

Public Safety Answering Points Global Edition

-February 2025-

Abstract



Understanding PSAPs
around the world has never
been easier

eena
EUROPEAN EMERGENCY NUMBER ASSOCIATION

2024

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 **INTRADO**
Always there in an emergency

Welcome message

Since 2011, EENA's annual publication "Public Safety Answering Points (PSAPs) in Europe" has become one of the most anticipated documents in the emergency services field. During the years, the document evolved to a global overview and, for the first time ever, in 2016 EENA published "**PSAPs around the Globe**".

In 2023, EENA in collaboration with the Department of Public Security of the Organization of American States (**OAS**), prepared the publication "Public Safety Answering Points (PSAPs) in Latin America", including information from 10 countries.

The time for the ninth global edition is finally here! This edition includes the data from all the countries in this year's Latin America edition, resulting in a publication containing information for **64 countries worldwide!** Find details about PSAPs' functioning, understand the complexity of different national structures and get a clear view of the context in which PSAPs operate.

Every year, the report covers new topics to make sure the latest information on new technologies and developments is available to you. The 2025 edition includes everything covered by previous editions, as well as information on how the emergency call handling service is funded, caller location accuracy and reliability criteria, apps for first responders, PSAP capability to receive IMS-based eCalls, and more.

We would like to thank Intrado for sponsoring this year's publication.

Enjoy your reading!

The EENA team

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For more information, please contact Jerome Paris at jp@eena.org.

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Always there in an emergency

Intrado is the essential partner for those committed to saving lives and protecting communities anywhere in the world. As a leading global provider of trusted emergency response solutions, Intrado improves public safety outcomes by connecting help to those in need.

The company blends legacy intelligence, modern technology, and passionately dedicated people to create end-to-end solutions that are innovative, resilient, intuitive, and insightful.



LEO and Direct to Device (D2D) might be new technologies now, but Intrado have been servicing satellite providers with emergency routing for over a decade.

For years, when organizations in North America have needed to route emergency calls to the right PSAP, Intrado has been there. Regarded as the de facto standard in the USA and Canada, Intrado now offers similar services elsewhere around the globe.

Our Emergency Call Relay Center (ECRC), located in our headquarters in Longmont, Colorado, USA, works 24/7/365 and provides emergency call handling services to customers worldwide who either don't have their own relay centers or need one as a backup solution.



Intrado – By The Numbers

40+ Years of Experience

1000+ Employees

6000+ PSAP Connections

#1 E911 Footprint in US

230 Carrier Customers

1400 Enterprise Customers

430M 9-1-1 transactions /year

170M TN Records Managed

3.1M Wireless Cell Sectors

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Intrado Next Generation (NG112/911) / ETSI TS 103 479 Solutions

Intrado NG112 solutions provide a flexible, future-proofed foundation for emergency communications. Powered by secure, constantly IP networking technology, NG Emergency Services networks, ESInets, provide the robust, reliable foundation for enhanced emergency call routing, seamless data sharing and broad interoperability. Intrado services and solutions include:

NG112/911 with i3 and ETSI TS 103 479 Compliance

i3 and ETSI TS 103 479 compliant solutions – regardless of where you are in your transition to NG112/911.

NG Networks

The backbone for NG112/911 applications is built on a secure, robust IP network enabling fully managed call routing and data delivery with unmatched flexibility and interoperability

Interoperability Testing

For our partners and vendors, Terminating Emergency Services Routing Proxys (T-ESRPs).

CLEC/ILEC Services

Network gateway and data management services, reporting and analytics tools all help enable the most accurate address data delivery services.

GIS i3 & ETSI TS 103 479 Data Services

i3 & ETSI TS 103 479 compliant GIS data services answer the challenges of location validation, routing, and service identification.

CPE / Call Handling

Fully-integrated, mission-critical 112/911 call handling equipment and services that accelerate call handling, reduce maintenance, enhance reliability and provide unmatched uptime.

Text-to-112/911 Solutions

For times when text/sms messaging is more convenient than a voice call or tactically necessary, Intrado offers three industry-standard solutions.

