#### Feedback from the Aarhus & Nuclear roundtable :

"Aarhus Convention implementation in the context of a nuclear accident with long lasting consequences – New challenges after Fukushima"
(Luxemburg, 15th-16th February 2012)

> NERIS-TP WP3 workshop Bordeaux, 13<sup>th</sup> September 2013 Stéphane Baudé, Mutadis

#### The Aarhus Convention & Nuclear (ACN) initiative & the Luxemburg roundtable

- Convention signed in 1998 by the EU and its member States.
- 3 pillars : public access to information, public participation in decision making and access to justice in environmental matters.
- Since Sept. 2009, the EC and the ANCCLI have opened a European space for dialogue on the practical implementation of the AC in the nuclear field, in partnership with the EC and ENEF
   A National initiatives + European roundtables
- 3<sup>rd</sup> European roundtable on the theme of emergency and postemergency (Luxemburg, 15<sup>th</sup>-16<sup>th</sup> February)
  - Article 5.1.c of AC : "In the event of any imminent threat to human health or the environment [...], all information which could enable the public to take measures to prevent or mitigate harm arising from the threat and is held by a public authority is disseminated immediately and without delay to members of the public who may be affected."

# 1. Information and public participation issue in the emergency phase

#### New challenges in the emergency phase

- Fukushima showed that the emergency phase (until end of discharge) can be of long duration, which entails issues which were not considered for the emergency phase :
  - long time confining
  - highly populated urban areas (evacuating Tokyo was considered)
  - o maintaining supplies during a long-lasting emergency phase
  - o issue for enterprises : continuation of work ?
  - o animals management (cattle)
- From the emergency phase, a wide range of professional and non-professional actors will have to make choices and need reliable information quickly
  - Should I leave (evacuation limit 20 mSv/y. not trusted by all)?
  - How to manage my firm / farm / production unit ?

## A spontaneous and non-centralised production of information

• A variety of sources of information develops quickly :

- National and regional authorities (or federal / State level)
- Universities & independent experts
- Independent laboratories (from trade unions, NGOs, commercial initiatives, municipalities ...)
- Foreign nuclear safety and RP authorities
- o Professionals
- Civil society
- Comparing multiple sources of information is important for citizens to assess reliability of information (distrust / official sources)
  - Need of a plurality of information sources
  - Plurality also needed as regards information analysis
- Internet allows different non-institutional networks of information to develop spontaneously and quickly, with high efficiency

# A key stake: sharing, crossing and feeding back multiple sources of information

- Co-existence and complementarity of
  - Confirmed official information produced with professional standards
  - Spontaneous and quick information production by a variety of noninstitutional experts and non-professional actors
- A key stake: availability of tools to easily share, compile, sort and feed information back in a meaningful and reliable way
  - o for citizen networks
  - o for experts
- 2 examples: information monitoring and feedback tools for experts (e.g. EnerWebWatch), web 2.0 & crowd sourcing tools to compile measurements from different sources (including citizens)
- While no central actor is trusted by all, the issue at stake is to make available ready and easy-to-use tools to various actors
- Issue of reliability of measures of independent laboratories: need for tools for training, cross-comparison, exchanges on methods

### Lessons for emergency preparation as regards access to information

- For official experts and authorities, need to be prepared to cope with the multiplication of networks in a productive way
  - Being prepared to put together official information and information from other sources and feed this back to people
  - Ensuring that user-friendly tools for autonomous information sharing and compiling are available to a diversity of actors including civil society
  - Being prepared to take maximum benefit from the multiplication of information producers
  - Ensuring that tools for supporting independent laboratories are available (training & networking) – not a certification issue

# 2. Information and public participation issue in the post-emergency phase

#### Challenges in the post-emergency phase

- New issues from Fukushima context (both rural and urban areas concerned)
  - New issues for post-emergency: urban areas
  - Important number of people affected who needs information
  - Issue of maintaining supplies (including electricity) for both people and enterprises
  - Spontaneous measurements by population quickly developed
  - Wide availability of communication tools, notably Internet
- Issues comparable to Chernobyl :
  - A key question : is my environment or food contaminated ?
  - access to measurement capacities (for a high number of people)
  - information sharing regarding radiation monitoring results (both official and citizen control)
- A key issue for post-emergency preparedness: how can all concerned actors (including local ones) prepare themselves?

# Assessing contamination in environment & food

- Lack of trust vis-à-vis the official monitoring system (contaminated fish, beef & rice in the commercial system)
- Quick development of citizen monitoring capacities for environment and food
- Information on food contamination on numerous webpages, blogs
- Official recognition of citizen contribution in environment monitoring: "From now on, we must offer equipment and ask people to look well beyond Fukushima to find hot spots" (MEXT). Questions to be tackled in the preparation phase:
  - $\circ$   $\rightarrow$  issue of availability of maesurement equipment
  - $\rightarrow$  issue of data sharing (as in emergency phase)
  - → issue of compilation/comparison of citizen-produced information and official monitoring data

#### Long-term issues (Norwegian and Belarusian cases)

- Keeping the issue on the agenda on a long period of time and keeping local actors awareness and engagement
- Ensuring continuity of necessary competence at all appropriate levels (including local level), and keeping plurality of expertise sources
- Ensuring continuity of effective access to information on food and environment contamination (including for people who came after the accident)
- Developing and keeping up practical radiation protection culture
- Engagement with families in case of detection of higher exposure or body contamination to identify and find concrete ways to reduce the source of exposure

#### Issues for post-emergency preparation

- A key issue for radiation protection organisations : how to facilitate preparation of all actors to cope with the consequences of a nuclear accident while this is not on top of their agenda?
  - Importance of local actors awareness and engagement in post- $\bigcirc$ emergency preparation
  - Inclusion into a multi-risk perspective (e.g. example of public-private 0 cooperation in Finland on the issue of securing supplies)
  - Simulation and awareness-rising tools (e.g. OPAL tool in France)
  - Multi-stakeholder dialogue tools (EURANOS methodological Ο framework)
- Need for technical tools facilitating information sharing and cooperation between all concerned actors at all levels
  - Issue of articulation between different sources of expertise and information (including citizens) as relevant as in emergency phase
- Need for flexible procedures allowing evolution and negotiation of roles and responsibilities through time 12

#### Conclusion

- Complexity of a nuclear event situation grows very quickly including in the emergency phase
- Need for affected people to access information they need to take their decisions (different / information needed by decision makers)
- Parallel development of information from 3 types of sources: official sources, other experts and citizens
  - Need for tools to share information from these 3 sources, to articulate them and to feed them back meaningfully, which will involve different actors & networks
- Need for tools of technical mediation at the local/regional level for compiling and making available information about local situation
- PE response (especially in the long term) is the result of the actions of all concerned actors. Public participation issue is not limited to participation to public decisions, it is rather a question of processes and methods for all actors to address complexity, assess the situation and build strategies together.