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Update on REACH112 & NG112

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About REACH112

The project:

- 3-year project until June 2012
- 20 partners and 5 pilot countries (but Europe wide guidelines)
- Co-funded by the EC

Objectives:

- Improve person to person communication (50%)
- Improve accessibility of 112 (50%)

Features:

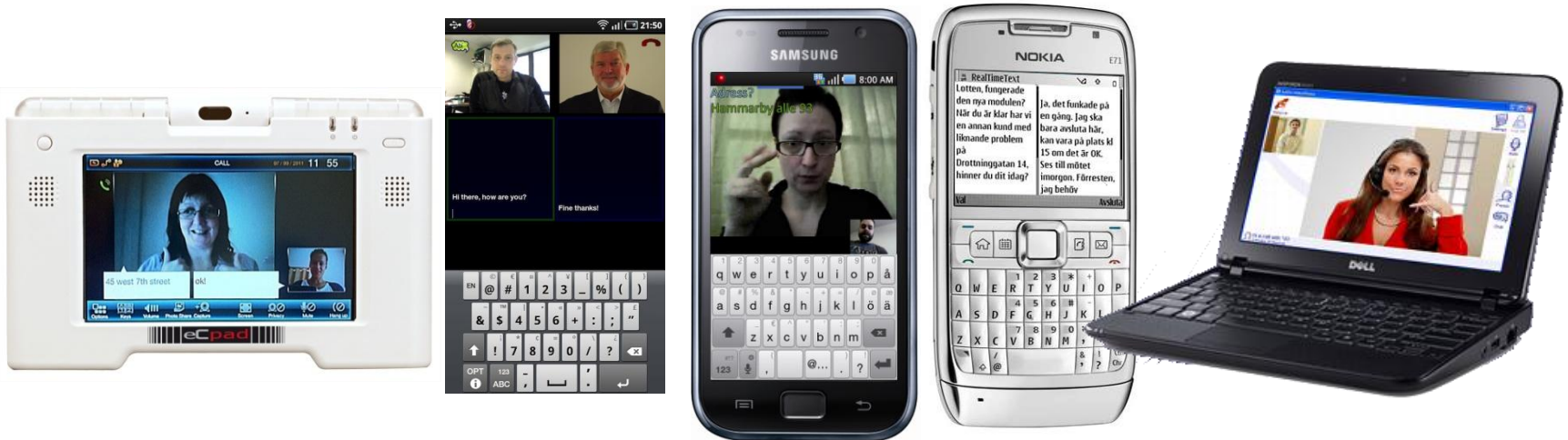
- IP devices to be used by citizen with Total Conversation i.e. simultaneous voice, real-time text and video for sign language for instance (SIP calling)
- Relay services (e.g. sign language to voice) in most cases
- IP-access to emergency services and forerunner for NG112



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REACH112 Status

- Pilots are running since May 2011.
- A number of different terminals. Interoperable in video, real-time text and audio through their communication service providers.
- Near 7000 users. Calling each other and emergency services
- Real emergency calls done (e.g. 18 in Sweden since May).
- PSAP and relay operators trained in all countries





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REACH112 – Swedish Pilot PSAP





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REACH112 – Swedish Pilot PSAP





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PSAPs in REACH112

France	Calls routed to newly created Stage 1 PSAP/relay handling calls from people with disabilities. Voice and data transfer to Stage 2 existing PSAPs all over France.
Spain	Calls routed to Galicia's stage 1 PSAP. RTT not installed in stage 2 PSAPs. Only in Galicia
Sweden	Calls routed to Orebro's PSAP. TC not installed in other PSAPs in the SOS Alarm network but voice and data can be shared.
UK	(a) <u>national</u> : 999/112 TC calls routed to either Bristol relay (if 999 qualified relay operator logged in) or to BT text direct for RTT connection. In both cases the operator, talks to emergency services (b) <u>local</u> : 999/112 in Bristol area are routed direct to PSAP (Fire and Police) TC operator who has options, to speak, provide text, sign or invoke relay interpreter
The Netherlands	Calls routed to the national 112 Stage 1 PSAP. Voice transfer to Stage 2 PSAPs.



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Integration

France	n.a: Creation of a 1 st level emergency call service
Spain	Semi-integrated: CAD system and RTT client run in same workstation
Sweden	Semi-integrated: TC softphone is stand-alone but placed on same table as the standard equipment . Audio to/from relay service is integrated with standard 112 PSAP-system with a manual PSTN-call from relay service.
UK	Standalone workstation installed alongside existing voice services (in Avon and Somerset PSAP partners)
The Netherlands	Semi- integrated: The software is running on a separate PC but is integrated in the standard work environment of a PSAP agent. Also the processes and procedures surrounding the handling of 112 Text Calls are integrated in the standard work instructions.



