

Ministry of Interior



Bulgarian National 112 System

10 September 2010 - Vilnius, Lithuania



EMERGENCY NUMBERS IN PLACE IN BULGARIA

- Republic of Bulgaria has national emergency numbers for each of the three main emergency services: Police - 166, Fire Brigade - 160 and Ambulance 150.
- The authorities responsible and answering this numbers are :Ministry of Interior – Police, Fire Brigade service, Civil protection service; Ministry of Health - Ambulance service
- National numbers will be kept, but in compliance with the the Council of ministry Act No 367/03.10.2010 till 30.09.2011, all calls to the specific emergency numbers 150, 160 and 166 shall be routed to 112 centers . At present the calls to Police and Fire brigade at Ruse region are already routed to tel. 112

THE KNOWLEDGE OF 112

According to Eurobarometer survey - “European Emergency Number 112” - February 2010:

- The proportion of respondents who thought of calling 112 in case of an emergency in Bulgaria was 52 %, higher than the proportion who would dial a national number.
- In Bulgaria proportion of respondents who identified 112 as the number to call the emergency services from anywhere in the EU is 46 %.

SIZE OF OPERATION

Distribution of the population coverage for the 112 Centers

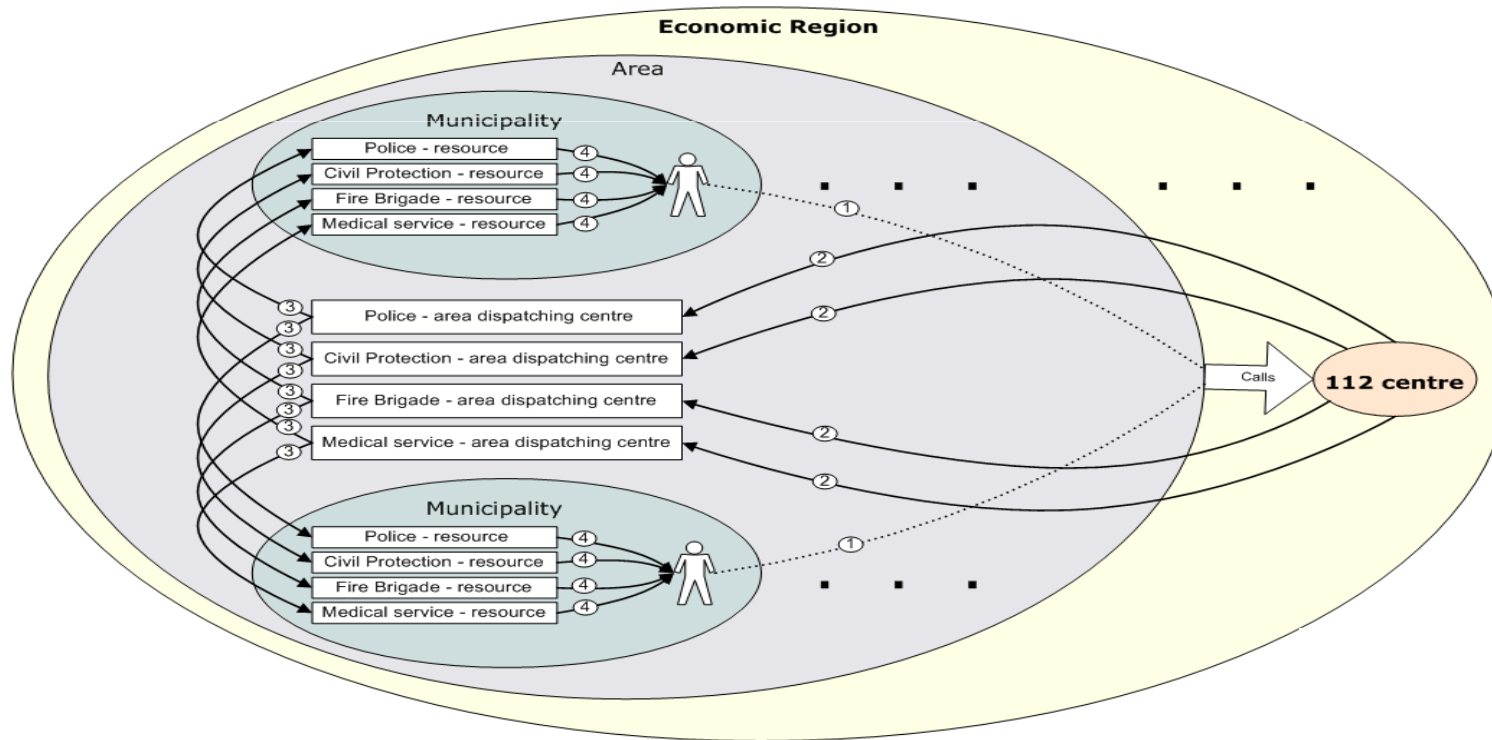
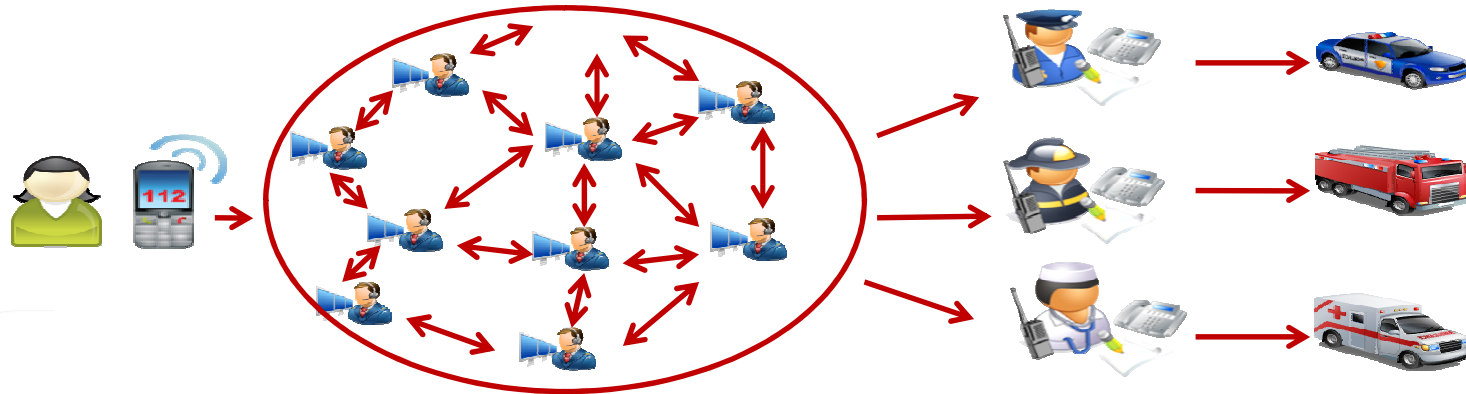
Economic Region (Center)	Population	Region share / total population
South - West Region (112 Center Sofia)	2 232 575	27,52%
North - West Region (112 Center Montana)	984 324	12,13%
North - Central Region (112 Center Ruse)	985 488	12,15%
North - East Region (112 Center Varna)	1 071 585	13,21%
South - East Region (112 Center Burgas)	1 207 061	14,88%
South - Central Region (112 Center Kardzhali)	1 631 249	20,11%

In Bulgaria , the National emergency system 112 is assigned to the following authorities:

- 1 . Ministry of Interior – Regional centers 112 and Police, Fire brigade and Civil Protection emergency services .
2. Ministry of Health - Ambulance service;
3. Ministry of Transport- Marine Administration - Marine rescue service;
4. Bulgarian Red Cross - Mountain rescue service.

National system 112 is 100 % state property. In charge of financing is Ministry of Finance.