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in an emergency**

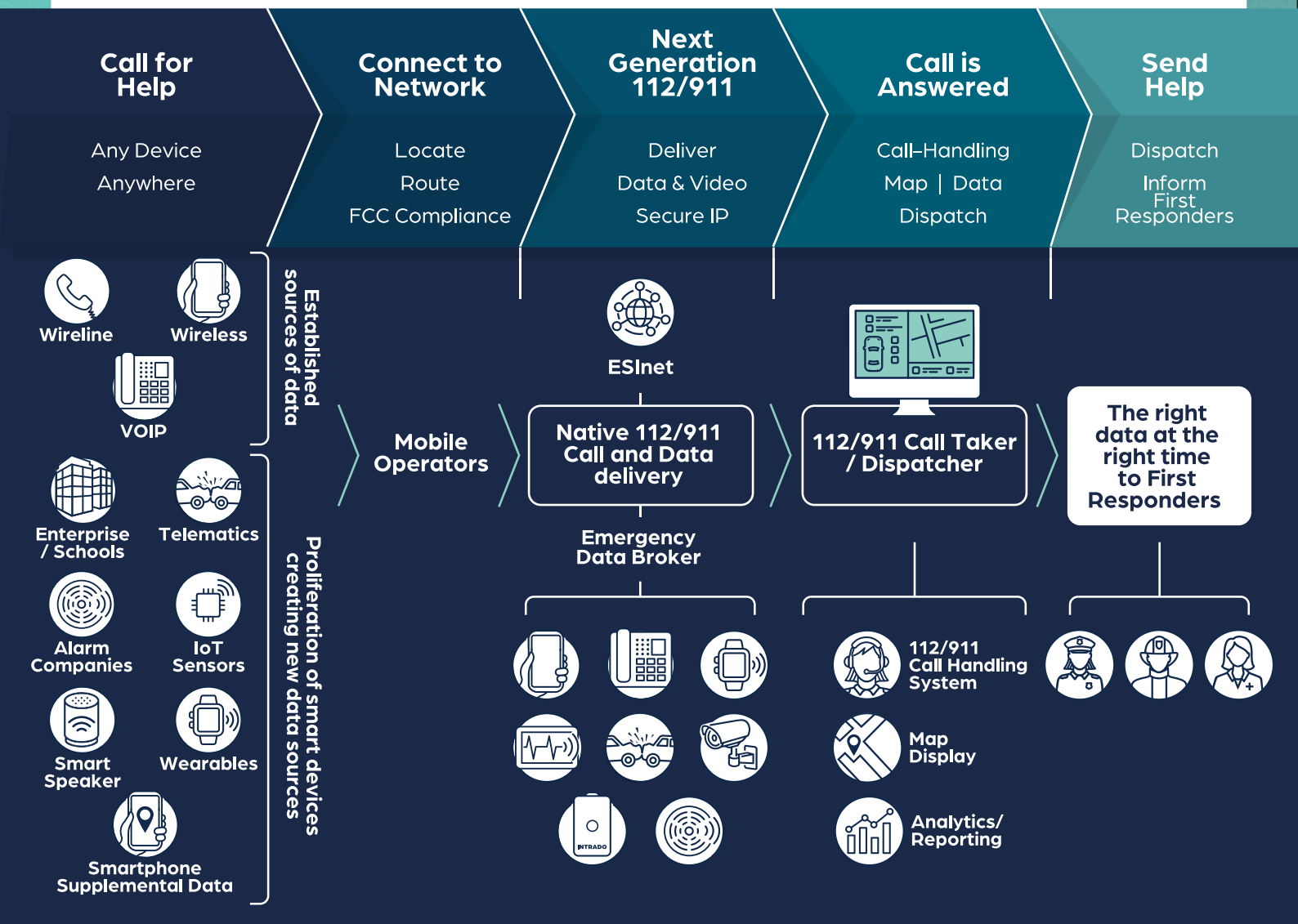


Intrado – a leader in public safety for over 45 years.

Our innovative solutions, combined with dedicated service and unmatched reliability, have made Intrado an essential partner to PSAPs, network operators, satellite communications companies and others in the public safety community.

With 45-plus years of experience, nobody can match our expertise or our level of deep-rooted passion and commitment.

Founded as an innovative company disrupting the status quo in emergency services, we are proud of our roots while being fully committed to advancing safety services with cutting-edge product and technological innovation.



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Report information

Last updated on 11 February 2025.

Use of symbols

- "-" and "*No information provided*" are used when no answer was provided in a questionnaire response
- "*Not available*" is used when a questionnaire response indicates that the data is not available
- "*n/a*" is used when a question is not applicable

List of acronyms

A definition of all acronyms related to 112 can be found in the [112 Terminology EENA Operations Document](#). It is updated with the terminology used in the EENA Operations and Next Generation 112 documents.

Questions or comments? Please contact Jerome Paris at jp@eena.org.

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Call handling models

This section provides a short explanation of the call handling models as they are defined in the publication "[Emergency call handling service chain description](#)" and as they are used in this report.

Please note that the following models do not introduce all the PSAPs Organisation models in the world but present the major concepts with voluntarily simplified descriptions. The models do not cover the entire call handling model but rather try to highlight their major characteristics.

Definitions

Emergency Response Organisation (ERO): organisation handling specific type of emergencies, e.g. the police, fire and rescue, emergency medical services, coast guard, etc.