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PSAP and Relay Installation and Training

	France	Spain	Sweden	UK	The Netherlands
PSAP Installation	TC platform with 2 client workstations	RTT client installed in all 36 workstations (10 to 12 active per shift, operational 24x7)	2 workstations with TC software client installed	1 works. at each PSAP partner	3 RTT dedicated workstations installed
Relay Installation	Installed and used by deaf agents in backup	1 workstation with RTT installed (operational 24x7)	24/7 dedicated relay service set-up Installed	2 sign relay service centres; TC (RTT) connection to 24/7 text relay service – user can connect using mobile devices; lip-speaking/speech to text relay in test	No relay service involved
PSAP training	<ul style="list-style-type: none"> • 6 deaf and speaking operators trained to TC • 12 trained to specific deaf text. 	77 1st level operators trained	17 operators received presentation training	16 trained PSAP staff on TC terminals	<ul style="list-style-type: none"> •90 1st level operators trained •Plans for 2nd level M29
Relay Service training	No relay service training	5 Operators trained	2 operators trained (Sign relay service staff)	8 sign relay; 2 lip-speaking relay; full training programme for 112 being piloted	No relay service involved



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Routing, Location and caller ID

	France	Spain	Sweden	UK	The Netherlands
Call-routing	Routing to Stage 1 PSAPs by preferences and attributes (sign language and video, text, voice)	Yes: PSAP and users use the same media (RTT)	Based on pre-registration only routed to one PSAP	Based on preregistration	Routing to Stage 1 PSAPs
Caller-ID	YES	YES	YES	YES (for TC calls)	YES
Caller-location	•the postal address, caller location as determined by IP location, GPS (etc), Orange API	No* (Nokia RTT - SITREM RTT. Location data received but unused)	System prepared for Caller-location but only one of our clients support it and we have issues with PSAP firewall.	No	Home address info and location information based on GPS planned M29.



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REACH112 installations in PSAPs *Assessment*

REACH112 is successful...

- 112 calls with Total Conversation can be made and are being made.
- End-users have been very positive about it.
- PSAPs enjoy the possibility to receive video very much.
- Calls are recorded and PSAPs can call-back
- It shortens the conversations vs SMS (figures soon available).

But improvements are needed...

- Currently separate IP-access for REACH112
- Some PSAPs IP-networks are not NG112/REACH112 compatible
- No full integration in PSAP environment
- Major 112 providers didn't integrate it (same TC clients for end-users)
- Routing only to one PSAP based on pre-registration
- Almost no automatic location information

THE WAY FORWARD IS NG112



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Update on NG112



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EENA NG112 Committee update

Next steps	Timeframe (foreseen)
Emergency services operational requirements survey	Published
NG112 Long Term Definition (LTD) Document (NENA i3 equivalent)	December 2011



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NG112 survey

- The survey was launched on 27 June and closed on 15 August.
- Emergency services requirements to help NG112 standardisation
- Sent to EENA 112 Emergency Services Staff Network (112 ESSN)
- 40 completed surveys were received.
- Results available [here](#)

