



Workshop on the Implementation of the  
**HERCA-WENRA Approach**

with Civil Protection Competent Authorities

13-15 June 2016 :: Grand Hotel Toplice :: Bled :: Slovenia

# Summary Report

Workshop rapporteurs: Adeline Clos and Patrick Majerus

## Introduction

HERCA and WENRA held their Workshop on the Implementation of the HERCA-WENRA Approach (HWA) with European Radiation Protection, Nuclear Safety and Civil Protection Competent Authorities from 13 to 15 June 2016 in Bled, Slovenia.

78 high-level representatives from 23 countries and from international organisations, such as the International Atomic Energy Agency (IAEA), the European Commission (EC) and the Nuclear Energy Agency (OECD/NEA) attended the workshop.

The aim of the workshop was to discuss with the key actors involved in nuclear emergency planning and response operational and pragmatic means to implement the HWA and therewith contribute to an enhanced protection of the population, particularly in a cross-border context.

## Overview over the Workshop

An introductory panel, composed of M. A. Stritar, Director General of the Slovenian Nuclear Safety Administration, K. Petrova, vice Chair of HERCA, M. H. Wanner, Chairman of WENRA, M. P. Majerus, Head of the Radiation Protection Department of Luxembourg and M. B. Dervodel, Deputy director general, Administration for Civil Protection and Disaster Relief, Slovenia, opened the workshop. In their introductory remarks, the speakers:

- highlighted the challenge of responding to a nuclear accident with cross border impact, noting that 11 NPP's in Europe are closer than 20 km to a neighbour state,
- confirmed the need for a common understanding, mutual approach and coordination at multilateral level,
- stressed the importance to continuously improve nuclear safety as a whole including the prevention of nuclear accidents, as well as on site and off site emergency preparedness,
- illustrated the cooperation at national level between the relevant authorities and the importance of more cooperation between the states, and
- recalled the European council conclusions on Off-site nuclear emergency preparedness and response, adopted by the Council at its 3439th meeting held on 15 December 2015.

The HWA was presented through a series of key-note presentations, reminding notably that:

- The HWA aims a better coordination of protective actions taken during a nuclear emergency, so that populations living on both sides of a national border would feel to be protected in the same way.
- In the early phase of an accident, the proposed HWA foresees rapid information exchange through existing bilateral and international arrangements. If the response is thought consistent, the neighbouring countries are encouraged to recommend to their governments to follow these recommendations, i.e. adopt the principle “We do the same as the accident country”.
- The initial stage of a severe accident might require rapid decisions for protective actions while very little is known about the situation and reliable dose calculations are not yet available. Recommendations of protective actions need to be formulated rapidly, leaving very limited time for cross border coordination during the first phase of the accident. Therefore, the HWA contains pre-defined simplified schemes for protective actions that may be applied in these cases, as improbable they might be. It also defines the level of preparation of protective actions that should be achieved in Europe.
- The results that have already been made were acknowledged, particularly in those areas where NPPs are close to national borders.

The meeting then split in 4 parallel topical sessions to allow open discussions on the following subjects:

- Preparedness arrangements;
- Bilateral or multilateral arrangements;
- Response arrangements for the early phase; and
- Response in the case of great uncertainty and preparedness in Europe.

In each session two rapporteurs summarized the main discussion points and the opinions expressed. These rapporteur’s reports are joined to the annexe.

The final plenary session gave also the possibility for statements from International Organisations.

- M. Y. Dussart from DG ECHO Civil Protection Policy welcomed the effort done by HERCA-WENRA. He however questioned the reasons why no better harmonization has been achieved before. He also presented the EU Civil Protection Mechanism for coordinated response to disasters inside or outside de EU. He suggested areas for cooperation including raising awareness of the HWA at the EU CP DG Meeting and/or the EUCP Committee.
- M. M. Kuske from DG Energy, Directorate D “Nuclear Energy, safety, ITER” recalled the recent directives in radiation protection and nuclear safety, which include relevant provisions with regard to EP&R. He welcomed the high ambition of HERCA and WENRA and recalled that the European Council expressed support of the HWA.
- Ms. E. Buglova, Head of the IAEA Incident and Emergency Center, presented the roles of the IAEA in response, the encompass notification and official exchange, public information, the assessment of consequences and prognosis or potential progression, coordination of assistance on request and the coordination of the inter-agency response. For preparedness proposes, she referred notably to safety standards, capacity building mechanisms and peer reviews. She finally welcomed the good cooperation with the HERCA-WENRA working group on emergencies in the mutual benefit of both parties.

