



Survey on Public Warning Systems in Europe

What is Public Warning?

Public warning systems (PWS) are needed to protect the lives of people in case of major emergency. During the last 50 years the siren is the most widely used public warning system, together with radio broadcast. There is only a single message associated with hearing a siren, for example: 'go inside and close doors and windows'. Following up on this message is not always the right thing to do. Radios have a limited reach, since not that many people are listening to a radio all of the day and all of the night. In this survey, PWS is considered to consist of one technology or a mixture of technologies such as:

- Sirens
- Radio
- TV
- Cell Broadcast (CB)
- SMS

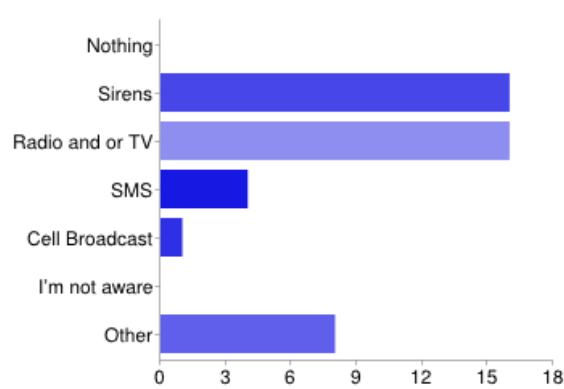
This survey will help the EENA Operations Committee in analysing and understanding the current situation with regard to Public Warning Services (hereafter called PWS) in Europe and to investigate the needs and possibly the plans for public warning that may already exist.

Legal Disclaimer

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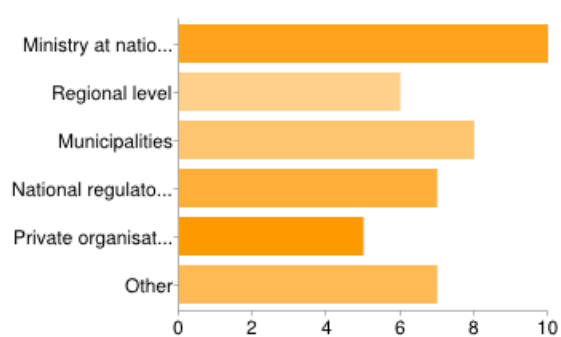
1. Which type of PWS currently exists in your country?



Nothing	0	0%
Sirens	16	94%
Radio and or TV	16	94%
SMS	4	24%
Cell Broadcast	1	6%
I'm not aware	0	0%
Other	8	47%

People may select more than one checkbox, so percentages may add up to more than 100%.

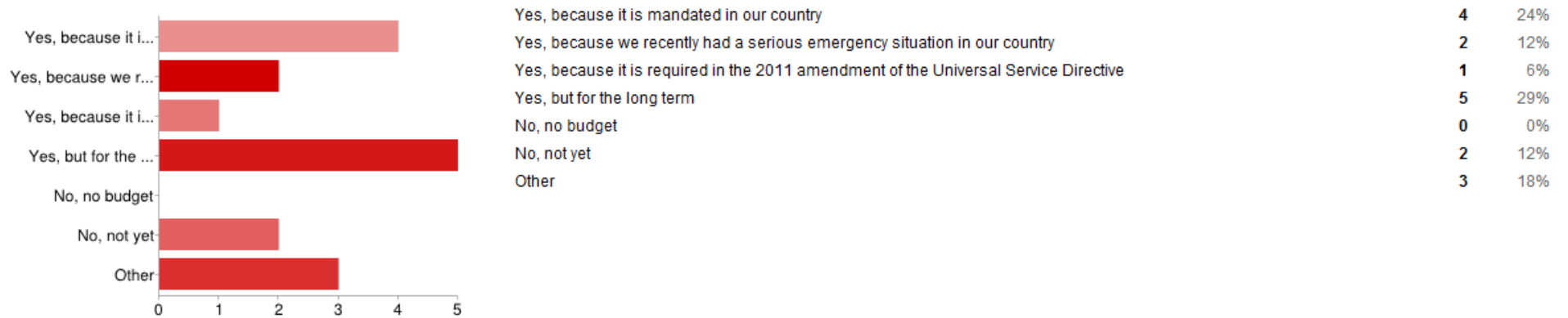
2. What are the organisations responsible for PW?