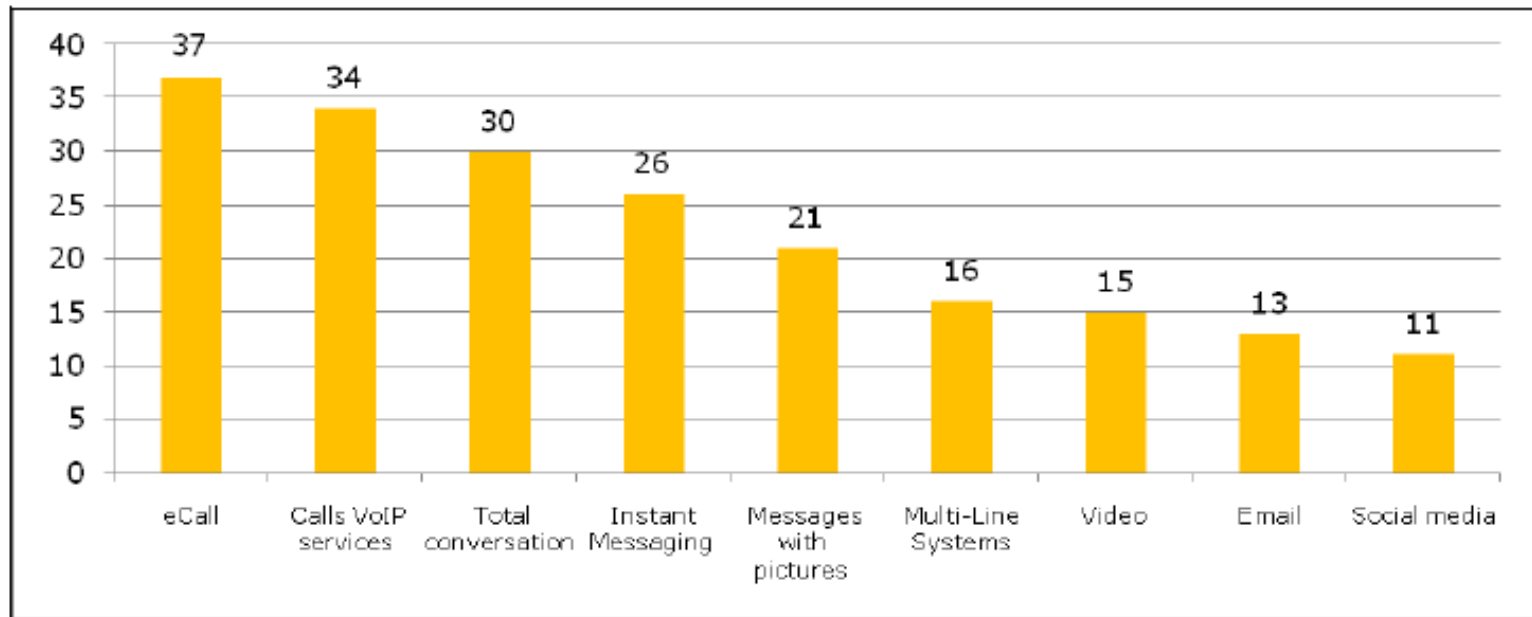


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NG112 survey

Question 2

What type of Next Generation emergency calls and data you think should be accepted in the coming years? (tick one or more)



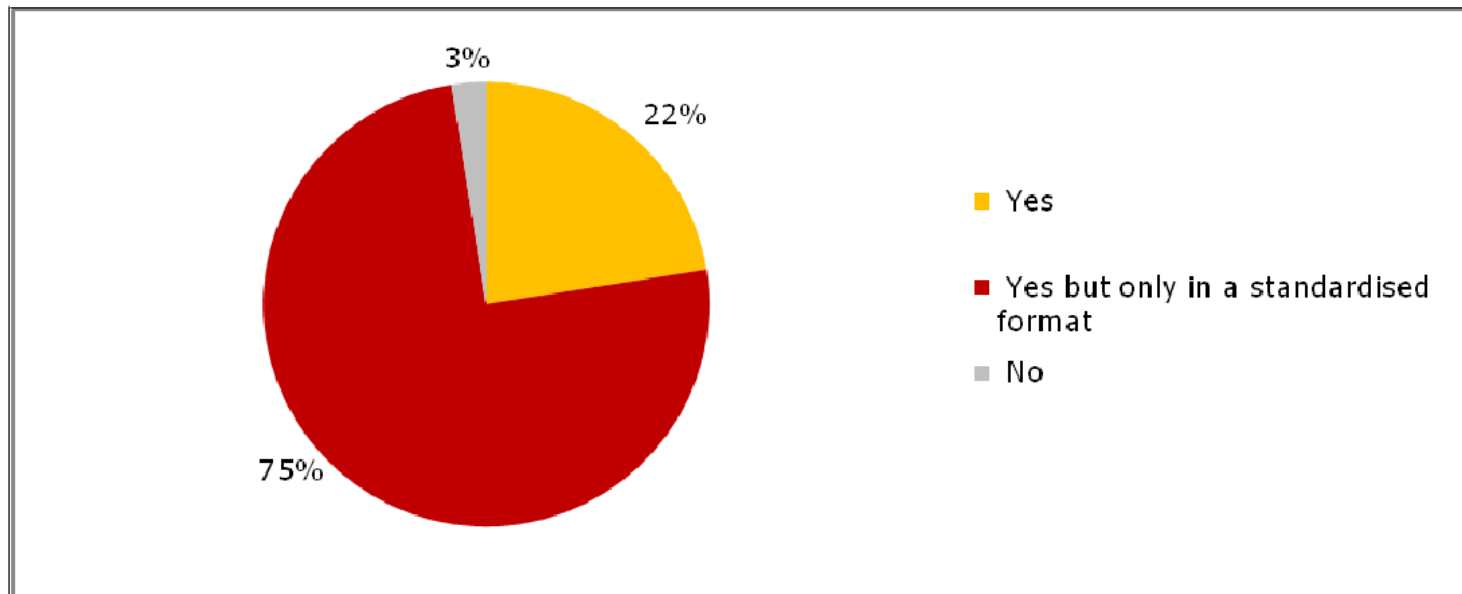


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NG112 survey

Question 4:

Do you believe it is appropriate to receive data (e.g, pictures, location information, contact data) from 112 applications from smartphones?