- Ms. O. Guzmán López-Ocón, Division of Radiological Protection and Radioactive Waste Management of the OECD Nuclear Energy Agency (NEA), gave an overview on the present NEA activities and its active involvement in efforts to improve EP&R among its member states. She stressed the importance of close cooperation of all relevant authorities both at national and international levels. NEA is prepared to actively contribute to the implementation of the HWA with its experience, in sharing information, establishing trust, stakeholder's involvement and the organisation of international exercises and workshops.
- The chairman of ENSREG, P-F Chevet, recalled that a severe accident can never be completely ruled out in Europe and that the necessary provisions for dealing with and managing a radiological emergency situation must be planned, tested and regularly revised. Therefore ENSREG has endorsed the HWA and the 2013 and 2015 ENSREG conference programmes included off-site emergency preparedness.

## Conclusions

Participants agreed to the following main conclusions from the workshop:

1. During the workshop participants had fruitful exchanges on a better understanding of the HWA, its recommendation and possible ways of implementation.
2. Participants agreed that trust between the relevant competent authorities and other key stakeholders is of fundamental importance. Trust needs to be built at preparation stage and maintained.
3. Participants identified issues for further work on food chain protection, the extension of protective actions at distances beyond the emergency planning zones and the use of non-radiological criteria for deciding on protective actions.
4. Alignment of planning zones and the alignment of protective actions during the response have proven to be difficult, even during exercises, due to political, historical, local and financial issues.
5. Participants identified some areas with NPPs near national borders in Europe where in-depth work for implementing HWA should be prioritized, allowing for experience feedback to be used by other sites.
6. Authorities competent in radiation protection, nuclear safety and civil protection need to continue to work on the implementation of the HWA while taking into account existing international mechanisms, standards etc.
7. Participants underlined the need for setting up an effective and coordinated cooperation among all relevant authorities involved in disaster management, with the support of EC DG ECHO.

## Annexe – Rapporteurs Reports form the topical sessions

### *Preparedness arrangements*

- Adding protective actions on food restriction to HWA (not reopening the HWA) in order to make the HWA more comprehensive and to cover larger areas. This will involve countries that currently consider not to be concerned by recommendations of the HWA.
- Applying the HERCA [“Practical proposals for further harmonisation of the reactions in European countries to any distant nuclear or radiological emergency”](#) for accidents in Europe.
- Proposals for exercises include:
  - Carry on bilateral and regional exercises and observation of national exercises.
  - Use existing exercises to test implementation of the approach (example IAEA, NEA, EC)
  - Organise dedicated table top exercise to practice implementation of HWA
  - Involve civil protection
  - Identify obstacles and practice « plan B » if alignment does not happen, including communication to the public
- Improving trust: Make country fact sheets available to civil protection authorities and the IAEA EPRIMS data available to HERCA and WENRA Member States.
- Planning zones in preparation phase :
  - Harmonization of planning zones in the preparedness phase is preferred but is not absolutely essential for HWA implementation.
  - Harmonization of planning zones is relevant mostly for States with NPPs close to borders
  - Planning zones should be adapted to local conditions (e.g. geography)

