Implementation of an awareness tool to post-accidental issues for local stakeholders
The involvement of local stakeholders in accident management becomes more and more important during the post-accidental phase:

- Protection of population
- Rural and urban management
- Communication
- ...

Growing willingness expressed by local stakeholders to improve, in preparedness, their knowledge about post-accidental consequences of a nuclear accident.
ANCCLI and IRSN launched a common action (2010-2013) with the underlying objectives:

- To develop an awareness tool
- To train local stakeholders about post-accidental consequences (via Local Liaison Committees – CLI)
- To identify local issues
- For IRSN, to collect local information that characterizes environment close to nuclear site
OPAL (awareness tool)

- **Architecture:** Web-mapping tool
  - Accident scenarios pre-calculated with existing tools used at IRSN Emergency Response Center and stored in a data base
  - Not a simulation tool

- **Scope of OPAL:**
  - Middle-severity accident scenarios
  - Post-accidental phase
  - Education and training purpose
  - Not relevant for expertise and emergency response management
Input: nuclear site, accident scenario, season, wind speed and direction and atmospheric stability

Map: three contaminated territories management zones
- Visualization of 2 studies -> influence of the input parameters on the post-accidental consequences

Output: “post-accidental layers” defined on the CODIRPA recommendations – three contaminated territories management zones
- GIS-format compatible with local stakeholders cartographic tools
CODIRPA recommandations

**Relocation Perimeter**
- Highest external exposure
- Population have to be relocated

**Population Protection Zone**
- No population relocation but require measures to reduce resident exposure
- Consumption and sale of foodstuff produced in the ZPP would be prohibited, regardless of their level of contamination

**Territorial reinforced Surveillance Zone**
- European Community’s Maximum Permissible Levels (MPL) may be exceeded
- Restrictions on all forms of sale (mandatory) and consumption (recommended) of farm products
- Implementation of testing systems and sampling strategy to check the respect of MPL before commercialization
Implementation on 4 pilot Local Liaison Committees

- CLI of Marcoule (South of France) and Saclay (Paris Region) started the experimentation:
  - Identification and mobilisation of the local stakeholders
  - Identification of the areas possibly affected by atmospheric deposition following various accident scenarios (severity of the accident, weather condition and wind direction) with OPAL
  - Determination of local issues by interviews with involved mayors (Marcoule)
  - Cartographic representation for data mining (ongoing):
    - drinking water, vineyards, sensitive establishment, …
  - Integration of results in “Local Prevention Plan”

- Next experimentations will start at the end of 2012
Implementation on 4 pilot Local Liaison Committees - Marcoule

Overlaying between the layer of « Territorial reinforced Surveillance Zone » and land occupancy

Classification of local issues

- Zones urbaines de forte densité
- Zones urbaines de moyenne densité
- Zones urbaines de faible densité

Occupation du sol

- Zones agricoles
- Jardins
- Terrains
- Prés
- Verger
- Vignes
- Bois
- Landes
- Carrières
- Eaux
- Terrains à bâtir
- Chemin de fer
- Sol
- Zones d’agrément

Zones d’intérêt particulier

- Zones ADC
- Zones naturelles
- Nature 2000
- ZNIEFF
Implementation on 4 pilot Local Liaison Committees - Saclay

Identification of « public-access building » around the nuclear installations of Saclay

Overlaying between the layer of « Territorial reinforced Surveillance Zone” and land occupancy
Conclusion

- OPAL is the result of a collaboration between ANCCLI (local stakeholders) and IRSN

- Scope of OPAL:
  - Middle-severity accident scenarios
  - Post-accidental phase
  - Education and training purpose
  - Not relevant for expertise and emergency response management
  - Not a simulation tool

- The aim of this project is, in preparedness, to help local stakeholders with the management of post-accidental situations by:
  - Local stakeholders mobilisation
  - Identifying local issues for which protection/recovery actions would be necessary (agricultural production located in ZPP and ZST)
  - Increasing the awareness of local stakeholders and the public
  - Allowing a better involvement in accident management
Thank you for your attention