

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

European citizens rely on electronic communications networks to stay safe in emergencies, by contacting 112, or receiving public warnings with advice during crises. Without these networks, it would be impossible to provide timely support to individuals during crises, underlining their key role in EU resilience and preparedness. EENA therefore welcomed Executive Vice President Henna Virkkunen's <u>statement</u> at EENA 2025 that the Digital Networks Act (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. To achieve this, it calls for the DNA to clarify existing rules in Article 109 and 110 EECC, protect 112 during network shutdowns, bolster the resilience of emergency communications during crises, and ensure PSAPs can efficiently process new forms of 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.



Annex I: Results of PSAP Survey on Improving Emergency Communications in the DNA

EENA recently conducted a survey of its Emergency Services Staff Network (ESSN), an international network gathering emergency services and public authorities staff involved in emergency calls handling. The survey ran from 24 June to 8 July and sought to gather evidence on the added value of current EU law requirements for access to 112, and potential improvements to these rules. The survey received 55 responses, which are outlined below.

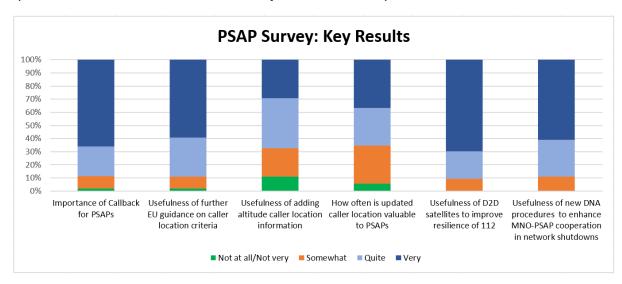


Table with responses to survey (N=55):

Questions	No opinion ▼ Not	at all 🔻 Not ve	ery Some	ewhat V Quite	▼ Very	_
Importance of Callback for PSAPs	2	1	0	5	12	35
How often are callbacks used in your PSAP?	2	0	3	12	17	21
How problematic if callback is not available for roamers over 4G/5G?	5	0	0	6	11	33
How important is receiving accurate handset-based caller location		U	U	0	11	33
information for your work?	0	0	0	1	6	48
Are existing commission rules on handset-derived caller location criteria			-	-		
useful	7		2	7	12	27
How useful would further European Commission guidance be on caller						
location criteria	1	1	0	5	16	32
Would altitude caller location information be useful in typical emergency	,	_		-		
communications?	0	0	6	12	21	16
How useful would altitude information be in multi-storey buildings?	0	0	6	8	10	31
How useful would altitude information be in mountain rescue?	2	0	3	10	13	27
How often is updated caller location valuable (eg, for moving people)	3	0	3	15	15	19
How problematic if caller location is not available for roamers over		_				
4G/5G?	1	0	0	5	19	30
Value of D2D satellites to improve coverage in remote areas	1	0	1	9	8	36
Value of D2D satellites to improve resilience of 112 during terrestrial				'		
network failures	2	0	0	5	11	37
How important is independent power backup to ensure 112 coverage						
during power failures	0	0	0	1	9	45
Is independent power backup to ensure 112 coverage durng power						
failures sufficient in your area?	9	9	13	14	3	7
How effective was cooperation between MNOs and PSAPs during 2G/3G						
shutdown?	16	3	11	13	7	5
Should DNA have a procedure to improve MNO-PSAP cooperation in						
network shutdowns?	1	0	0	6	15	33
Number Independent Interpersonal Communications Systems						
(NIICS)	No opinior	Ψ _	¥	▼ No	Yes	Y
Should NIICS provide access to 112 in future?	6				18	31
Impact of Network outages on access to 112	No opinior	▼ Name	1 or r	more Z 2 10 tim	ne 10+ tin	-
How many situations are you aware of where network failures/power	Wo opinioi _	None	ume	2-10 tin	10# tin	iies
outages resulted in loss of access to 112?	6		1	25	22	1
0			-			