



# Public assessment of the emergency preparedness and response in the nuclear field: an overview of the NTW analysis

3rd European Regulatory Conference on Nuclear Safety -  
ENSREG

Brussels, 29 & 30 June 2015

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# Emergency Preparedness and Response (EP&R) Working Group (EP&R WG)

- EP&R working group was established **with the creation of NTW in November 2013**
- **The aim of EP&R WG is:**
  - to carry out an evaluation of the existing European and national EP&R provisions from the civil society point of view, identifying key challenges,
  - to inform public on the findings and
  - to provide guidance for further activities of the interested public.
- **10 European countries:** Belgium, Bulgaria, Czech Republic, France, Germany, Ireland, Luxembourg, Ukraine, Sweden and Slovenia involving 21 participants from 15 organisations.
- **The results:**
  - Report of NTW on Emergency Preparedness & Response work (200 pages),
  - Position paper of NTW on Emergency Preparedness & Response situation in Europe (15 pages).

# Presentation of the EP&R report

After one-year investigation of off-site EP&R, **this report has been presented on April 15 at the European Parliament** in the presence of MEPs (Klaus Buchner, Ana Gomes, Jo Leinen, Michèle Rivasi and Julie Ward) and representatives of the European Commission and Public institutions.



# Information collection and analyses of EP&R

- **International seminars**  
with expert institutions and international associations,
- **Desk work**  
to review the national provisions and international requirements,
- **Interviews and questionnaires**  
with representatives of responsible institutions and local populations,
- **The investigations performed by the EU institutions**  
(i.e. the “Review of current off-site nuclear emergency preparedness and response arrangements in EU member states and neighbouring countries“ study).,
- **The organisation of transboundary roundtables**  
involving the participation of responsible institutions and civil society.



# Main results of EP&R WG -1

## ■ Seminars:

- Current EP&R is in practice at best a bureaucratic list of good intentions since plans are not realistic.
- Citizens are insufficiently informed and involved.
- Exercise scenarios are not realistic.
- Plans need to integrate the feedback of Fukushima in order to be realistic.
- National arrangements are too different: in methods, algorithms, models, appreciations of uncertainties, intervention levels and definitions, etc., Individual differences are leading toward inconsistencies along borders.
- This lead to distrust in the decisions of the authorities that amplify the seriousness of an eventual crisis situation.
- Not prepared for challenge: in a major nuclear emergency situation in a country, multiple sources of information, presumably conflicting, will develop even in the short term. How to communicate?
- Address post-emergency issues based on the experiences gained from the Fukushima accident.
- EU level authorities – initiatives the improvements but the work is extremely slow.

# Main results of EP&R WG -2

- **Desk top and interviews/1:**
  - Many different approaches in EU on Emergency Planning Zones, Sheltering, Iodine Prophylaxis, Evacuation, Restrictions to Food and Drinks, Information Provision, Termination of Emergency, Trans-boundary Issues,
  - Almost no real involvement and public participation of civil society organisations in planning – prevailing top-down approach,
  - Almost no cross- border cooperation in place with some exceptions, but public is not involved,
  - No special sheltering sites are envisaged, possible problems with food supply (48 h) and conditions in houses (ventilation),
  - Low percentage of people in emergency zones (20-50 %) has iodine tablets with theme,
  - Very different levels for evacuations (from 30 mSv to 350 mSv),
  - Evacuation is a challenge (how, in which direction, availability of info, multiple sources of info), but not realistically addressed in drills,

# Main results of EP&R WG -3

## ■ Desk top and interviews/2:

- Decontamination seen as not problematic, but no real proves (the number of people in millions, how to do it, contaminated material management, standards, ...)
- Possibilities for multiple relocation still present, the duration of relocation is underestimated (as learned from Fukushima accident),
- Possible capacities for food and drinks monitoring are not sufficient in case of large contamination,
- Communication strategies are too passive and there is a lack of public discussions on the issues,
- Language barriers for information distribution and dissemination (within the authorities and journalists to the citizens),
- Trust to the information sources is a challenge all over Europe – more needs to be done.

# Main results of the EP&R WG -4

## ■ Trans-boundary EP&R Round Tables:

- EP&R of **NPP Cattenom**; Remich , Luxembourg, May 17 2014
- EP&R of **NPP Temelin**; Hlobuka nad Vltavom, Czech Rep, September 27 2014
- EP&R of **NPP Krško**; Brežice, Slovenia, October 20, 2014
- EP&R of **NPP Kozloduy**, Sofia, Bulgaria, January 19 2015
- EP&R in **Ukraine**, Kyiv, Ukraine, January 26 2015

