



Local stakeholder participation in Slovakia – regional-local cooperation and improvement of local preparedness

Tatiana Duranova, VUJE

NERIS WG2 Meeting:
Emergency preparedness and stakeholder participation

NRPA, Oslo, Norway
November 26-27, 2012



- Slovakia has been impacted by Chernobyl accident
- Slovakia is hosting nuclear activities – Bohunice V2 and Mochovce are owned and operated by SE. In 2006, Italian utility Enel acquired a 66% stake in SE. The remaining 34% is held by the state through the National Property Fund. The Nuclear Decommissioning Company, JAVYS, owns Bohunice A1 and V1 which are under the decommissioning. There is national RAW surface repository under operation in the Slovak Republic in Mochovce, which obtained authorization for permanent operation in 2001
- Both management and preparedness processes are the origin of the activities related to the stakeholder involvement in the area of nuclear or radiological emergency and post-accident recovery



Since the beginning of 2000s, different experiences on emergency and rehabilitation preparedness and management have been developed in Europe, either in the context of the EVATECH, TC-OSEM, DSSNET, RODOS Migration, STRATEGY, FARMING, EURANOS project, or independently.

To share experience about different initiatives on emergency and rehabilitation preparedness and management throughout Europe – the main Slovak interest and motivation to be involved in different projects



EVATECH (STUK) - Information Requirements and Countermeasure Evaluation Techniques in Nuclear Emergency Management (2001 – 2005)

- the thorough study, survey and documentation of the emergency management process and duties of the parties involved in Slovakia were performed
- the process modelling made the identification of the target group of stakeholders easier; as a result the core of target group of stakeholders was identified
- the method for stakeholder involvement in exercises and emergency planning was developed under the same project and successfully applied in the Slovak Republic
- the essential for that work was development of methodologies to conduct scenario-focused decision making workshops with participation of relevant stakeholders and training on using available computer-aided techniques (RODOS, Web-HIPRE) in decision analysis and conducting facilitated decision-making panels or workshops (2003)



First facilitated workshop: “Decision analysis of clean-up actions in inhabited areas in the Slovak Republic after an accidental release of radionuclides”, November 19-20, 2003; 25 participants

- Participants – members of the Central Crisis Staff of the Slovak Republic and representatives of the National Emergency Commission for Radiation Accidents (NECRA), members of the regional and local Civil Protection Crisis Staff (county, district and municipality)
- Workshop processes:
 - Scenario
 - First thoughts, issues
 - Discussion - criteria and values that drive decisions - ‘attribute tree’
 - Identification of possible recovery strategies + what to explore further
 - Score strategies for each attribute + weight attributes
 - Analysis of results
 - First impression of process and feedback
- Introductory meeting – one month before the workshop (group dynamics and facilitated workshop, decision analysis, introduction to value tree analysis, clean-up actions in urban environments)



Training Course on Decision Making in Emergency Management within the Project *Strengthening of the Nuclear Emergency Preparedness – Sharing of New International Experience* (NSP/03-S2), February 14-16, 2005, 21 participants, 8 lecturers

The training course included: lectures, workshop sessions and moderated discussions to demonstrate, use and establish strategies for the intervention of decision support tools (mainly the RODOS) in the decision making process.

Experiences and processes from the EVATECH facilitated workshop used and improved.

The course prepared wider community of stakeholders in Slovakia for work in stakeholder panels in the field of emergency and rehabilitation preparedness.

Other trainings within the international and national projects, e.g -

TC-OSEM: RODOS based decision support for off-site emergency management in the early and later phases of a nuclear accident



- Seminar and Facilitated workshop on Generic Handbook for Assisting in the Management of Contaminated Inhabited Areas in Europe Following a Radiological Emergency, June – September 2005, 13-16 participants
- Seminar and Facilitated workshop on revised version of Generic Inhabited Area Handbook, May – June 2006, 16 participants
- Facilitated Workshop on revised version of Generic Inhabited Area Handbook, Part VI „Management on Drinking water“, November 2007, 10 participants
- Seminar „Recovery Management following a Radiological Incident“, September 29 – November 1, 2008, 18 participants
- Local stakeholders involvement





The Slovak HUG was established including following representatives:

- Regional Civil Protection and Crisis Management Office in Trnava
- Regional Civil Protection and Crisis Management Office in Nitra
- Regional Civil Protection and Crisis Management Office in Banska Bystrica
- Mayors of villages (Dolny Lopašov and other)
- Section of Crisis Management and Civil Protection of Ministry of Interior of SR, Bratislava
- Crisis Management and State Safety Office, SR Government Office, Bratislava
- Regional Health Protection Agency, Trnava
- Regional Veterinary and Food Administration, Trnava
- Slovak Head Office of Radiation Monitoring Network (SURMS), Bratislava
- Slovak Hydrometeorological Institute (SHMU), Bratislava
- Nuclear Regulatory Authority (ÚJD SR), Bratislava
- Slovak Army, RCHBO
- Slovak NPPs, Emergency planning and preparedness units and Headquarters



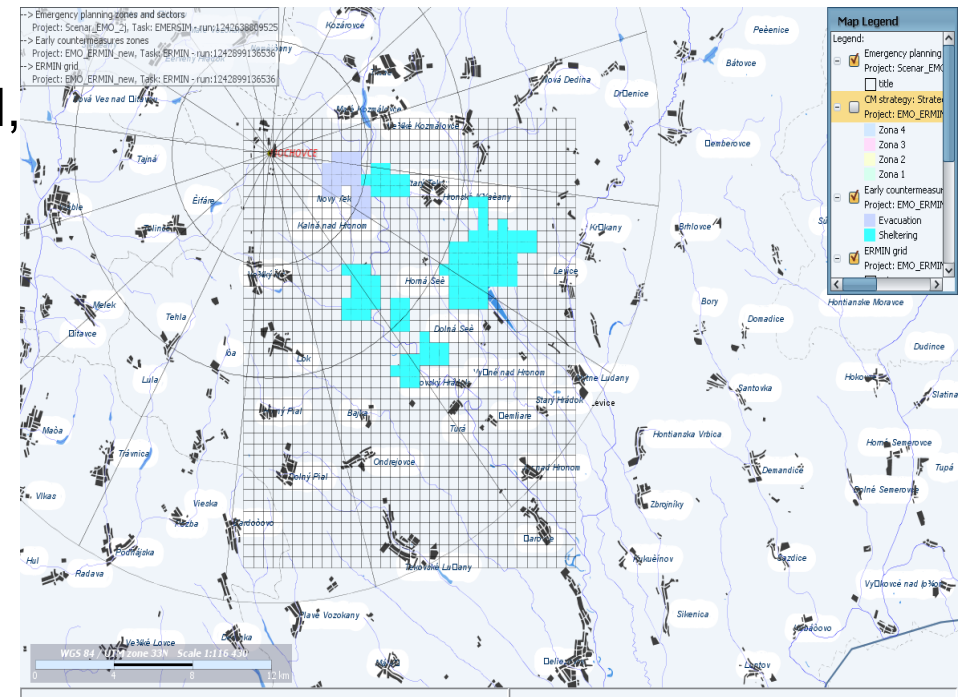
In the follow-up activities following representatives expressed an willingness and actively participated in workshops:

- State Veterinary and Food Administration of SR, Bratislava
- Crisis management office of Ministry of Soil of SR, Bratislava
- Health Protection Agency of SR, Bratislava
- Regional Health Protection Agency, Banská Bystrica
- Regional Veterinary and Food Administration, Banská Bystrica
- Regional Veterinary and Food Administration, Bratislava
- Fire and Rescue brigade

General goal: Handbooks development, customisation and implementation in Slovakia; discussion of issues of rehabilitation after the nuclear accident in general, and in particular - presentation of rehabilitation project results in Belarus after Chernobyl accident (ETOS).



- The need in training and exercising the recovery and rehabilitation issues at national, regional and local level was expressed within the stakeholder panel
- Nuclear Regulatory Authority of the Slovak Republic – coordinator of the activities under national research and development projects
- Training course: „Evaluation tools and methods for supporting the emergency management team“ developed and conducted under the national R&D project in VUJE facility Modra-Harmonia, 25.-27.5.2009, 19 participants
- JRODOS used for scenario preparation including the results of LSMC, EMERSIM, ERMIN
- Web-HIPRE used for decision analyses and thorough discussion of strategies developed using the Generic Handbook for assisting in the management of contaminated inhabited areas





Local-national forum for improvement of both local and national capabilities in planning for nuclear and radiological emergency and recovery preparedness and response continued its work in Slovakia.