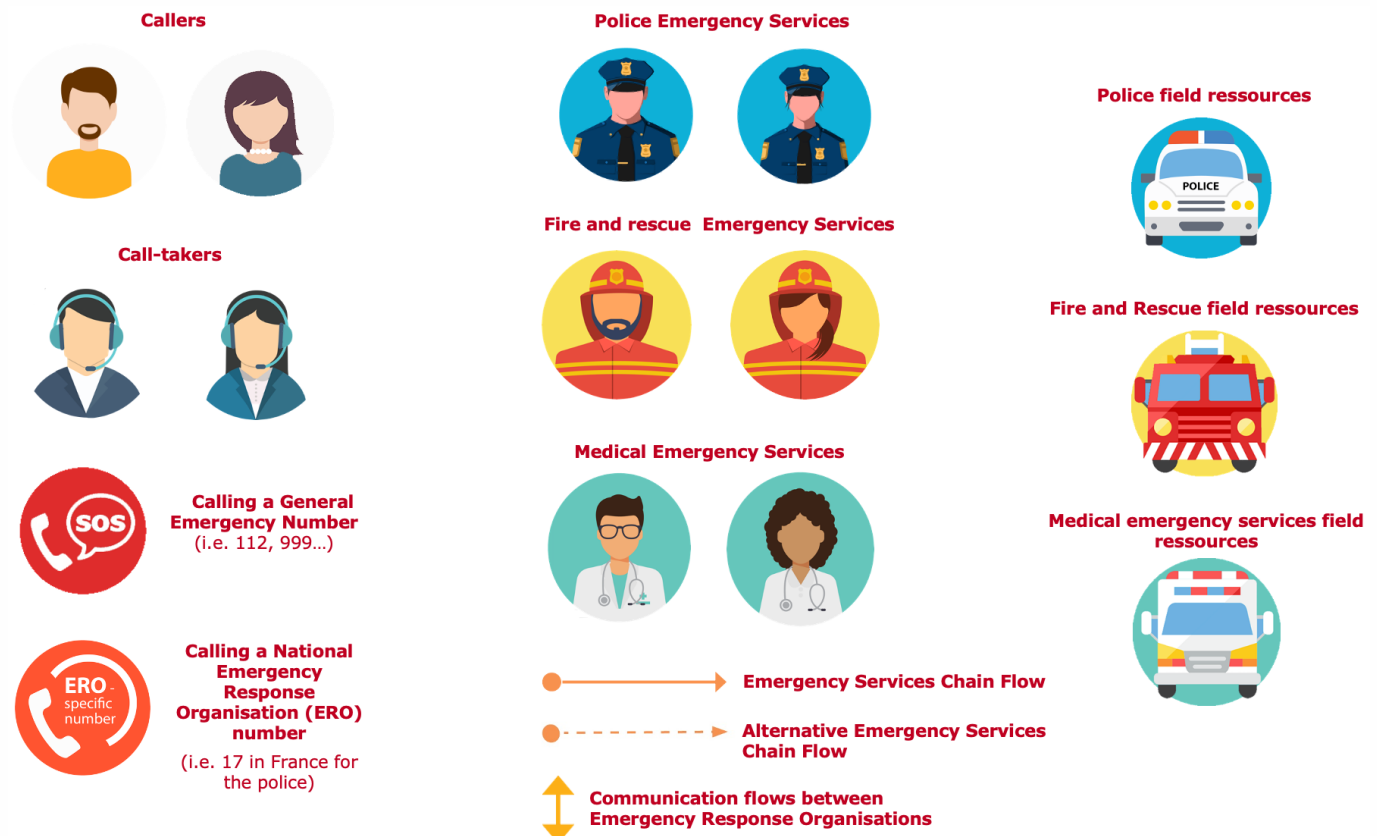
Public Safety Answering Point (PSAP): organisation under the responsibility of a public authority or a private organisation under public mandate in charge of first reception of emergency calls.

General emergency number: phone number that citizens can use for any type of emergencies e.g. 112, 911.

ERO emergency number: a specific number for an emergency service, for example, one number for police, another number for medical emergency services and another for fire and rescue services.

General emergency number PSAP: organisation in charge of handling all types of emergency calls. Its responsibilities and tasks may differ from one country to another.

Legend



■ Model 1: EROs handling emergency calls

General description

Many emergency numbers co-exist in the country. Emergency calls made to the general emergency number (i.e. 112 in the European Union) are redirected to one of the emergency response organisations, e.g. police, fire and rescue, or medical emergency services.

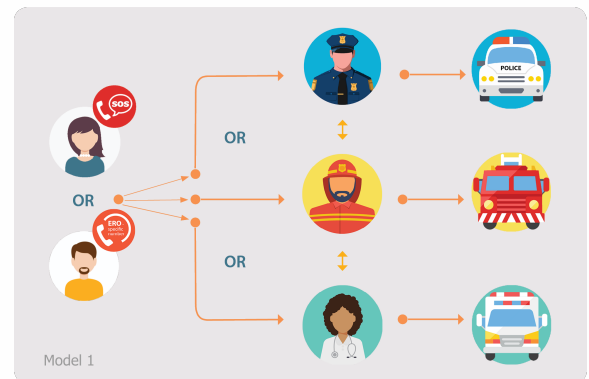
If the intervention of a different emergency response organisation is required, the call and/or data about the emergency situation are forwarded to the most appropriate ERO.

Examples: Austria, Germany, France.

Emergency call handling chain

Calls are handled by a PSAP operated by one emergency response organisation:

1. Reception of the call by a PSAP operated by an emergency response organisation
2. Dispatch to other emergency services (e.g. a 112 call is answered by the police but the citizen needs an ambulance): the call is forwarded by the operator
3. Dispatch of the intervention resources done by the ERO operators



■ Model 2: Filtering Stage 1 PSAP and resource dispatching stage 2 PSAPs

General description

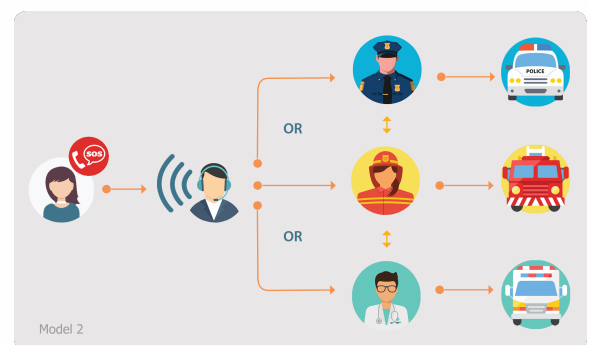
Emergency call handling is organised over two levels: there is an independent organisation in charge of the first reception of the call and then the call is forwarded to the most appropriate local emergency response organisation.

