

The Digital Networks Act - An Opportunity to Build a Safer and Resilient EU

112 is the first line of defence for people in a crisis. When a disaster strikes, it allows any person in danger to get in contact with emergency services, to provide information to coordinate responses, or to get help. In parallel to this, public warnings can provide real time updates to populations, telling them to shelter in place, providing advice, or ensuring people that civil authorities are working to help them.

As the EU has full competence to set rules on access to 112, the Digital Networks Act is an opportunity to improve EU resilience and preparedness by ensuring that Europe's emergency communications networks are ready to protect EU citizens in future crises. EENA therefore welcomed Executive Vice President Henna Virkkunen's <u>statement</u> at EENA 2025 that the DNA will build on the EECC's successes in emergency communications by using new technologies to support faster, more efficient crisis response.

This paper and its annexes set out proposals to ensure that the DNA delivers more resilient, efficient and future proofed emergency communications, based on EENA's expertise and its recent Public Safety Answering Point (PSAP) survey on emergency communications. Implementing these proposals will save lives, reduce disaster related costs, and support the work of the European champions who protect citizens when they need it most: first responders, emergency call takers, and civil protection organisations.

1. Making existing obligations in Article 109 and 110 EECC efficient and effective.

Over the past decade the EU has played a leading role in protecting its citizens by integrating new technologies into European PSAPs. Mobile network based public warning and handset-derived caller location have improved outcomes during crises, while Real Time Text (RTT) can provide equivalent access to 112 for people with disabilities. However EENA has identified shortcomings during the implementation of these technologies, several of which are due to unclear wording in Article 109 and 110 EECC.

For example, costly delays in issuing public warnings have resulted in significant losses of life, indicating that further EU guidance on how these systems should be structured and managed could be beneficial. Similarly, while caller location has significantly improved public safety, minor enhancements to include altitude information, better location criteria, and ensuring that location information is regularly updated throughout the call could improve its effectiveness further. In addition as RTT is implemented, greater clarity is needed on how it will work while roaming, and be processed by PSAPs. EENA has therefore proposed several targeted technical updates to Article 109 and 110 EECC to ensure that lessons learned so far are shared and implemented across Europe.

2. Network Evolutions Cannot Reduce Public Safety

Until 2025, emergency communications were typically routed over 2G/3G networks. Despite their importance for public safety, a lack of MNO cooperation with PSAPs when planning the 2G/3G phase-out has created significant issues for PSAPs, creating safety risks and requiring MNOs to maintain these networks until solutions are found. As a result, 41% of National Regulatory Authorities have <u>identified</u> the 2G/3G shutdown as having significant risks for



emergency access. EENA has therefore proposed amendments to improve MNO-PSAP cooperation during future significant changes in the networks used to provide access to 112.

One significant issue faced following the transition of emergency communications to IMS is the inability of PSAPs to receive handset-derived caller location, such as AML, from users who are roaming in another Member State, or to call back these users if the call drops. PSAPs currently face similar issues with calls from devices in Limited Service State, while these callback issues will extend to the majority of eCalls, which are in "permanent roaming". With 2.7 million roaming calls <u>made to 112</u> in 2023, the removal of handset-derived caller location for roamers alone will result in hundreds of additional deaths and serious injuries annually, based on <u>EU figures</u> on its effectiveness. To avoid this, the DNA must recognise the right for PSAPs to receive callbacks and handset-based caller location for all users in emergencies.

3. Crisis-Proofing Emergency Communications

Emergency communications can only protect people during crises if the networks they rely on remain operational. Extended power outages in <u>Ireland</u> and <u>Spain</u> in 2025 revealed a lack of network resilience during crises, with both outages resulting in widespread loss of access to 112. This inability to contact emergency services, or receive public warnings during a network failure could severely undermine public safety and preparedness during a crisis.