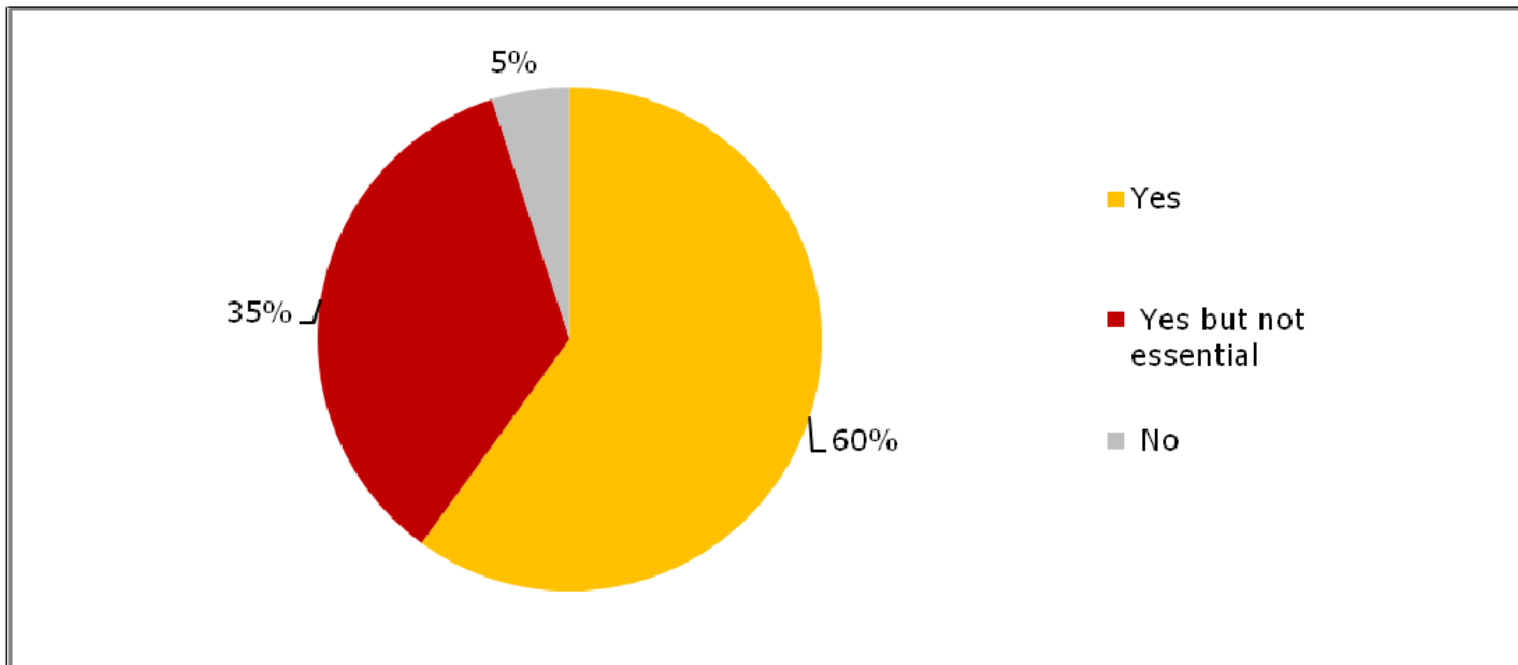


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NG112 survey

Question 5:

Do you believe it is preferable to have a single software interface at the PSAP to handle all type of communications (e.g., video calls, real-time text, SMS, IMS, etc .)?