Examples: United Kingdom, Ireland

Emergency call handling chain

The general emergency number calls handled by a general emergency number PSAP:

1. General emergency number (e.g. 112, 999) calls handled by civilian operators
2. Stage 1 PSAP: Filtering tasks. The call-taker locates the caller and where the emergency is. He or she asks the caller with which emergency service he/she wants to get in contact (e.g. “What do you need? police, ambulance, fire and rescue services?”). The detailed gathering of data is not done by the stage 1 call-taker.
3. Transfer to medical / fire and rescue / police services: stage 1 PSAP forwards the call to the appropriate local emergency service
4. Detailed data gathering is done by the emergency response organisation operator
5. Dispatch of the intervention resources is ensured by the emergency response organisation



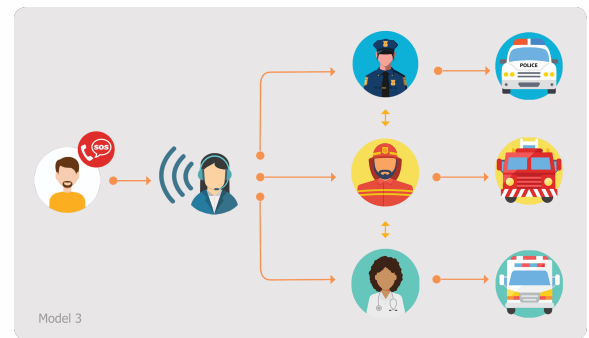
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■ Model 3: Only one emergency number. Data gathering by stage 1, resource dispatching by stage 2

General description

As in the previous model, the handling of emergency calls is organised in two levels. The difference between the “Filtering Stage 1 PSAP and resource dispatching stage 2 PSAP(s)” and this model is the role played by the independent organisation. In this case, the call-taker is in charge of the classification of the call and makes a parallel dispatch to the most appropriate EROs. In some cases, police, fire and rescue and medical specialists are available to support the call takers.



Example: Romania

Emergency calls handling chain

The general emergency number calls handled by a general emergency number PSAP:

1. Classification and data gathering done by the stage 1 PSAP call-taker: the operator asks what is happening and decides which EROs should be contacted depending on the information given by the caller. The operator gathers detailed data about the location and emergency situation of the caller.
2. Parallel dispatch to medical emergency / fire and rescue / police services if needed
3. Dispatch of the intervention resources done by emergency response organisation

■ Model 4: National emergency numbers routed to EROs. General emergency calls routed to civilian PSAP

General description

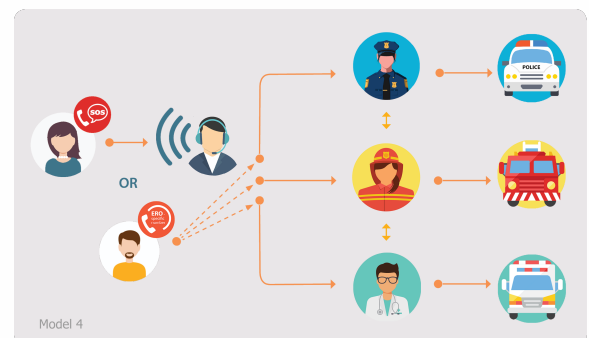
General emergency number (i.e. 112) co-exists with national numbers. Emergency calls made to the general number are routed to civilian PSAPs, calls to national numbers are routed to EROs.

Example: Spain – some regions

Emergency calls handling chain

For the emergency calls made to the generalist emergency number, the emergency calls handling chain is the same as model 3.

For emergency calls made to the national specific EROs numbers, the emergency calls handling chain is the same as model 1.



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■ Model 5: Civilian Call-Taking & Dispatching

General description

Emergency calls made to the general emergency number (i.e. 112) are handled by civilian operators. The operators are highly trained and handle both call-taking and dispatch of intervention resources. In some cases, police, fire and rescue and medical specialists are available to support the call-takers.

Example: Finland

Emergency call handling chain

The same PSAP is in charge of all tasks: classification of calls, data collection and dispatching the intervention resources to the incident.

Source

[Emergency call handling service chain description](#)



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EENA knowledge hub

EENA is committed to knowledge-sharing in our effort to improve public safety and the work of emergency services. We **regularly publish documents on numerous topics about:**

- [112 General Information](#)
- [Access to 112](#)
- [AED](#)
- [Apps](#)
- [Case Studies](#)
- [Drones](#)
- [eCall](#)
- [Legislation](#)
- [Location](#)
- [NG112](#)
- [PSAP Operations](#)
- [PSAP Technology](#)
- [Public Warning](#)
- [Social Media in Emergencies](#)

View all our **documents** and **webinars** under the knowledge hub available at the **EENA website**.