112 MODEL AND ARCHITECTURE



LEVEL OF EMERGENCY SERVICE INTEGRATION

- Public telephone networks operators route calls to two centers (Sofia and Russe) and provide caller location information. Centers dispatch the calls to the other ones via IP. Call dispatching is automatic, without call taker intervention, based on caller's language knowledge and location.
- The system is 100% homogeneous across the country. The six call centers, are interchangeable. Any center can accept calls from any geographical point of the country (including geographical areas outside the corresponding economic regions). The incidents are always served by the same way and that is transparent for the calling citizens. That functionality makes 112 system very flexible in two cases. First if there are no free call takers in one center the calls are automatically redirected to free call takers in another center. Second If one of the call centers is not accessible due to failure, then the calls to that center are automatically redirected to the other ones.
- Each emergency service office has local 112 contact points. Usually contact points are located at area dispatching centers in area towns. At these points the emergency dispatch centers receive data about incidents, happening on the territory they serve.
- Contact points of first responders have a direct access to information system of 112 centers. 112 centers and first responders exchange information trough information system.
- PSAP's and first responders use the same software and share the same database.

112 ACCESS

Statistics

- Number of emergency calls per year (01.07.2009 – 30.06.2010) - **3 010 932.**
- Average number of calls per month - **250 911**
- Maximum number of calls we receive between 16:00 and 20:00 h.– **14 %** of total calls for 24 hours.

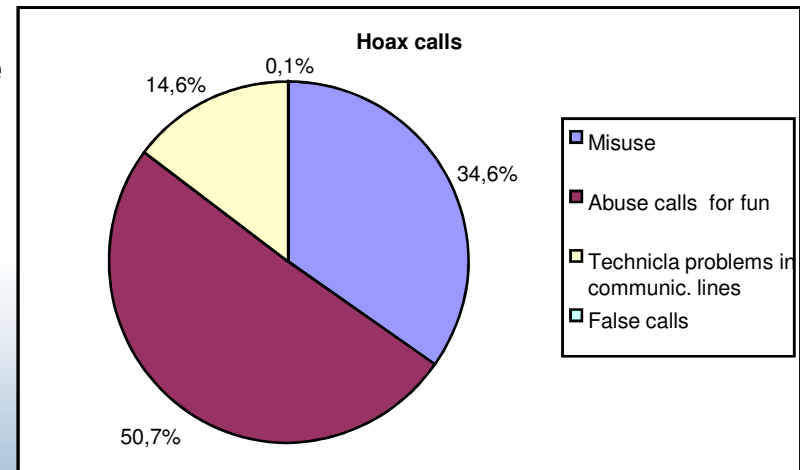
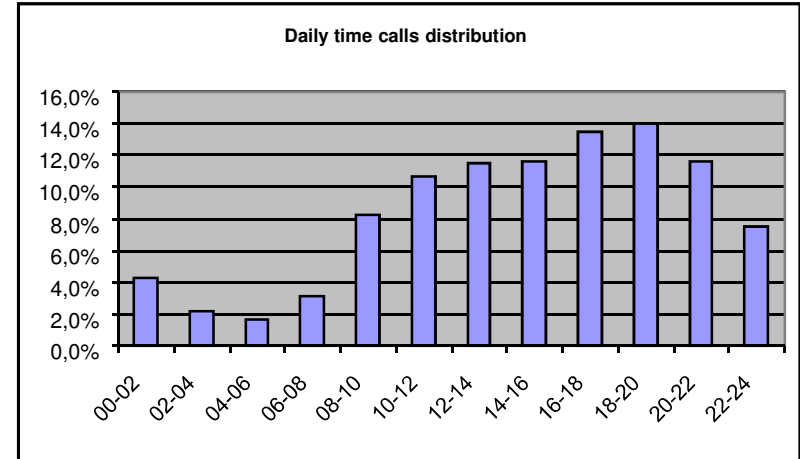
Hoax calls