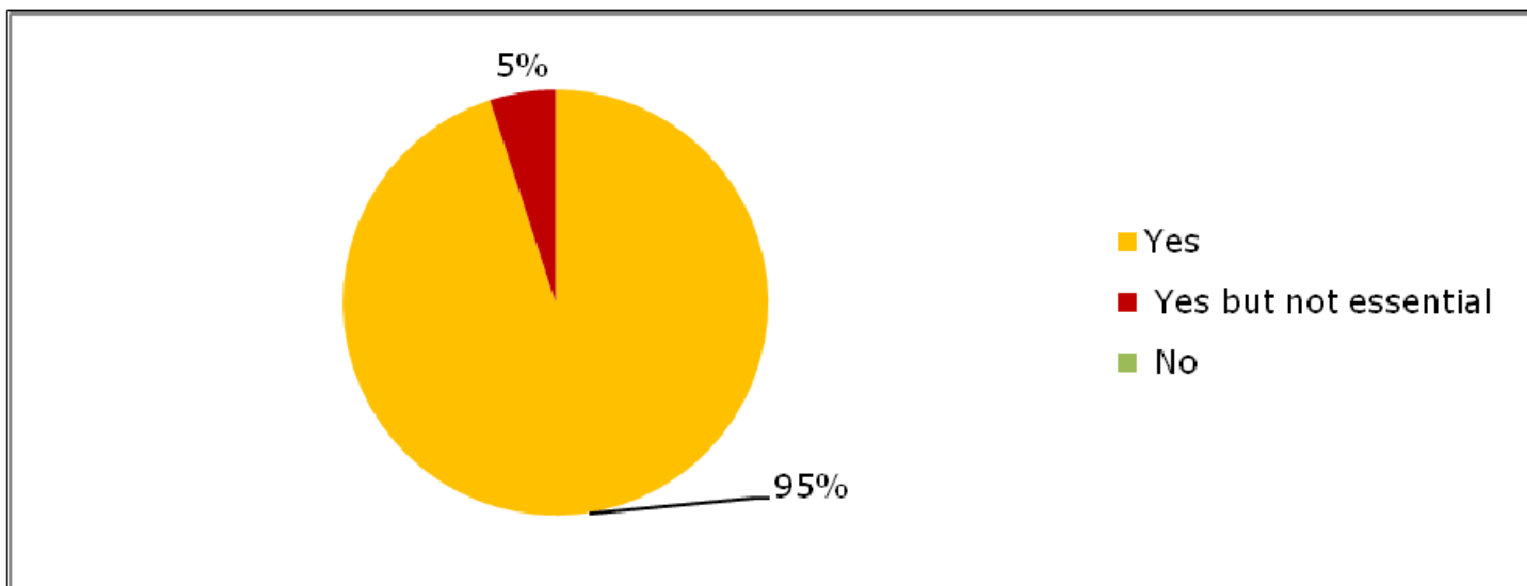


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NG112 survey

Question 8:

Should location for the call always be available?



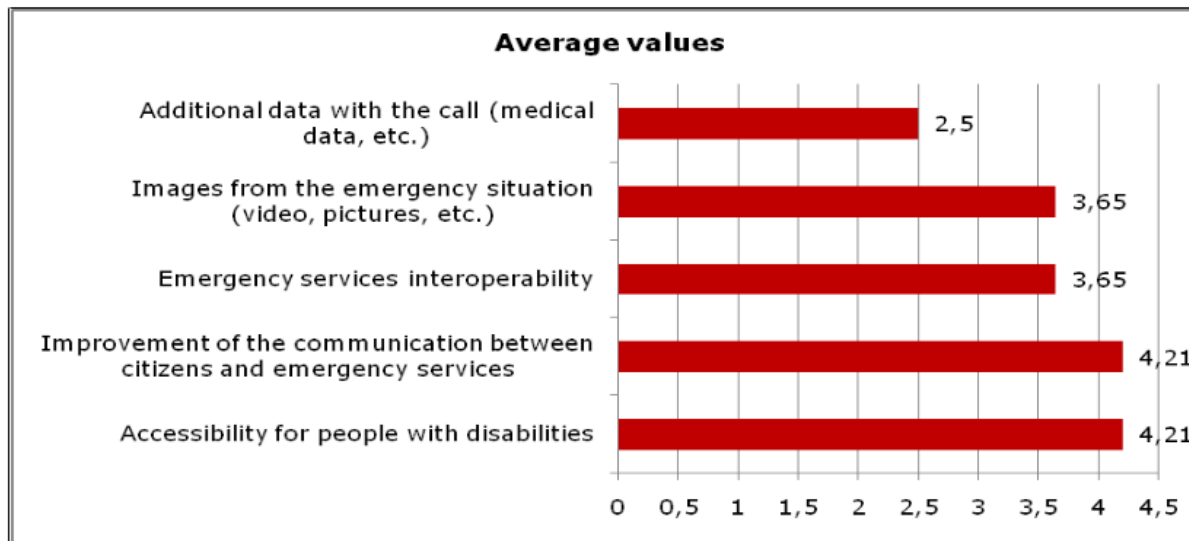


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NG112 survey

Question 11:

*Which of the following do you consider to be important, with regard to NG112 calls?
(1 = less important; 5 = very important)*