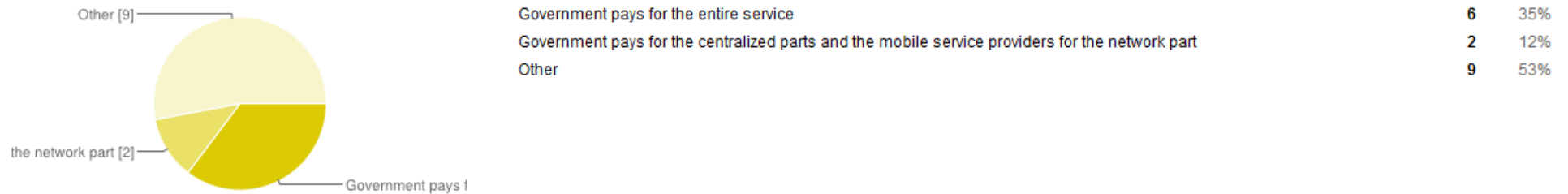
Ministry at national level	10	59%
Regional level	6	35%
Municipalities	8	47%
National regulatory authority	7	41%
Private organisations	5	29%
Other	7	41%

People may select more than one checkbox, so percentages may add up to more than 100%.

3. Is a new or an upgrade of the PWS being considered in your country/region/municipality?



4. If your country is considering a new or an upgraded PWS, what is going to be the funding model?



5. If your country is considering a new or an upgraded PWS, are you taking into consideration what is happening in other countries?

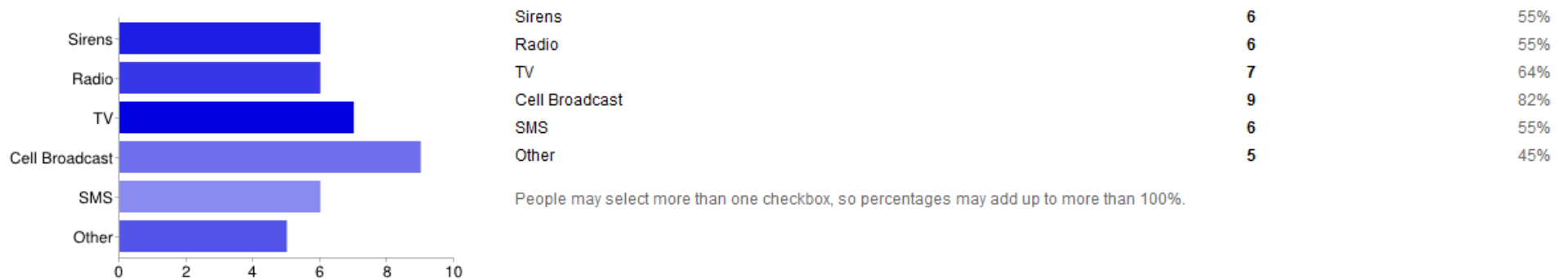
See answers in annex 1

6.

a) If your country is considering a new or an upgraded PWS and deploying a single technology, could you please name this technology?



b) If your country is considering a new or an upgraded PWS and deploying multiple technologies, could you please list these technologies (i.e. sirens/radio/TV/Cell Broadcast/SMS/.....)

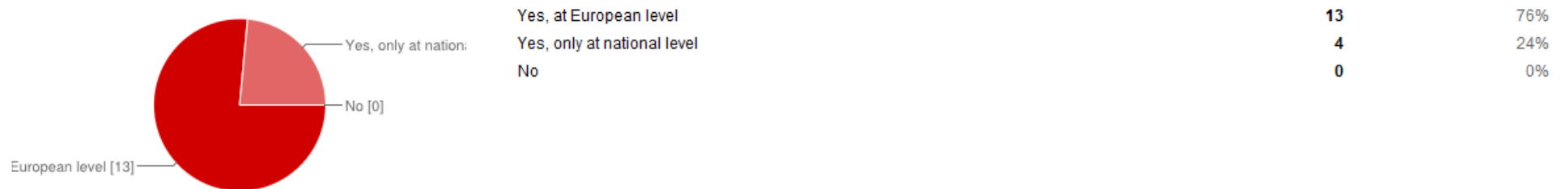


People may select more than one checkbox, so percentages may add up to more than 100%.

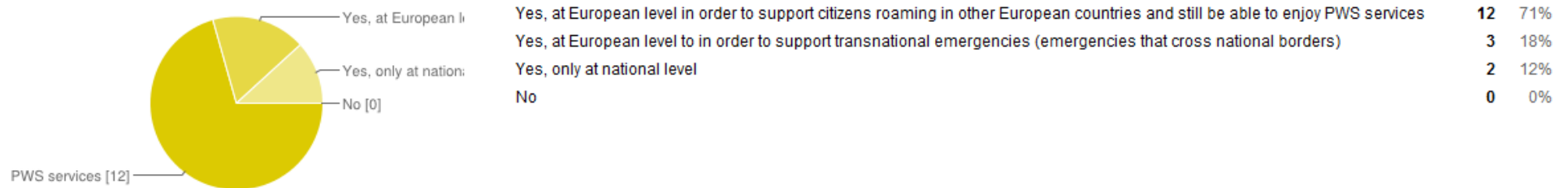
7. Would you like to receive information about PWS deployments in other countries?