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10.5 million
Population

447,435 km²
Area

3,659 K
Calls

2023
Year of reference



Organisation handling 112

SOS Alarm Sverige AB



National legislative / regulatory acts on 112

- The Electronic Communications Act (Chapter 7; 35 §, 36 §), only in Swedish:
https://www.riksdagen.se/sv/dokument-och-lagar/dokument/svensk-forfattningssamling/lag-2022482-om-elektronisk-kommunikation_sfs-2022-482/
- PTS (Swedish Post- and Telecom Agency) regulation on emergency calls, only in Swedish:
[ptsfs-2022_3-om-formedling-av-nodkommunikation-och-tillhandahallande-av-lokaliseringsuppgifter-till-samhallets-alarmeringstjanst.pdf](https://www.pts.se/ptfsfs-2022-3-om-formedling-av-nodkommunikation-och-tillhandahallande-av-lokaliseringsuppgifter-till-samhallets-alarmeringstjanst.pdf)
- Law (1981: 1104) Concerning the Activities of Certain Regional Alarm Centres, only in Swedish:
https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/lag-19811104-om-verksamheten-hos-vissa_sfs-1981-1104



Report applies to

- 112 Centres, FRS, EMS, Police, Sea/Air Rescue, Coast Guard
- All of Sweden

Emergency call handling model

All 112 calls are handled by civilian call takers ("SOS-operators") at SOS Alarm. These operators are highly trained to handle both 112 call taking and dispatching of intervention resources. Depending on the type of emergency, the SOS-operators are supported by indexes/decision trees and interview support adjusted to the incident type protocol. In most cases fire and rescue or medical specialists are available to support the call takers.



Most of the Regions, responsible for Emergency Medical Services (EMS) have agreements with SOS Alarm, often stating that medical evaluation (triage) and prioritization has to be done by a registered nurse in a certain percentage of the total amount of medical cases or in all cases. Four Regions (Uppsala, Västmanland, Värmland and Södermanland) run their own stage 2 PSAPs/Dispatch medical centres. 112-calls concerning only medical cases in those Regions are transferred by SOS Alarm to the concerned EMS PSAP which then takes over the call. Some regions have a mix, where most the triage is made by their own nurses, but dispatching is done by SOS Alarm and in one case vice versa. Of the twenty-one Swedish regions, SOS Alarm thereby handles prioritizing for seventeen and dispatching for sixteen.

Interview in Fire Rescue Services (FRS) cases are done by SOS-operators. Dispatching of Fire Rescue Services are done by SOS Alarm or by FRS own dispatch centres, so called Rescue Centres, for example in the big city regions. They use SOS Alarms operational technical platform and are thus interconnected with SOS Alarm.

Interview and dispatching of Police resources is done by regional Police command and control centres. Dispatching of sea and air rescue is done by the Joint Rescue Coordination Centre (JRCC), located in Gothenburg, and the Coast Guard in their own dispatch centre, located together with the JRCC.

The Swedish authority Myndigheten för samhällsskydd och beredskap, MSB (Swedish Civil Contingencies Agency) is responsible for matters related to protection of the population in case of all types of emergencies emergency management, and civil defence. This responsibility applies to measures taken before, during, and after the occurrence of emergencies, crises, and disasters. The MSB mandate spans the entire spectrum of threats and risks, from everyday accidents up to major disasters.

All 112 PSAPs are interconnected and - as mentioned above - also stage 2 FRS dispatch and 17 out of 21 regions since these are handled by SOS Alarm. The four Regions with their own PSAP stage 2 are interconnected between them.

■ Funding of emergency call handling service

Through funding from the Swedish state for the 112 service and from the municipalities and Regions for FRS and EMS respectively

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eCall implementation

All incoming eCalls are flagged as eCall, if they are manually or automatically and from which municipality. They terminate to three dedicated 112 PSAPs in the same call queue as regular 112 calls. Call taker can label the call as an eCall to get interview and decision support. NB: in case of silent automatically triggered eCall, dispatching is usually done, while in silent manually triggered no action takes place – this is regarded as a false call. This routine was agreed on in 2017 from a reference group mainly consisting of people from the Police, some FRS, and Regions. Since then, the low figures on real automatic eCalls indicates that this routine might be subject to change after further evaluation.



- ✓ eCall has been implemented
- Work is ongoing to receive IMS based eCalls (NG eCalls)

ECALLS IN 2023

eCall Type	Calls Received	Emergency Cases	Comments
Manual	8,576	58 (0.6%)	Real emergency case defined as one or more units from EMS and/or FRS reporting being on site of accident/event
Automatic	1,743	419 (24%)	Real emergency case defined as one or more units from EMS and/or FRS reporting being on site of accident/event
Total	10,319	477 (4.6%)	

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PSAPs & Dispatch Centres (DCs)

PSAPS & DISPATCH CENTRES (DCS)