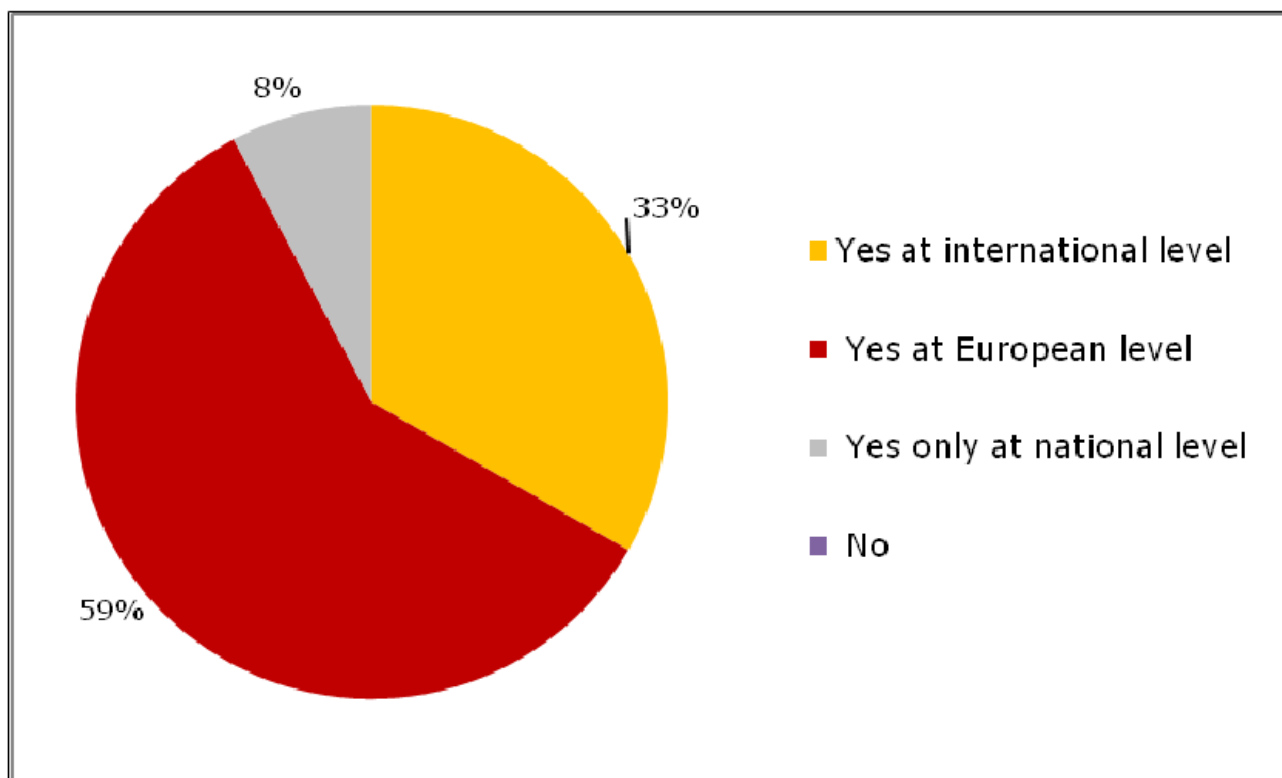


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NG112 survey

Question 12

Do you think that regulation on NG112 is needed?