8. Do you think that regulation on PWS is needed?



9. Do you think that standards on PWS are needed?



10. If you have a PWS in operation or if you are considering a new PWS or an upgrade, please provide indicative per capita costs of deployment (capex) and ongoing maintenance (opex).

See answers in annex 1

11. Are interoperability tests part of the current PWS or under consideration for the new PWS?



Annex 1: Answers to the questionnaire

Country	1. Which type of PWS currently exists in your country?	2. What are the organisations responsible for PW?	3. Is a new or an upgrade of the PWS being considered in your country/region/municipality?	4. If your country is considering a new or an upgraded PWS, what is going to be the funding model?	5. If your country is considering a new or an upgraded PWS, are you taking into consideration what is happening in other countries?	6a. If your country is considering a new or an upgraded PWS and deploying a single technology, could you please name this technology?	6b. If your country is considering a new or an upgraded PWS and deploying multiple technologies, could you please list these technologies (i.e. sirens/radio/TV/Cell Broadcast/SMS/.	7. Would you like to receive information about PWS deployments in other countries?	8. Do you think that regulation on PWS is needed?	9. Do you think that standards on PWS are needed?	10. If you have a PWS in operation or if you are considering a new PWS or an upgrade, please provide indicative per capita costs of deployment (capex) and ongoing maintenance (opex).	11. Are interoperability tests part of the current PWS or under consideration for the new PWS?
Finland	Sirens, Radio and or TV, Mobile warning systems in vehicles, internet	Ministry at national level, National regulatory authority	Yes, because it is required in the 2011 amendment of the Universal Service Directive	TBD	Yes, namely the following countries: [Please select the box "Other" and write your answer]	Cell Broadcast	Cell Broadcast	Yes	Yes, only at national level	Yes, only at national level		Yes
Republic of Macedonia	Sirens	Crisis Management Center	Yes, because it is mandated in our country	We expect Government to pay but donations are welcome	Not yet, but is good to have experience from other countries	Sirens	Sirens, Radio, TV, Cell Broadcast, SMS	Yes	Yes, at European level	Yes, at European level to in order to support transnational emergencies (emergencies that cross national borders)	Capex - minimum 6 million euros Opex - don't have information at the moment	Yes



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	Sirens, Radio and or TV	National regulatory authority	No, not yet					Yes	Yes, only at national level	Yes, at European level in order to support citizens roaming in other European countries and still be able to enjoy PWS services		
Lithuania	Sirens, Radio and or TV	Fire and rescue department	Cell Broadcast is under implementati on process	Government pays for the entire service	Yes, namely Netherlands	Cell Broadcast		Yes	Yes, at European level	Yes, at European level in order to support citizens roaming in other European countries and still be able to enjoy PWS services	N/A	Yes
Italy	Radio and or TV	Ministry at national level, Municipalities	No, not yet					Yes	Yes, at European level	Yes, at European level in order to support citizens roaming in other European countries and still be able to enjoy PWS services		

Belgium	Sirens, Radio and or TV, SMS	Ministry at national level, Regional level, Municipalities	Yes, because it is mandated in our country	not already known	Yes, namely the following countries: [Please select the box "Other" and write your answer]	single technology is not an option	Sirens, Radio, TV, Cell Broadcast, SMS, IP applications (Billboards, smartphones, ...) + pre-warning on Tetra handsets for emergency workers	Yes	Yes, at European level	Yes, at European level in order to support citizens roaming in other European countries and still be able to enjoy PWS services	PWS in operation (Sirens + SMS) opex : 500 k€/year PWS in project : CAPEX : 5.000 k€ over 5 years OPEX : 2.000 k€/year	No
Croatia	Sirens, Radio and or TV	Ministry at national level, Private organisations	Yes, but for the long term	Government pays for the entire service	Yes, namely the following countries: [Please select the box "Other" and write your answer]		Sirens, Radio, TV, SMS	Yes	Yes, at European level	Yes, at European level to in order to support transnational emergencies (emergencies that cross national borders)	For the maintenance of current system for warning which based on sirens per capita costs per year 2 € cents.	Yes
Slovenia	Sirens, Radio and or TV	Ministry at national level, Regional level, Municipalities, National regulatory authority, Private organisations	Yes, but for the long term	Government pays for the centralized parts and the mobile service providers for the network part	Yes, namely the following countries: [Please select the box "Other" and write your answer]	no single technology	TV, Cell Broadcast, SMS	Yes	Yes, at European level	Yes, at European level in order to support citizens roaming in other European countries and still be able to enjoy PWS services		Yes