	PSAPs	DCs	Comments
112	14	-	SOS Alarms PSAPs reduced from 15 to 14 in October 2024.
FRS	-	18	SOS Alarm handles dispatch for several municipalities. Some of FRS rescue centres are co-located with SOS Alarm.
EMS	5	21	Regions has 5 own dispatch centres which also handle interview and classification. 16 dispatch centres are handled by SOS Alarm (co-located with the 112 service).
Police	-	7	Police has own dispatch centres which also handles interview for police matters.
Other	-	-	
Several Forces	-	2	Joint Rescue Coordination Centre (JRCC) for air/sea rescue, located together with Coast Guard
TOTAL	18	48	Whereof ~25 are co-located

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Emergency Numbers

EMERGENCY NUMBERS ANSWERED BY PSAPS

PSAPs	Numbers	Comments
112	112	Single national emergency number, answered by SOS Alarm
FRS	n/a	
EMS	n/a	
Police	n/a	
Other	n/a	
Several Forces	n/a	

■ Non emergency numbers

- 1177: Medical advice
- 11313: National information number for communication concerning serious accidents or crisis
- 11414: Police non-emergency
- 116000: Hotline missing children
- 116006: Victim support
- 116111: Child Helpline
- 116123: Emotional Support Helpline




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Emergency calls in 2023

EMERGENCY CALLS			
	Calls	Real Emergency Calls	Comments
112	3,658,823	64%	Answered 112-calls
FRS	-	-	
EMS	-	-	
Police	-	-	
Other	-	-	
TOTAL	3,658,823	64%	Answered 112-calls

Emergency calls per type in 2023

EMERGENCY CALLS		
	Calls	Comments
 Mobile telephone networks	3,455,503	94.4%
 Fixed telephone networks (landlines)	122,574	3.4%
 Campus/private and IP networks	80,746	2.2%

■ PSAP capacity to receive IP based communications

Yes (VoLTE, VoWiFi, SIP-based solutions)

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Technology and equipment used in the PSAPs

→ Do all PSAPs use the same technology in your country?

All PSAPs stage 1 (SOS Alarm) uses the same technology and some of the stage 2 PSAPs also (SOS Alarm for ambulance dispatching for 16 Regions and all 18 Fire rescue services rescue centres (dispatch centres). Regions 4 own medical centres are interconnected between them. Police 7 dispatch centres are interconnected between them.

→ How are the PSAPs interconnected?

- Voice and data interconnection for all PSAPs
- PSAPs use common database
- PSAPs use the same network

There is always some degree of interconnection. SOS Alarm (stage 1) are always transferring some data when transferring a 112 call to the Police or the five Regions with own dispatch centre, for example location of the caller.

All stage 1 PSAPs, the stage 2 PSAPs handled by SOS Alarm and all Fire Rescue Services 18 own dispatch centres are fully interconnected and uses the same network and the same database.

→ Are PSAPs/dispatch centres using a standard to exchange data between?

No.

TECHNOLOGIES AVAILABLE IN THE PSAPS

Geographic Information System (GIS)	✓	
Computer-Aided Dispatch (CAD)	✓	
Interactive Voice Response (IVR)	×	
Video communication	×	Used by a few stage 2 PSAPs (EMS, FRS), using HTML5
Tools for remote call-taking	×	

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Next Generation 112 (NG112)

- Do you consider upgrading towards Next Generation 112?**
Upgrade has been implemented. Packet switched technology (IP based communications) fully implemented since November 2022.
- Have you established a plan for the migration to NG112?**
Yes, it is established. IP-based communications is already implemented since November 2022.
- Are you aware of any plans to shutdown 2G/3G mobile telecommunications networks?**
Yes, a plan has been established and PSAPs are not directly involved. Three out of four mobile network operators are closing 2G by December 2025. One has declared that 2G will be kept until December 2027. Shutdown of 3G is almost completed.

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Caller location in support of emergency services

MOBILE CALLER LOCATION

Type	Time needed	% of calls	Comments
Cell-ID	<1 sec	~ 100%	
Base station sector-ID	<1 sec	~ 100%	
AML	Depending on set value; Android: currently 7 sec / 25 sec from incoming call. Apple: after 20 sec or when better radius than 65 meters	~ 82%	
HTML 5 Geolocation		Not measured	Used very rarely
Handset-derived location via App	<1 sec	~1%	
PIDF-LO			Tests ongoing (July 2024), probably start during late 2024 or 2025

■ Landline caller location

Time needed

<1 sec



How often are the subscriber number addresses being updated?

Continuously



■ Caller location accuracy and reliability criteria

- ✓ Caller location criteria have been defined

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■ Mobile networks

100 meters accuracy in 80 percent of the cases. The new rules will be introduced in two stages. On January 1, 2025, the requirement for 100 meters accuracy will come into force in 80 percent of cases. From 1 January 2026, the Swedish Post and Telecom Agency will also require operators to use a method for better positioning using their own networks. This method will be used in modern 4G and 5G networks.

■ Plans to define accuracy and reliability criteria

No criteria defined for fixed networks since these use subscriber registers.