Seminar „Recovery Management following a Radiological Incident“ was conducted on May 16-18, 2011, 34 participants

Main goal: Focusing on sharing the experiences with development, customization and implementation of Generic Handbooks for Assisting in the Management of **Contaminated Inhabited Areas, Drinking Water Supplies** and in the **Withdrawal of Emergency Countermeasures** in Europe Following a Radiological Emergency to the local, regional and national conditions of Slovakia.

Participants:

- local stakeholders and local urban community of Trnava and Nitra
- local, regional (Trnava and Nitra region) and national authorities in the area of Civil Protection and Crisis Management (including Training and Technical Centre), Health Protection, Veterinary and Food administration, Water supply, Nuclear Regulation, Radiation Monitoring, Hydrometeorology (radiation monitoring issues), Slovak Army, Police Force, Slovak NPPs.



Programme frame:

1st day: Plenary session

- INEX 4 exercise conclusions, relevant issues: Nuclear Regulatory Authority of the Slovak Republic (UJD SR),
- Response to the Fukushima accident: UJD SR, Health Protection Agency, Ministry of Interior – Section of Crisis Management and Civil Protection,
- Monitoring system: relevant issues and conception related to INEX 4 outcomes and Fukushima accident,
- Emergency planning in Slovakia – analyses of the system in relation to the measures undertaken after the Fukushima accident
- Assisting in the management of emergency and existing exposure situations – tools and international cooperation
- Generic Handbooks for Assisting in the Management of Contaminated Inhabited Areas, Drinking Water Supplies and in the Withdrawal of Emergency Countermeasures in Europe Following a Radiological Emergency and their implementation to the local, regional and national conditions of Slovakia – block of presentations with complex information



Programme frame:

2nd day: Facilitated workshops driven by scenario,

- practical use of the Handbook for Assisting in the Management of Contaminated Inhabited Areas following an accident at Mochovce NPP focused on the selection of countermeasures and strategy development based on scenario developed using the RODOS Linux system, adapted to the Slovak Republic conditions,
- practical use of the Handbook for Assisting in the Management of Drinking Water Supplies following an accident at Bohunice NPP. Valuable inputs from the local stakeholder – TAVOS, Inc – Trnava region water supply company.

3rd day: Facilitated discussions

- practical use of the Handbook for Assisting in the Withdrawal of Emergency Countermeasures Following a Radiological Emergency. Discussion of factors influencing the withdrawal of countermeasures, datasheets and check lists and its implementation to the local, regional and national conditions of Slovakia,
- general discussion on recovery management issues in Slovakia: preparedness at local, regional and national levels, existing tools, requirements, future perspectives,
- discussion of conclusions and recommendations.



Local-national forum for nuclear emergency and recovery strategies continued its work in 2012 with challenge to move to more robust national-local and regional-local cooperation where the district and municipality administration will play a key role.

Forum „Protection of individuals in emergency exposure situations and living in long-term contaminated areas after an accident “ was conducted on November 12-13, 2012, 19 participants

Main goal: To prepare environment and conditions for dialogue and cooperation of stakeholders group in the area of the accident consequences management and transfer to recovery within the response to the nuclear accident at NPP. The emergency management in the intermediate and late phase of the accident, long-term response on the existing exposure situation and emergency preparedness – the key issues.

Participants:

- local (Trnava, Piestany, Nitra), regional (Trnava and Nitra region) and national authorities in the area of Civil Protection and Crisis Management, Health Protection, Veterinary and Food administration, Water supply, Nuclear Regulation, Radiation Monitoring, Hydrometeorology (radiation monitoring issues), Slovak NPPs.