The rate of hoax calls to total calls is **69,7%**

- From 01.07 2009 is not allowed to call 112 without active SIM card – the hoax calls drop down more than 2,5 times.
- The effective initial interview reduced the false calls, when first responders are activated to less than **0,1 %** of total hoax calls.
- The citizens are legally responsible :
 - for false or abuse calls the fine is 2000 – 5000 BGL.
 - when first responders are activated -10000- 20000 BGL, and when repeated the fine is doubled

Mobile calls and VoIP

- Mobile calls are routed to the Regional center, where the corresponding mobile cell is located, and the first responders at the area of cell's location is activated
- National mobile roaming is active for 112 calls
- With VoIP 112 is accessible only for fixed subscribers.
- At present there are not used interactive voice responders and recorded messages



CALL HANDLING FIGURES

- The average call answering time – **3 s.**
- The average duration of conversation between citizens and 112 is – 30 s.
* estimated period is one year- 01.07.2009-30.06.2010
- There are not legal provisions and undertakings, specifying the time of interventions and obligations to authorities responsible for the first responders, to provide data on intervention time.
- Available call takers and coordinators in average at given time :

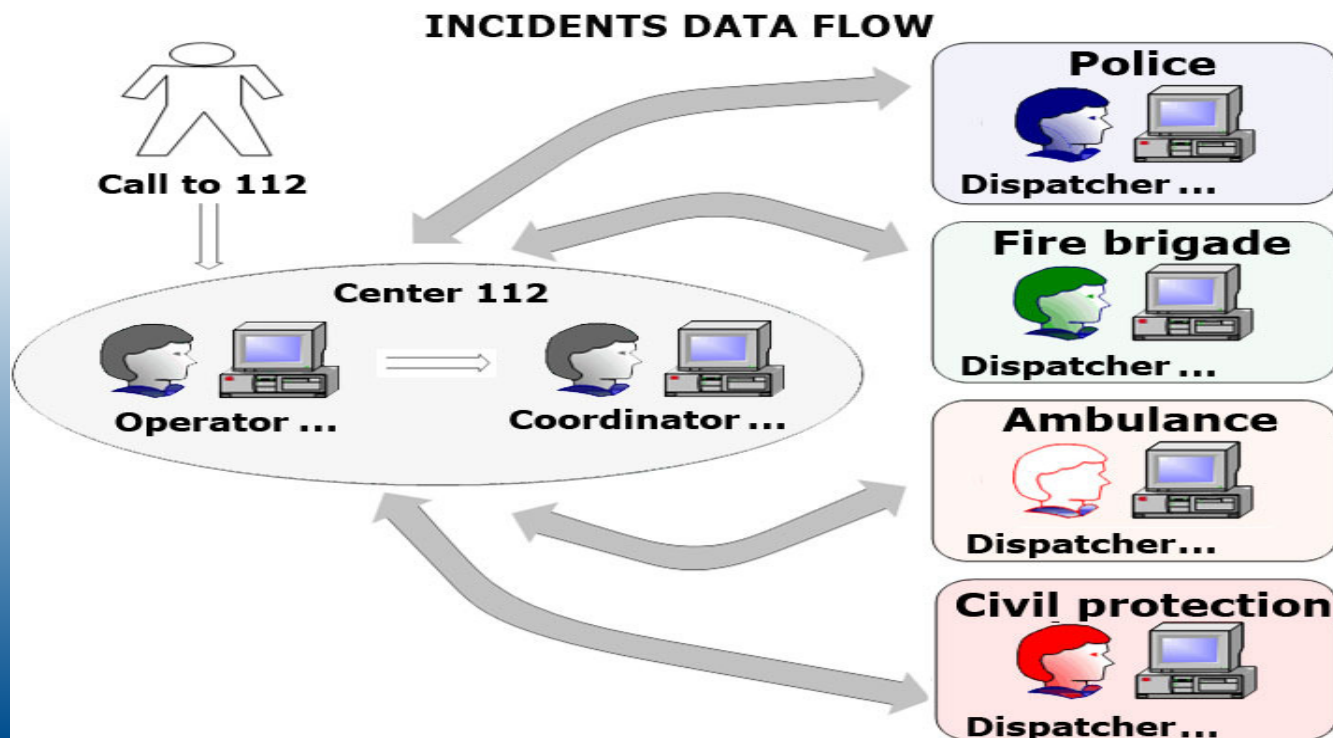
	Operators	Koordinators	Total
Day	39	16	55
Night	34	12	46