Improved independent power generation in cell towers <u>could mitigate this vulnerability</u> by maintaining access to 112 for several hours after a power failure. Direct to Device (D2D) satellite communications networks have also been identified by the <u>European Commission</u>, the <u>Council of the EU</u> and <u>EENA</u> as having strong potential to improve the resilience of 112, by offering fallback connectivity following disruptions to ground-based networks. To ensure universal access to 112 at any time, the DNA should support both technologies as part of a broader effort to improve EU telecom resilience during crises.

4. Future Proofing Public Safety

Today, PSAPs receive emergency communications from a growing range of services, including satellite calls, number independent ICS, international calls, and accessible services such as RTT, sign language relay services and video calls. These new technologies improve 112's coverage and accessibility, but are undermined by PSAPs' inability to route and process them as efficiently as traditional voice calls. This limitation slows emergency responses, undermining the functional equivalence of accessible services like RTT, and the potential of innovations like satellite communications to improve the resilience of 112.

Existing IP solutions such as ESInets can solve this issue, but haven't been implemented in most EU Member States. Therefore, to ensure emergency communications keep pace with new technologies, the DNA should require PSAPs to route and process all communications to 112 in an equivalent manner. Member States should also assign a single entry point for emergency communications when the most appropriate PSAP cannot be identified. This will avoid situations where international, relayed, or in the future, number independent emergency communications cannot be routed to emergency services due to the lack of a receiving PSAP.



PSAP Survey on Improving Emergency Communications in the DNA

EENA recently conducted a survey of its Emergency Services Staff Network (ESSN), an international network of emergency services and public authorities involved in emergency call handling. The survey ran from 24 June to 8 July and gathered evidence on the added value of current EU rules on 112. The survey received 55 responses.

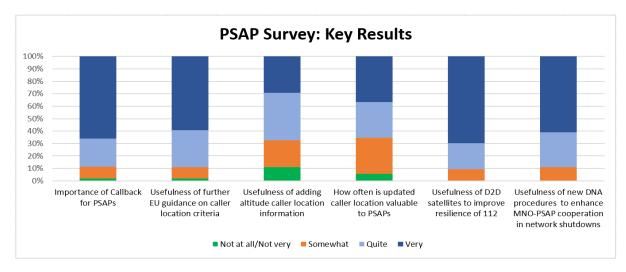


Table with responses to survey (N=55):

Question	Quite/very	Some limited	Not at all/not very
		value	
Importance of Callback	89%	9%	2%
How often are callbacks used?	72 %	23%	6%
How problematic if callback is not available for			
roamers over 4G/5G?	88%	12%	0%
How important is receiving accurate handset-based			
caller location information for your work?	98%	2%	0%
Are existing commission rules on handset-derived			
caller location criteria useful?	81%	15%	4%
How useful would further European Commission			
guidance on caller location criteria be?	89%	9%	2%
- Would altitude caller location information be useful in			
typical emergency communications?	67%	22%	11%
How useful would altitude information be in multi-			
storey buildings?	75%	15%	11%
How useful would altitude information be in mountain			
rescue?	75%	19%	6%
How often is updated caller location valuable (eg, for			
moving people)?	65%	29%	6%
How problematic if caller location is not available for			
roamers over 4G/5G?	91%	9%	0%
Value of D2D satellites to improve coverage in remote			
areas?	81%	17%	2%
Value of D2D satellites to improve resilience of 112			
during terrestrial network failures?	91%	9%	0%
Importance of independent power backup to ensure			
112 coverage durng power failures?	98%	2%	0%
Is independent power backup to ensure 112 coverage			
durng power failures sufficient?	22%	30%	48%
How effective was cooperation between MNOs and			
PSAPs during 2G/3G shutdown?	31%	33%	36%
Should DNA have procedure to improve MNO-PSAP			
cooperation in network shutdowns?	89%	11%	0%
Have you experienced 112 outages due to	Yes many	Yes at least	Never
network/power failures?	· ·	once 🔻	-
Answer	53%	45%	2%
Should NIICS provide access to 112 in future?	Yes	No	
Answer	63%	37%	