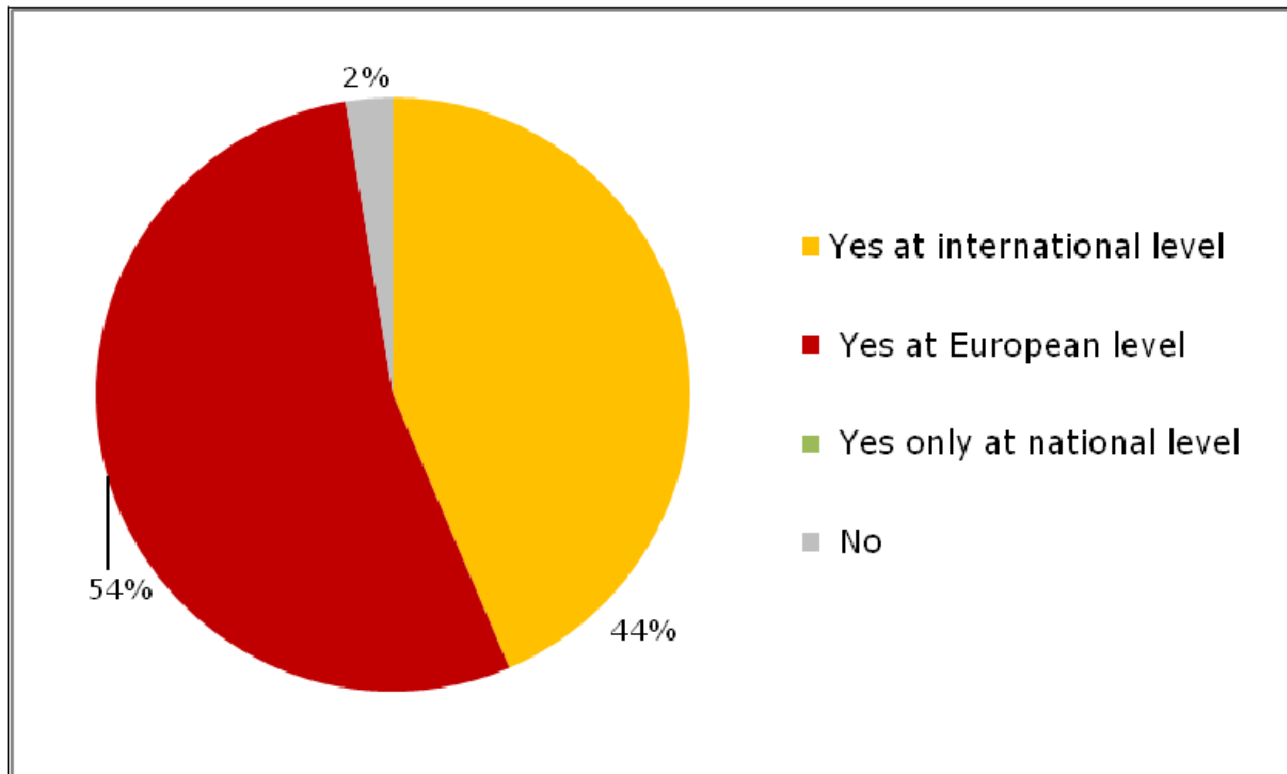


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NG112 survey

Question 13

Do you think that standards on NG112 are needed?





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Main findings

- Emergency Services are open to NG112
- General improvement of communications between citizens and PSAPs with video, text and more data is considered as the main advantage of NG112, also for people with disabilities
- Requirements are the same as for traditional phone calls (location, recording, call-back, etc...)
- Concern about having too many interfaces and non-standardised access
- International/EU Standards and regulation are needed



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NG112 Project Proposal



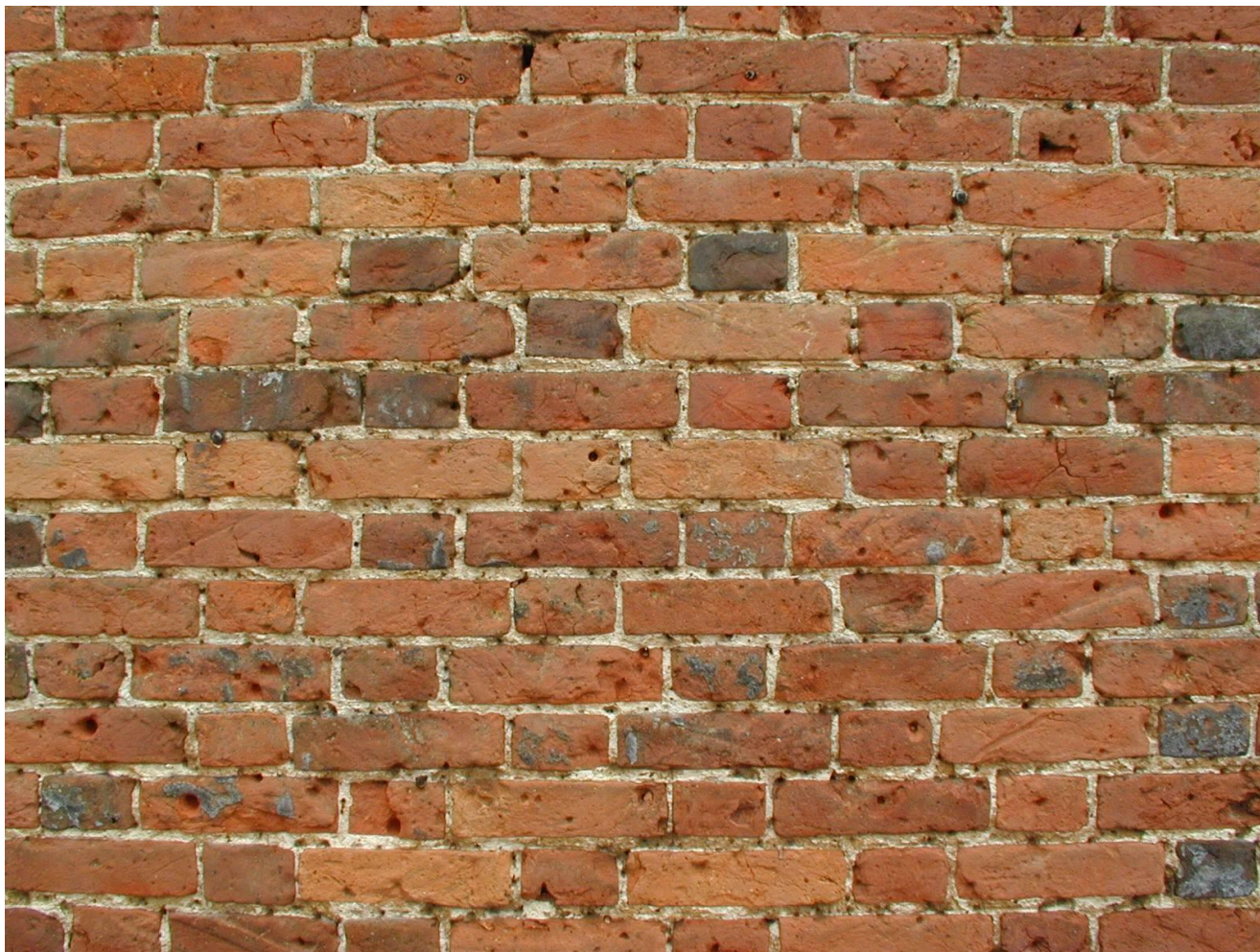
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Options available with Next-Generation technologies