CALL HANDLING ASPECTS

- The mission of call-taker - **“112 IS YOUR SOS NUMBER”**
- Call takers are recruited by competition at 4 stages: Application documents - foreign language knowledge is an advantage; test for intellectual capabilities; physiological test for suitability of the job specifics; Interview .
- Trainings: Call takers are trained under an approved curriculum - 1 month theoretical course in a special training center plus 15 days training on live system from educated supervisor: Lectures - 14 hours, on legislation, regulatory system, instructions; Exercises – 66 hours on working with the software applications and development of quality of call takings.

CALL HANDLING ASPECTS

- All emergency activities are subject to internal instruction (call-taking protocols). It was developed and implemented emergency cases classifier. The incorporated priority system assigns automatically priority according to the case classification, or is set manually by call-taker.
- Quality monitoring - quality control forms for evaluation of the performance at 3 levels : Call takers and coordinators, Center 112 and the overall System 112. It includes 2 set of indicators: for time performance and quality of operation.
- The call-takers give a pre-arrival instruction and initial physiological support. They have the caller tel. number and if needed the coordinator makes a call-back to the caller for updates and additional information



Multilingual calls

Supported languages :

24 X 7
 (24 h – 7 days)

EU official languages

Non EU languages



English



German



Italian



Turkish



French



Spanish



Greek

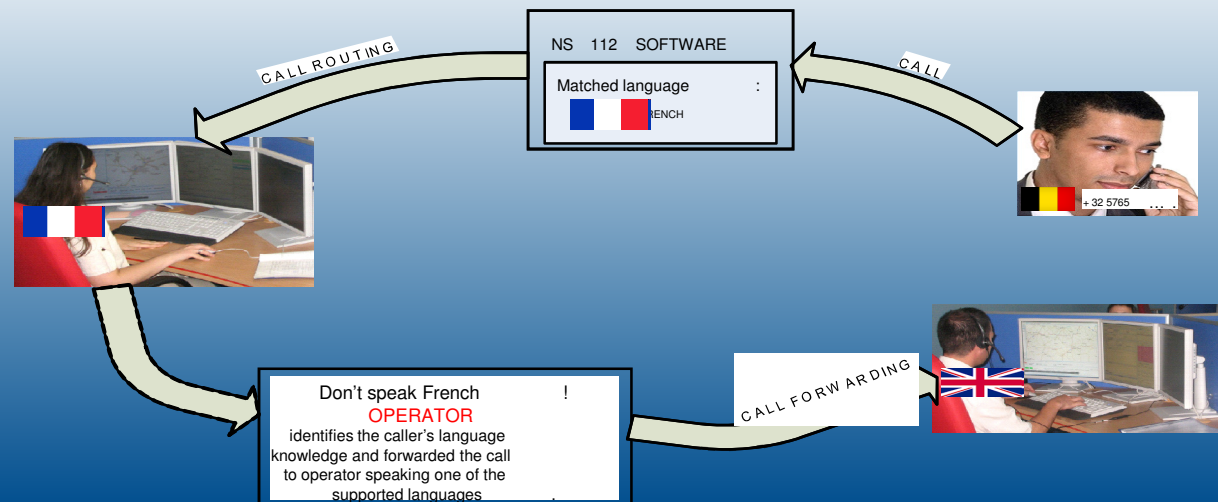


Russian

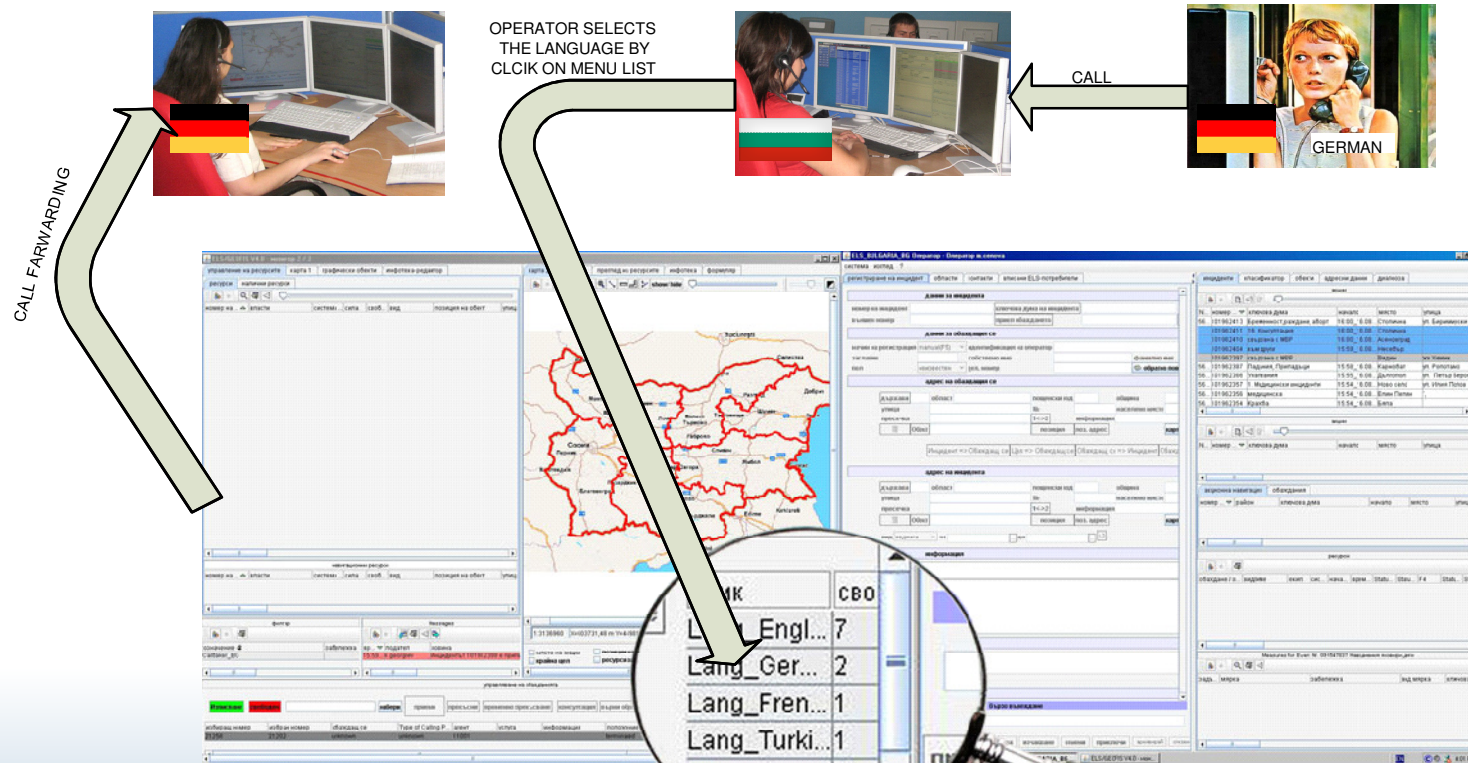


Romanian

CASE 1 – ANSWERING INTERNATIONAL ROUTED CALLS



CASE 2 – ANSWERING NATIONAL CALL OF NON BULGARIAN SPEAKING CALLER

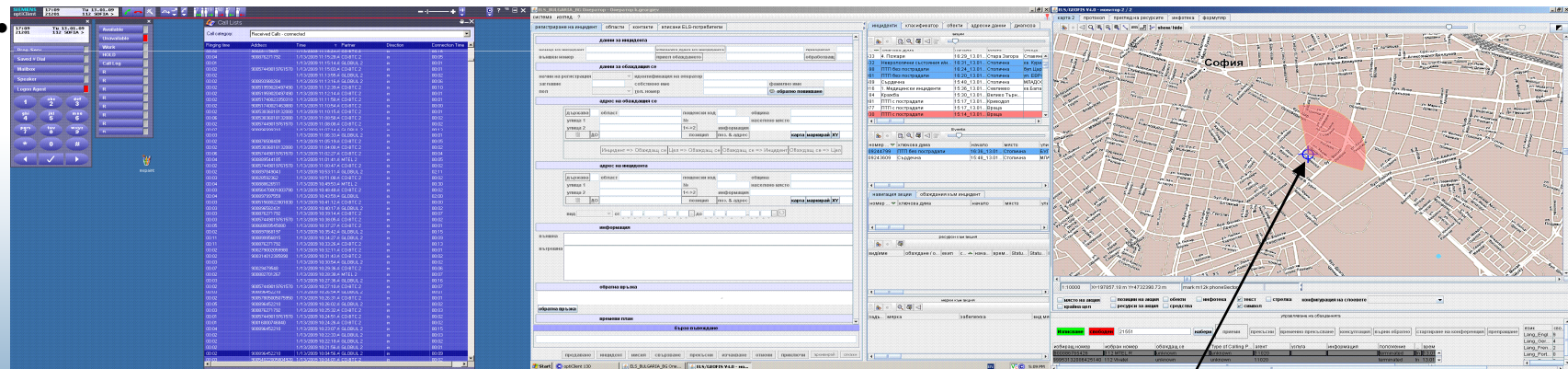


ACCESSIBILITIES FOR PEOPLE WITH DISABILITIES

- At present there is not legal basis and corresponding undertakings for serving the people with disabilities, respectively there is not available financing.
- The project for access of the people with a disabilities to the services of telephone 112 is laid in the “Conception for Development of the National Emergency Call System with a Single European Number 112” (NECSSEN 112).

CALLER LOCATION

- GIS containing maps with geographical data for positioning the caller party localization, available in 112 centers immediately on picking up the call (push method).
 - landline phones: localization based on periodically updated data base presented by the communication operators.
 - mobile phones: localization based on cell id / sector id that is transmitted next to every 112 call. The service is free for Centers 112. The costs are bared by mobile operators.



Coverage of the cell, handling a subscriber, at the moment of calling 112

Calling party localization

- Used technology allows equivalent functioning of the local (with local SIM card) and International roaming (with International SIM card) location, based on cell id/sector id.

CHALLENGE, PROJECTS AND/OR REFORMS

At the beginning of this year experts working group created a “Conception for Development of the National Emergency Call System with a Single European Number 112” (NECSSEN 112). The Conception is a basic document for the organizational and technical development of the system. The main technical aspects based of new technology achievements include:

- More precise mobile phones caller localization
 - deploying the service Mobile positioning in each of the telephone operators
 - using GPS, which will be standard in tomorrow’s mobile phone
- Implementation of CAD (Computer Aided Dispatching) system of the mobile teams.
- Online access of the mobile teams to Center 112 Database
- Implementation of AVL (Automatic Vehicle Localization) system of the mobile teams
- Access from the people with a disabilities to the services of telephone 112.
- eCall service – option for automatic or manual call generating to tel. 112 in traffic accidents
- GIS development - actual maps of all settlements with the current status of the important infrastructure objects, introduction of 3D maps etc.
- Accepting video calls.

Thanks for your attention

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