## ■ Objectives:

- To **bring together key stakeholders** to discuss state of the art of national and trans-boundary provisions, practices and challenges of EP&R from a civil society perspective
- To **trigger the multi-stakeholders process** of critical discussion in an open, fearless, critical and toward improvement of the situation oriented manner
- To **encourage concerned citizens, citizen's initiatives and NGOs** in respective countries and provide them basic information, also on lessons learned from Fukushima and on-going EU activities in the field
- To **support the cross border cooperation on trans-boundary EP&R issues** <sup>8</sup> between citizens and authorities

# Main results from the EP&R WG -4

## Main findings from the RTs:

- Inadequate **response/ignorance of the operators and authorities** and **lack of participation of local inhabitants and municipalities** in case of RT Cattenom and Temlin.
- **Good collaboration with official institutions** in RT Krško although low level of information about the provision in Slovenia and even lower in Croatia has observed.
- **EP&R plans are based on rationality** of a planned top down administrative actions that **does not match with the chaotic reality**.
- **Information strategies and capacities seems to be the weakest point of EP&R activities** and are often based on message that severe nuclear accident is impossible to happen.
- There is **question of reality of scenarios** upon which the responses are based, **limited exercises**.
- **Trans boundary EP&R provisions are few and hampered by inadequate procedures and/or languages skills of responsible personnel.**

# Main findings in EP&R WG -5/1

- Evaluation of national EP&R provisions
  - EP provisions remains outdated, inadequate, delusional and not real in many cases
  - Evacuation (large scale) not possible in many cases
  - Lack of efficient radiation monitoring devices
  - Lack of local authorities (and local population) awareness and training
  - Inadequate medical support
- Assessment of Plans, including involvement of Citizens
  - Lessons of Emergency exercises & drills are limitedly taken into account
  - Sub-optimal management of response: lack of radiological expertise among first responders, late transfer of data or lack of it, operational rooms for command,...
  - Poor maintenance of Emergency plans
  - No independent review or evaluation of plans
  - CS not involved in planning
- Emergency information
  - Total lack of communication between different concerned administration
  - On – site emergency is remit of operator and not shared with people
  - No use of new media for information dissemination
  - Communication and notification lines for responsible are not entirely working.

# Main findings in EP&R WG -5/2

- Trans-boundary dimension of nuclear accidents
  - EP&R is dealt at national level, with little trans-boundary cooperation
  - Heterogeneity of existing EP&R provisions is a real threat
  - Difficulty to bring together all the players across borders in order to discuss EP&R
- Post-accident consequences
  - Nuclear accidents have (very) Long Term complex consequences that need to be addressed
  - Post-accident situations necessitates complex recovery processes involving the population
  - Only addressed by very few countries today (like France), with minor scenario – difficulties of local implementation, especially in case of trans boundary situation
  - Need for clarification of food standards and their harmonisation
- On-site emergency management
  - Questions on the availability of human resources
  - Protection of workers which was evident during Fukushima accident
  - Availability of technical tools

# Main findings in EP&R WG -5/3

## ■ Nuclear liability

- Abyssal gaps between accident costs and existing insurance provisions
- Need for investigations on actual costs of accidents based on recent Fukushima experience (compensation)
- Public liability replaces private liability?

# Main recommendations from EP&R report -6

- **Need for detailed CSO evaluation** of EP&R provisions in each country
- **Need for CSO and public engagement** in planning and management at local, national and trans-boundary levels
- **Harmonise emergency provisions** (emergency zoning on evacuation, sheltering, iodine distribution)
- Need for developing a **legal framework involving CSOs at each level** of preparation and decision in the spirit of the Aarhus Convention
- **Develop a EU wide policy on EP&R** – EC should take the lead (like for updating of nuclear safety after Stress Tests)
- **Need for appropriate resources** for CSO and local communities to be involved
- **Need for quality control procedures** (QA/QC) including feed-back of new events, exercises & drills (learning process)
- **Reconsider evacuation process** in the case of large urban area
- **Integrate rescue and radiation experts** in civil protection staff
- **Train medical staff**
- **Finance research activities** in this area
- **Develop Medium - Long Term post-accident policies**
- **Create a CS-EP cooperation** to investigate liabilities for NPPs accident

## Possible follow-up: 2015-2017

- **Systematic investigation of EP&R provisions** at different national and transboundary levels based on modified approach used for the EP&R report.
- **Influence of improvements made in new legal EU framework** (BSS, Safety directive, food standards) requirements would be analysed
- **Round tables:**
  - Aarhus Convention & Nuclear round tables linking EU associations (HERCA, WENRA, ENSREG), EUP, EC and NTW,
  - Cross border RT on trans-boundary cooperation/harmonisation,
  - Nationally with all relevant stakeholders - Interactions between regulators, civil protection authorities, local municipalities, operators, NGOs, civil society and other interested organisations and citizens.
- **Possible cooperation between EU research projects** (H2020/Eauratom) **and associations**

[ Thank you for your attention ! ]



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