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Option 1 *The wall*





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Option 2 *Uncoordinated efforts*





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Option 3 Consolidated efforts

**Caller-ID
&
Location**

Caller Information

Caller Location:

Community: State:

Contact Info:

Alternate:

Name:

Service Provider: Class of Service:

Secondary Contact Info:

Latitude: Longitude:

Additional Addresses:

Caller History:

Additional Call Data:

Update:

Video / Interactive Video

Volume:

Brightness:

Zoom:

Close Tab:

Conference Call: Add to Comments: Call Interpreter: Activate Web Cam:

**All Text
Streams**

**Data
Entry**

Emergency Information

Emergency Location:

Community: State:

Emergency Type:

Emergency Secondary Type:

Name:

Notes:

Clear Text:

Discrepancy: Dispatch: Call SOP: Call Script: Agency Info:

Closest Response Agencies

Response Agency 1:

Response Agency 2:

Response Agency 3:

Response Agency 4:

**All Video
Streams**

Call Interpreter

Agency Detail: Caller History: Call Record:

Volume:

Brightness:

Zoom:

Close Tab:

**Voice
Calls**

Telephone Controls

000-000-0000

Answer: Call Back: Clear Number:

Hold: Conf: Transfer:

Release: Mute: Dial:

Speed Dial 1: Speed Dial 4:

Speed Dial 2: Speed Dial 5:

Speed Dial 3: Speed Dial 6:

ACD Display

Response Time: Call Duration: Hold Time:

Call Taker Status:

Call Queue: Call Record: Call Recording: Auto Locate:

Links: General SOPs: Training Materials: FAQ's: Helpful Links: Response Agencies Listing: Queries:



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Intro

This proposal is based on the findings of :

- The EENA NG112 survey
- The REACH112 project
- The PEACE project
- Discussions with many PSAPs and industry representative, including the VOIP industry
- The NG911 developments in USA (e.g. NENA)



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Objectives

- Testing and pre-deployment of IP access to emergency services
- Reliable and secure VOIP access to 112
- Use of Next Generation technologies (video, text, pictures, etc...) and standards for all citizens, including those with disabilities.
- Interoperability of emergency services with IP



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Policy support

The NG112 project will support:

- Article 26 of the Universal Service directive by ensuring:
 - ✓ access to emergency services from a large range of “electronic communications service” (26.1 and recital 40 and 44)
 - ✓ accessibility for all citizens including those with disabilities (26.4 and recital 41)
 - ✓ accurate caller-location (26.5 and recital 39)
- EP Resolution on 112 (5/7/2011)
- The many requests from the EP on 112, including the current Written Declaration of accessible 112
- Inclusion requirements



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Description

- Partners: Emergency services, emergency services providers, application service providers (ASPs), ISPs and MNOs, handsets manufacturers
- Where: 5 to 10 pilot countries
- When: Kick-off not before September 2012
- Duration: 3-year project
- Total budget: 10 to 15 million EUR (Funding of 5 to 7.5 million EUR)
- Funding programme: ICP-PSP (Pilot type A or B)



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Impact

- Guidance for implementing Next Generation 112 in all Member States, including access from VoIP providers
- Guidance for further regulation at EU and MS levels (if needed)
- Guidance on further EU standardisation (if needed)
- Improvement of the access to emergency services for all (inclusion)
- Reduction of the costs of providing emergency services (see [USDOT studies](#))
- Reduction of the intervention times and improvement of the quality of interventions (see USDOT studies)
- Guidelines for Next-Generation eCall



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The project is...

...not about:

- Paying for full deployment in the MS (national issue)
- Paying industry to develop NG112 solutions

...but about:

- Gathering all compulsory stakeholders without which NG112 won't work
- Testing full NG112 in a micro-environment with real calls based on EU/international standards
- Prepare the ground for further national deployments



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Thanks to the project...

Routing and location:

- MNO/ISP "Waterphone" won't be in a position that tell there are no standards and no tests done (as for E112 today)
- Handset manufacturer association "Decimal Europe" won't tell they didn't know they needed to activate GPS automatically in case of a 112 call

Access from major Application Service Providers (e.g. VOIP):

- VOIP Provider "Skip" and "GoodTalk" will not refuse to provide access to emergency services

Interoperability:

- It will work for all and all over the EU, not only in one country/region
- PSAPs will be able to share data
- Companies will sell more standards-based products for PSAPs

Accessibility:

- People with communication disabilities will have equivalent access to 112

More generally:

- Interventions will be improved and costs reduced



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Questions?

For more information:

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