

Technology solutions and Public Safety

1 | Introduction

Technology is becoming increasingly integrated into our everyday lives. From watches to virtual assistants, many solutions now allow citizens to contact emergency services. EENA is always looking for ways that innovative technologies can work alongside emergency services to help keep people safer. These solutions have the potential to be lifesaving by enhancing access to emergency services.

However, problems also emerge due to a lack of dialogue between technology providers and emergency services. This can lead to a situation where emergency services are unable to receive data alerting of an emergency, or where they do not know how to respond to an alert. This puts citizens at risk, as they believe that help is on the way when this might not be the case.

In December 2019, EENA published a *position paper* calling for increased cooperation between emergency services and tech companies, which included signatories from across the world. EENA is now taking concrete steps to address this problem, by developing a process to encourage discussion between the two groups.

There are many different types of companies launching products, from tech giants to individual actors. The process is developed to suit all those developing solutions which involve communicating with emergency services. EENA will assist as much as possible by putting solution providers in contact with its expert group. This document will describe the process, explore the requirements for new solutions and explain how solution providers should proceed.

2 | Problems faced

It is undeniable that technology has the potential to help save lives and assist emergency services in their response. However, when there is a lack of dialogue between emergency professionals and solution providers, the following problems can hinder the work of emergency services.

Lack of awareness of new solutions

One of the principle problems is a lack of communication about new initiatives. Emergency services are often not informed of new means of access; some even find out about new innovations from the news. Public Safety Answering Points (PSAPs) are therefore often not ready to handle the communications and alerts about people in danger.

Protocols need to be defined by PSAPs to efficiently handle new types of communications; for instance, an automated voice message to a PSAP about a user in need. Emergency call-

takers and dispatchers also need to be adequately trained to handle new types of data and alerts. PSAPs therefore need an appropriate amount of time to prepare and deliver the training to their staff. If PSAPs are not informed enough in advance about the new product and how alerts will be received, they cannot properly respond to the alerts.

Unusable data formats

Thanks to technological advancements, more and more data is available to PSAPs. This can help to improve response: if more information is available, decisions can be made faster and more appropriately. However, the data needs to be relayed to PSAPs in a way that they can receive and process it. Many emergency services are currently limited in the formats of data they can receive, making some communications undecipherable. Solution providers must therefore be aware in advance of the capabilities of the PSAPs who will receive their communications and respond accordingly. Otherwise, emergency services may be unable to understand what the emergency is and what help is required.

False alerts

Connected devices are increasingly integrated into our everyday lives. Many have the capacity to automatically contact emergency services when they detect that help is needed. However, this can lead to the creation of false emergency alerts, which reduce the resources available for real emergencies. In addition, emergency services may face significant costs due to the allocation of resources to high numbers of false alerts from technological devices.

The situation is complicated further as many devices do not provide emergency services with the opportunity to contact back the user. Unable to obtain more information about the nature of the emergency - or whether there is a real emergency or not - the dispatchers must send resources to the location.

3 | Requirements for new solutions

Through consultation with emergency professionals and public safety experts across Europe, EENA has developed the following requirements for new solutions which involve communications with emergency services. Meeting these requirements is beneficial to all involved: emergency services, solution providers, and citizens. Emergency services will be sure that they are well prepared and able to effectively respond to all alerts of people in danger. Solution providers can be sure that their users are receiving the help that they need. Overall, this will make citizens safer.

Requirement	Explanation
The communication should be bidirectional	Solutions should enable emergency services to communicate with the caller. They should not be uni-directional, as this makes it difficult for emergency services to establish if the contact is a real emergency

	and to identify the resources to be dispatched.
There should be a contact-back feature	Solution providers should include the possibility to contact the citizen back. Often, emergency services need to obtain additional information or may wish to contact to caller to ascertain if it is a real emergency.
Location of the user must be provided	<p>Accurate location of the person in distress is lifesaving in an emergency and can positively influence the decisions made by emergency services. All solutions should therefore provide accurate caller location to enable emergency services to find the person in danger quickly.</p> <p>To make sure that all emergency services can receive and make use of the location data, the location information must be provided using the AML format (more information about AML here)</p>
Emergency services should be adequately informed in due time	Emergency services cannot prepare to handle new communications if they are not informed in advance. Communicating with the emergency services in the relevant country/countries will ensure that the alerts can be processed and handled by the PSAPs. The notice by solution providers should be appropriately given in advance so that the PSAP can prepare to receive the communications.
Solution developers should provide clear contact information to emergency services	It is essential that all solutions include a clear point of contact for emergency services. This will be needed, for instance, in cases where a solution is producing many false alerts.
The source of the communication should be clearly identified	In order to handle the alert in the best possible way, emergency services need to identify instantly how this alert is transmitted. Hence, it is necessary that the source of the alert can easily be identified.
Solutions should be testable for free by PSAPs	Before putting new products on the market, the capacity to contact emergency services should be tested. If PSAPs need to

	perform tests on their end, such tests should be free of charge for them.
Validation system by the user as a way to prevent false calls (depending on the nature of the product)	<p>If the new feature consists in sending an alert to emergency services after a specific action is detected (for instance: fall, car crash...), there should be a validation (or cancellation) system for the users to prevent the alert from being sent if there is no emergency situation.</p> <p>In case the user is not able to confirm or cancel the alert, this may still be sent to the emergency services</p> <p>Such mechanism is necessary to limit to number of false calls for the emergency services.</p>
The product has been tested with emergency services in Europe	The company should demonstrate that the product has been carefully tested with emergency services in the European Economic Area (EU + Norway, Iceland, Liechtenstein).

4 | Validation procedure for new solutions

To encourage dialogue and to ensure that solutions enhance the safety of citizens as much as possible, solution providers should use the following procedure:

1. Once you have a new solution which involves communicating with emergency services, you should fill in the *form on the EENA website*. A copy of the form can be found in the Appendix. The form includes a self-assessment of the criteria established by emergency services and detailed above. Once you have satisfied all of the criteria on the assessment, you should submit the form to EENA.
2. EENA will receive all the forms and ensure that the criteria are met.
3. EENA will then notify its group of experts of the new solution. The relevant experts will be put in contact with the company/individual and will facilitate a meeting to further discuss the solution. This process will allow for dialogue between the two parties – emergency services and technology providers – in order to ensure that once the solution is launched, its communications can be successfully handled by the emergency services.

APPENDIX

Find below a copy of the *form to fill out on the EENA website*

Name :

Email address :

Company / organisation (where relevant) :

Description of the solution (including how it works, the targeted public and the type of data provided to emergency services:

Description of the tests performed (where it was tested, in which conditions, which scenarios were tested, etc.

Description of the measures taken to limit the number of false alerts:

Country/countries or region(s) where you would like your solution to be active:

Indicative timeline of deployment :

Does the solution include a synthetic voice?

If yes:

Please give more information on this (including what the message will include and the language of the synthetic voice):

- The location information of the user will be sent using the AML format
- My solution is bidirectional
- My solution includes a contact back feature
- My solution provides accurate location information of the user or the victim using the AML format.
- I am willing to notify the relevant emergency services about my solution.
- My solution will include clear contact information for emergency services.
- The alert sent through this solution can be clearly identifiable as coming from this product/tool.
- The solution can be tested for free by PSAPs.

- Once the solution is implemented, I will remain fully cooperative with emergency services to limit the number of false alerts.
- The product has been tested with emergency services in one of the countries of the European Economic Area.
- By submitting this form, you agree to share your information with EENA and with EENA's expert group. Your data will only be used for purposes of collaboration regarding your solution. You can consult EENA's Privacy Policy [here](#).