Advanced Mobile Location (AML)

 AML Deployed

Apps

Apps for the public

■ SOS Alarm 112-app

- Provides GNSS based location
- Provides phone number
- National coverage
- App 20,000 - 30,000 calls to 112/year

You can call 112 through the app, send location, get Public Warnings and notifications in real time on certain types of events in your near vicinity (fires, road traffic accidents, boating accidents)

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Accessibility for people with disabilities

ACCESSIBILITY SERVICES

Service	Comments
SMS	SMS is sent to 112. Pre-registration needed since the number of non-emergency/false SMS to 112 should increase with appx 60 000 each year.
Smartphone App	Possible to reach text relay service Texttelefoni.se through app with the same name. Priority 112-button to reach relay service rapidly for relaying to PSAP. Possible to reach video relay service with sign interpreter through app with the same name. Priority 112-button to reach relay service rapidly for relaying to 112.
Relays	Text relay service (texttelefoni.se), Video relay service (Bildtelefoni.net) open 24/7, and Speech-to-speech relay service

SMS service for all citizens

→ SMS service is not available

112 available from handsets without SIM cards?

Yes

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☰ Cooperation with Third-Party Services (TPS)

THIRD-PARTY SERVICE		
Third-Party Service	Cooperate*	Comments
Medical alert or Telehealth	✓	Certain cooperation with medical advice service 1177
Calls from Satellite Telephony Service Providers	✓	No active cooperation but there is a dedicated number for emergency calls from satellite telephony
Translators/Interpreters	✓	Agreement with translation service that allows interpretation in appx 200 languages
eCall TPSPs	✓	Cooperation according to set agreements
Other	✓	Receiving info about detected forest fires from dedicated flight operations and from satellite overwatch

*TPS cooperates with emergency services

🌐 Use of social media

■ Social media/networks are used to

- Monitor potential incidents
- Share prevention tips with citizens and build public preparedness
- Share information about incidents towards citizens
- Fight fake news

■ Virtual Operations Support Team (VOST)

Setting up a VOST is not considered

■ Most followed social media accounts

- @polisen_sthlm
- @krisinformation
- @YB_Sodermalm
- @polisen_riks
- @SOSAlarmSverige

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Public warning

■ Public warning by

- Sirens
- Radio
- TV
- Location Based SMS
- Voice messages to fixed landlines in concerned area
- Smartphone App (push notification in 112-app, public service radio app SR Play and app from the Civil Contingency Agency (MSB) for crisis information krisinformation.se
- RDS-receiver households within safety zone around the three nuclear plants has a special receiver which alerts in case of nuclear incident, together with other means (sirens etc)

An authorised person from defined authorities, from the Fire and Rescue Service, nuclear plant or from certain industrial plants or similar handling dangerous goods, calls the national contact point, which is SOS Alarm's Crisis Management Unit. They, in turn, forward the call to the national public service radio broadcaster, Sveriges Radio. In this three-part-call, the channels in which the public warning should be sent are decided as well as the content of the PW.

The public can get more info on the PW by listening to public service radio, calling the national information number 113 13 and on website [Krisinformation.se](https://www.krisinformation.se)

■ Organisation responsible for public warning

- The Civil Contingencies Agency (MSB) are responsible for maintaining the PW system
- SOS Alarm is the contact point for PW and are together with Sveriges Radio (the national public service broadcasting radio) responsible for handling and issuing of PWs

Use of RPAS^(RPAS)

Drones are used by Emergency Services Organisations (ESOs)

■ Emergency Services Organisations (ESOs) using RPAS

- EMS (delivering of AED's)
- FRS
- Police
- Coastguard
- Sea/Air rescue

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Use of AEDs *(Automated External Defibrillator)*

- ✓ AED registries/maps are used

When an emergency call about suspected cardiac arrest is received, the call taker at SOS Alarm can see if an AED is nearby. This is visible on a map layer where AEDs are registered. The AED map is managed by Svenska Rådet för Hjärt-lungräddning (Swedish Resuscitation Council). In it, anyone can register an AED and leave info on the address, name of company, stairs, place of the AED in the premises etc. They can also leave opening hours if the AED not available 24/7. It is also possible to choose that the information should be visible only to SOS Alarm.

Weblink to the AED register: [Hjärtstartarregistret \(hjartstartarregistret.se\)](https://hjartstartarregistret.se)

The call taker can give advice on where to find the AED and this is generally done if there is more than one person at the place of the cardiac arrest and if the AED is available. If there is only one person at the scene, it is more important to perform CPR.

SOS Alarm has used the AED map since 2019.

■ Citizen responder programme

- ✓ There is a citizen responder programme

Currently 13 out of 21 regions are participating in the Citizen Responder Programme. [Hem » Sms-livräddare \(smslivraddare.se\)](#)