Programme frame:

- The Framework for post-accident preparedness,
- Decision support systems – simulation models and multicriterial analysis,
- The Handbooks for Assisting in the Management of Contaminated Inhabited Areas, Food Production Systems and Drinking Water Supplies
- Rehabilitation of living conditions after the nuclear accident: Lessons from Chernobyl and situation development after Fukushima accident
- The ETHOS Project in Belarus and in Fukushima
- National exercise “Havran 2012”: emergency situation, emergency response, tools and procedures used, advices and applied countermeasures
- Facilitated discussion: identify the main stakes in mid-term and long-term response to long-lasting contamination of the territory; identify methods, forms of cooperation, tools and processes adapted to the complex and multistakeholder issue of post-accident preparation and determine actions, next steps of a process of preparation of local actors and their possible contribution



Presentation of Handbooks to:

- the Mayors during the periodical training – Trnava District , Malacky District, presented by the NRA SR, supervision of the Ministry of Interior,
- the lecturers at the Police Academy,
- the lecturers of the Educational and Technical Institution of the Ministry of Interior in Nitra and Spisska Nova Ves.

Project have been submitted to the Ministry of the Interior to train trainees-lecturers on use of the tools (JRodos, Web-HIPRE) and Handbooks for further education of the local authorities/municipalities representatives and stakeholders in emergency preparedness and response and on preparation and conducting the table-top exercises/facilitated workshops using that tools to assist the municipalities in preparing for the local cooperation.

Presentation of the new developments (JRODOS: ERMIN, AgriCP) and suggestion of further activities related to the NERIS-TP Project WP3 and NERIS Platform WG2 at the Ministry of Interior of the Slovak Republic took place on November 20, 2012.



Procedures to involve local/national actors used:

- education seminars,
- topical workshops,
- moderated table-top exercises,
- inclusion in national and international exercises (NPP+municipalities, INEX 4),
- development of scenarios (INEX 4).

Tools used:

- The Handbooks,
- JRODOS/RODOS,
- Web-HIPRE.



The experience in Slovakia confirmed, that:

- Slovak stakeholder panels has shown that they are able to work together, to communicate problems, to absorb new comers to the working groups
- Working in the form of facilitated workshops with scenario developed using customized operational tools (RODOS/JRODOS, RTARC, Web-HIPRE) makes work more efficient, focus on possible real problem and finding real solutions
- There is a common understanding in necessity of continuation of joint meetings of stakeholders and willingness to have organized annually workshops for sharing experiences, identifying gaps and improving preparedness
- The Handbooks could be used as a preparatory tool, under non-crisis conditions to engage stakeholders and to update local and regional plans
- The handbooks can be applied as part of the decision-aiding process to develop a recovery strategy following an accident
- The handbooks are useful for training purposes and during emergency exercises.



Customisation and adaptation of JRODOS to assist the municipalities in preparing for the local-regional cooperation

Visit to Belarus – Bragin district

Training courses

Exercises

Dissemination workshop



Two 2-day training courses will be developed providing the necessary information on the new tools for the end users (train trainees course type):

- WP2 product - new simulation models and expanded simulation models of DSS, to threat ICRP 103 recommendations,
- WP4 product - exchange of information between an emergency information system and European DSS and for dynamic adaptation of the WRF data.

Preparation of exercises: specific exercises will be developed and included in training courses focused on exercising the new tools and their functionality.

The main objective is to train the participants to use the new tools for the purpose of further active participation in exercises and use of the end product in the community.

The courses will be based on tools and methods developed within WP2, WP3 and WP4.



Two technical exercises and one demonstration exercise are envisaged:

- Use of WP2 product and feedback on the users' experience,
- Use of WP4 product and feedback on the users' experience,
- Use of new methods and products on a European wide basis and their dissemination - demonstration exercise.

The work includes: defining the objective of exercises, develop exercise scenarios, prepare documents and data needed for performing the exercises, conduct the exercises and evaluate the success of the exercises by comparing their objectives with the response of the users.

Technical exercises will assure that the end users are fully integrated in the development process.

The demonstration exercise will demonstrate the result of effort of Platform establishment and use of new methods and tools.

The tasks will be developed in close interaction with OECD/NEA/CRPPH and the IAEA, the secretariat of the NERIS Platform and performed in close collaboration with WP2, WP3, WP4 and RUG.



The Second NERIS Platform Topical workshop

“Strengthening the preparedness at national and territorial level using new tools and methods - stakeholders experiences”

in winter 2014 in Norway organized by NRPA and UMB.

The main goal of the workshop will be to disseminate the new methods and products on a European wide basis and beyond via the NERIS Platform.