### *Bilateral or multilateral arrangements*

- Building trust through the following steps/topics to be included in bilateral arrangements; mutual understanding, bilateral alerting, clear responsibilities, data exchange (push!) and living process through regular joint meetings, trainings, exercises, forum...
- For civil protection (and decision-makers), legal framework is a key point to start to develop procedures and response routines. This legal framework should however leave sufficient flexibility to be able to adjust the actual response.
- Development of fact sheets “what is safe?”. Do not forget the “R” of ALARA during emergency situations => in such cases, exposure could be higher than in daily work. RP/NS should be ready to communicate such “increase” of exposure putting it in perspective with the emergency conditions.
- Development of dilemmas to prepare the discussion with decision-makers.
- Importance to make an appropriate balance of data/figures or products according to identified counterparts and associated responsibilities to avoid increase of misunderstanding or misuse (“too much information kill the information”) => data/“final products” exchange mechanisms should be adjusted accordingly as living process.
- Importance of strong commitment & willingness at both sides to remain the arrangements alive (<> paper arrangements)

- Rapid and efficient bilateral alerting of local authorities directly from the NPP (to be explicitly & formally included in the bilateral arrangements) or through implemented effective mechanisms (in order to cope with legal/sovereignty issues)

### *Response arrangements for the early phase*

- Competence: Heterogeneous approach for information and communication arrangements. Most countries have no specific bilateral agreement between decision makers of neighbouring countries for alert and information exchange in case of a nuclear emergency. However, bilateral agreements between nuclear regulators exist in most countries.
- Alerting and notification: Except for a few cases, there is no dedicated information channels between neighbouring countries. Direct alerting between neighbouring countries is conducted through the international established channels, i.e. ECURIE, USIE. Normal communication channels, such as phone, e-mail, fax etc. are used for emergency communication
- Communication and information: Few countries share access to specific websites with their neighbours/bilateral partners but language is a big issue. No case of exchange of log files. The use of liaison officers is not widely spread but has proven to be very useful in cross-border emergencies
- In the early phase, synchronisation of basic communication is of vital importance to reduce uncertainty for the public, although common press releases are not always possible
- Assessments: In case of lack of information, countries use simplified evaluation tools similar to JEFs. Risk estimates are not often shared between accident country and neighbouring country. No direct access to plant-data. Direct exchange of data regarding environmental monitoring exists between some countries. In neighbouring countries, consequence assessment is mostly calculated independently using assumptions on release categories.
- Harmonisation of emergency response: Although the Approach seems to be accepted by most nuclear regulators, alignment of planning zones has proven to be difficult, even during exercises, due to political, historical and financial issues. To implement the “We do the same as accident country” principle, trust is of crucial importance but requires a certain amount of flexibility in the national system.

Political issues: Political considerations are a potential issue in applying the principles of the HWA. Some countries are not against alignment, but are sensitive to maintain full decision-making sovereignty.

Conclusions of this topical session:

- Strengthen bilateral cooperation between countries to build trust and to establish rapid and reliable channels of information, communication and alerts
- Establishment of liaison officers can contribute to establishing a direct connection to the accident country
- Synchronisation of content and timing of press releases is of vital importance to reduce uncertainty for the public
- Involve political decision makers in an early phase of implementation, for example through participation in exercises

*Response in the case of great uncertainty and preparedness in Europe*

Review of the HWA

- Proposed changes of HWA: Where it says “wind direction”, read “meteorological conditions”; category “unknown” for “wind direction” might need to be changed;
- Expert should be designated in advance to perform the plausibility check; “You can trust, but you must control!”
- Emphasis on radiological risk at generator side should be balanced by considerations on “receiver” side: siting and area characteristics (rural or urban), affected populations

Evacuation <-> Sheltering

- Up to 5 km sheltering is preferred over evacuation if predictions show evacuation will occur under plume;
- An accident similar to Fukushima would generate considerable public concern all over Europe; protective actions should also consider human behaviour and socio-psychological aspects;
- Need of further studies to conclude on the pertinence of evacuation, in particular under the plume: time frame, where to evacuate people, weather changes, release characteristics,...

General preparedness

- Avoid different protective actions along borders and address any exception to this rule in a targeted and transparent communication with the concerned population;
- Clarify the HERCA WENRA extended approach (e.g. HWA concerning ITB up to 100 km).

Trust

- Trust should be established at all levels: local experts, authorities, experts, politicians, media and population;
- Promote trust “proactively” between these persons and groups. Earn trustworthiness in time of peace to harvest trust when incident/accident occurs