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☆ Quality of Service

<p>Call handling evaluation</p>	<p>✓ Call handling service is evaluated</p> <p><i>Call handling is evaluated continuously internally at SOS Alarm with every call taker and nurse to evaluate their performance.</i></p> <p><i>A yearly certification is also to be done. Every SOS operator shall every twelve months certify him/herself in a virtual test programme. At least ninety percent of the questions in the test must be correct, and at least eighty percent in every part (the test consists of several parts, and is depending on the role; call taker, dispatcher of EMS or FRS nurse).</i></p> <p><i>There is also an external yearly follow up done by MSB (Swedish Civil Contingencies Agency) which is the supervisory authority for 112.</i></p>
<p>Use of key performance indicators</p>	<p>✓ Yes</p> <p><i>KPI on average answering time on 112, time to first measure taken, eNPS, etc.</i></p>
<p>Use of protocols by call-takers/dispatchers</p>	<p>✓ Yes</p>
<p>Use of questions and decisions tree by call-takers/dispatchers</p>	<p>✓ Yes</p> <p><i>There are different questions and decisions trees depending on type of case; 112, Police, FRS or EMS. These are developed inhouse together with concerned actors.</i></p>
<p>Established processes or certifications for ensuring cybersecurity</p>	<p>✓ Yes</p>
<p>Recording & storage of emergency communications</p>	<p>✓ Yes</p> <p><i>Files with voice data are stored for three months (by allowance of the Government). Voice files and data containing medical data are stored for at least 10 years, according to Swedish medical legislation.</i></p>
<p>Quality certification(s)</p>	<p>✓ ISO 9001:2015</p> <p>✓ ISO 14001:2015</p> <p>✓ SSF 136 (Swedish certification for security centres)</p> <p>✓ SSF 200 (Swedish certification for security centres)</p>

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Projects, reforms, upgrades

- Development of new digital tetra radio system with possibility to communicate data (pictures etc). Will be ongoing for several years and is led by the Swedish Civil Contingencies Agency (MSB) and the Swedish Transport Administration.
- Legislation on Public Warning entered into force on the 1st January 2024. PW hasn't been regulated before.

■ Plans to use any type of AI

We are currently not using AI but have plans to. SOS Alarm is part of the EENA project on AI and are involved with two of the companies participating. We are also working with Corti to develop AI-support in medical triage for call takers and nurses.

Technology providers

- CAD, GIS, call recording: Omda (former CSAM)
- 112 App: KnowIT
- Public warning system: Everbridge

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Always there in an emergency

Annex 1: Number of PSAPs per service

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		Stage 1		FRS		EMS		Police		Other		Several Forces		TOTAL	
Country	Data	PSAP	DCs	PSAP	DCs	PSAP	DCs	PSAP	DCs	PSAP	DCs	PSAP	DCs	PSAP	DCs
Sweden	2023	14	-	-	18	5	21	-	7	-	-	-	2	18	48

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Annex 2: Direct emergency numbers to PSAPs

Country	Stage 1	FRS	EMS	Police	Other	Several Forces
Sweden	112	n/a	n/a	n/a	n/a	n/a

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Annex 3: Number of calls per service

Country	Data	Stage 1	FRS	EMS	Police	Other	TOTAL
Sweden	2023	3,658,823					3,658,823
	Stage 1: Answered 112-calls						

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Annex 4: Number of calls per network type

Country	Data	Mobile	Fixed	Campus/private and IP networks
Sweden	2023	3,455,503	122,574	80,746



Annex 5: Technologies available in the PSAPs

Country	Geographic Information System (GIS)	Computer-Aided Dispatch (CAD)	Interactive Voice Response (IVR)	Video communication	Tools for remote call-taking
Sweden	✓	✓	×	×	×



Annex 6: NG112

Country	Consider upgrading?	Established Plan?	Are you aware of any plans to shutdown 2G/3G mobile telecommunications networks?
Sweden	Upgrade has been implemented. Packet switched technology (IP based communications) fully implemented since November 2022.	Yes, it is established. IP-based communications is already implemented since November 2022.	Yes, a plan has been established and PSAPs are not directly involved. Three out of four mobile network operators are closing 2G by December 2025. One has declared that 2G will be kept until December 2027. Shutdown of 3G is almost completed.

Annex 7: Mobile Caller Location

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Country	Cell-ID			Sector-ID			Advanced Mobile Location (AML)			HTML 5 Geolocation			Apps		
	Available	Time	Calls	Available	Time	Calls	Available	Time	Calls	Available	Time	Calls	Available	Time	Calls
Sweden	✓	<1 sec	~ 100%				✓			✓		Not measured	✓		

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Annex 8: Landline Caller Location

Country	Time needed	Update frequency
Sweden	<1 sec	Continuously



Annex 9: Apps & SMS

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Country	Apps	SMS Service for all citizens
Sweden	→ SOS Alarm 112-app	× Not available

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Annex 10: Accessibility

Country	Fax	SMS	App	Video call	Real time text	Other
Sweden		✓	✓			→ Relay services

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Annex 11: Cooperation with TPS

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Country	Data	Security services	Personal safety	Lone and remote worker support services	Fire monitoring services	Medical alert services	Satellite calls	Counselling and mental health services	eCall TPSPs	Comments
Sweden	2023	×	×	×	×	✓	✓	×	✓	Medical alert services: Certain cooperation with medical advice service 1177; Satellite calls: No active cooperation but there is a dedicated number for emergency calls from satellite telephony; eCall TPSPs: Cooperation... see country for more comments

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Annex 12: Public Warning

Country	Sirens	Radio	TV	Cell Broadcast	Location-based SMS	Other
Sweden	✓	✓	✓	×	✓	→ Voice messages to fixed landlines in concerned area → Smartphone App → RDS-receiver

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Annex 13: AED Mapping

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Country	AED registries or maps	Citizen responder programme
Sweden	✓	✓

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