV, Radio or social media alerts in 10 Member States: CY, DE, EE, HR, IE, LV, NL, PL, SE, SK
- Specific application in 5 Member States AT, DE, DK, HU, PL
- SMS alert in 5 Member States: BE, IE, LU, PT, ES
- Cell Broadcast in 4 Member States: BE, LT, NL, RO

14 Member States reported the intention to deploy public warning systems in the next two years: BG (extending System coverage), CY (Mobile networks, application), CZ (SMS), EE (SMS), ES (Cell Broadcast, SMS or application), FI (application), FR (Cell broadcast or SMS), HR (SMS, Cell Broadcast, social media), LU (not specified), LV (Cell broadcast, Application for end-users with hearing impairment), MT (SMS), RO (Media gateway for the Cell Broadcast system), SI (Cell Broadcast), UK (not specified).

10. AWARENESS LEVELS OF 112

Data on the awareness level in 2017 of the single European emergency number "112" was published in July 2018 through the Eurobarometer E-communications household survey[21] commissioned by the European Commission.

The findings on the awareness levels at national[22] level are the following: most (61%) would call 112, while 31% would call the national emergency number. 14% would call another number, while 5% do not know what number they would call.

The findings on the EU level[23] awareness levels are the following: almost half (49%) identified 112 as the single number to call throughout the EU. This represents a slight 1pp increase since 2015. Awareness of 112 as the single number to call has increased by seven percentage points since 2014.

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[21] Published on 27 July 2018: https://publications.europa.eu/en/publication-detail/-/publication/57889a55-8fb6-11e8-8bc1-01aa75ed71a1/language-en

[22] The question asked: Can you tell me what telephone number you would call in the event of an emergency in (OUR COUNTRY); for example, if someone needs urgent medical assistance or if you need to contact the police or the fire brigade?

[23] The question asked: Can you tell me what telephone number enables you to call emergency services anywhere in the EU?

Meanwhile 13% mentioned other numbers, some together with 112. 39% could not say what number to call.

QB17 Can you tell me what telephone number enables you to call emergency services anywhere in the EU? (MULTIPLE ANSWERS POSSIBLE)
(%)

	112	2017 - 2015	Other number(s)	2017 - 2015	Don't know	Only correct answer	2017 - 2015
EU28	49	▲ 1	14	▲ 1	39	47	▲ 1
BE	74	▲ 9	19	▲ 5	9	72	▲ 8
BG	64	▲ 3	7	▲ 2	30	63	▲ 3
CZ	70	▲ 10	14	▼ 2	19	68	▲ 9
DK	50	▲ 1	19	▼ 1	34	47	▲ 1
DE	57	▼ 4	8	=	36	56	▼ 3
EE	72	▲ 7	5	▼ 1	23	72	▲ 7
IE	50	▲ 6	28	▼ 2	24	48	▲ 6
EL	14	▲ 1	27	▲ 3	60	13	=
ES	30	▲ 1	10	▲ 3	60	29	=
FR	39	▼ 1	13	▲ 2	48	39	▼ 1
HR	68	▲ 4	10	▼ 2	23	67	▲ 4
IT	42	▲ 6	24	▼ 2	39	37	▲ 5
CY	60	▲ 2	8	▼ 2	33	59	▲ 2
LV	50	▲ 6	12	▼ 2	39	49	▲ 6
LT	44	▲ 6	22	▼ 1	35	43	▲ 7
LU	88	▲ 8	9	▼ 1	8	84	▲ 6
HU	71	▲ 8	7	▼ 4	23	70	▲ 8
MT	51	▲ 8	12	▼ 2	38	50	▲ 7
NL	64	▲ 3	11	▲ 2	26	63	▲ 3
AT	53	▲ 3	24	▼ 1	24	52	▲ 3
PL	79	▼ 4	7	=	16	78	▼ 4
PT	49	▼ 2	11	▲ 1	41	48	▼ 2
RO	55	▼ 6	14	▲ 5	32	54	▼ 7
SI	65	▲ 15	17	▲ 2	20	62	▲ 14
SK	71	▼ 1	12	▼ 2	18	70	=
FI	65	▲ 1	10	▲ 1	27	63	=
SE	63	▲ 6	8	▼ 3	30	62	▲ 6
UK	26	▲ 4	22	▲ 4	53	26	▲ 4