Spain	Sirens, Radio and or TV, SMS	Regional level, Municipalities	Yes, because we recently had a serious emergency situation in our country	It is not yet defined	Netherland, Israel	Cell Broadcast	Cell Broadcast, App for smartphones	Yes	Yes, at European level	Yes, at European level in order to support citizens roaming in other European countries and still be able to enjoy PWS services	We have not yet the information about the new PWS. In case of the PWS deployed (sirens) the capex is about 1,45 € (considering a population density of 20.650 pers / km2). The opex annual is about 10% of the capex.	Yes
Sweden	Sirens, Radio and or TV, RDS, Radio data system, allows to break in on public FM radios (who cab receive digital info, for example car radios) with information)	National regulatory authority, Responsible for the service is The Swedish contingencies Agency (MSB), but if you mean who can trigger a PW it's amongst others the fire rescue service, certain central authorities, SOS Alarm, nuclear plants.	Yes, the responsible national authority, MSB, is considering cell broadcast.	Has to be answered by MSB (The Swedish Civil Contingencies Agency) who is responsible for the PB system	Has to be answered by MSB (The Swedish Civil Contingencies Agency) who is responsible for the PB system	Cell broadcast but also the new national information number 113 13, starting as a test i the southern r3egion of Sweden this december, will be a part of the PBS, where the public can both receive and leave information	Cell Broadcast, National information number 113 13	Yes	Yes, only at national level	Yes, at European level in order to support citizens roaming in other European countries and still be able to enjoy PWS services	Has to be answered by MSB (The Swedish Civil Contingencies Agency) who is responsible for the PB system	



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Sweden	Sirens, Radio and or TV, RDS, Nuclear Power Plants	National regulatory authority	Yes, but for the long term	Government pays for the entire service	Yes, namely the following countries: [Please select the box "Other" and write your answer]	Cell Broadcast		Yes	Yes, at European level	Yes, at European level in order to support citizens roaming in other European countries and still be able to enjoy PWS services	No
Norway	Sirens, Radio and or TV, Cell Broadcast	National regulatory authority	Yes, because we recently had a serious emergency situation in our country	Government pays for the entire service			Yes	Yes, at European level	Yes, at European level in order to support citizens roaming in other European countries and still be able to enjoy PWS services	No	
Luxembourg	Sirens, Radio and or TV	Ministry at national level	No, we finished our upgrade in 2012	Government pays for the entire service	Yes, namely the following countries: [Please select the box "Other" and write your answer]		Yes	Yes, at European level	Yes, at European level in order to support citizens roaming in other European countries and still be able to enjoy PWS services	No	



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Romania	Sirens, Radio and or TV, SMS	Ministry at national level, Municipalities, National regulatory authority, Private organisations	Yes, but for the long term		No	Sirens	Sirens, Radio, TV, SMS	Yes	Yes, at European level	Yes, at European level in order to support citizens roaming in other European countries and still be able to enjoy PWS services	There is no information related to costs, since they are the sole responsibility of the owners (county councils, local councils, companies, a.s.o)	Yes
Republic of Armenia	Sirens, Radio and or TV	Ministry at national level, Regional level, Municipalities, Private organisations	Yes, but for the long term	have not decided yet	Yes, namely the following countries: [Please select the box "Other" and write your answer]	We want to use different technologies	Sirens, Radio, TV, Cell Broadcast, SMS	Yes	Yes, only at national level	Yes, only at national level	Sorry, i'm not awarded...	No
France	Sirens, Radio and or TV	Ministry at national level, Regional level, Municipalities	Yes, because it is mandated in our country	Government pays for the centralized parts and the mobile service providers for the network part	Yes, namely the following countries: [Please select the box "Other" and write your answer]	Sirens	Sirens, Radio, TV, Cell Broadcast	Yes	Yes, at European level	Yes, at European level in order to support transnational emergencies (emergencies that cross national borders)	CAPEX : 77M	No



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Slovak Republic	Sirens, Radio and or TV, SMS	Ministry at national level, Regional level, Municipalities, Private organisations	Yes, because it is mandated in our country	Government pays for the entire service	Yes, namely the following countries: [Please select the box "Other" and write your answer]	Cell Broadcast	Cell Broadcast	Yes	Yes, at European level	Yes, at European level in order to support citizens roaming in other European countries and still be able to enjoy PWS services	capex - Implementation costs of modernizing the PWS are € 29 000 000. Per capita, the financial costs are € 5.30 (SR population - 5,404,555) opex - Total annual costs of operation and maintenance € 387 000.	Yes
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