IRSN
INSTITUT
DE RADIOPROTECTION
ET DE SÛRETÉ NUCLÉAIRE

Faire avancer la sûreté nucléaire

ANCCLI
Association Nationale des Comités
et Commissions Locales d'Information

Implementation of an awareness tool to post-accidental issues for local stakeholders

OPAL

Claire GAUVIN

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WHY ?

- From the post-accidental phase on, the involvement of local stakeholders in accident management becomes more and more important
  - 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 nuclear accident**

HOW ?

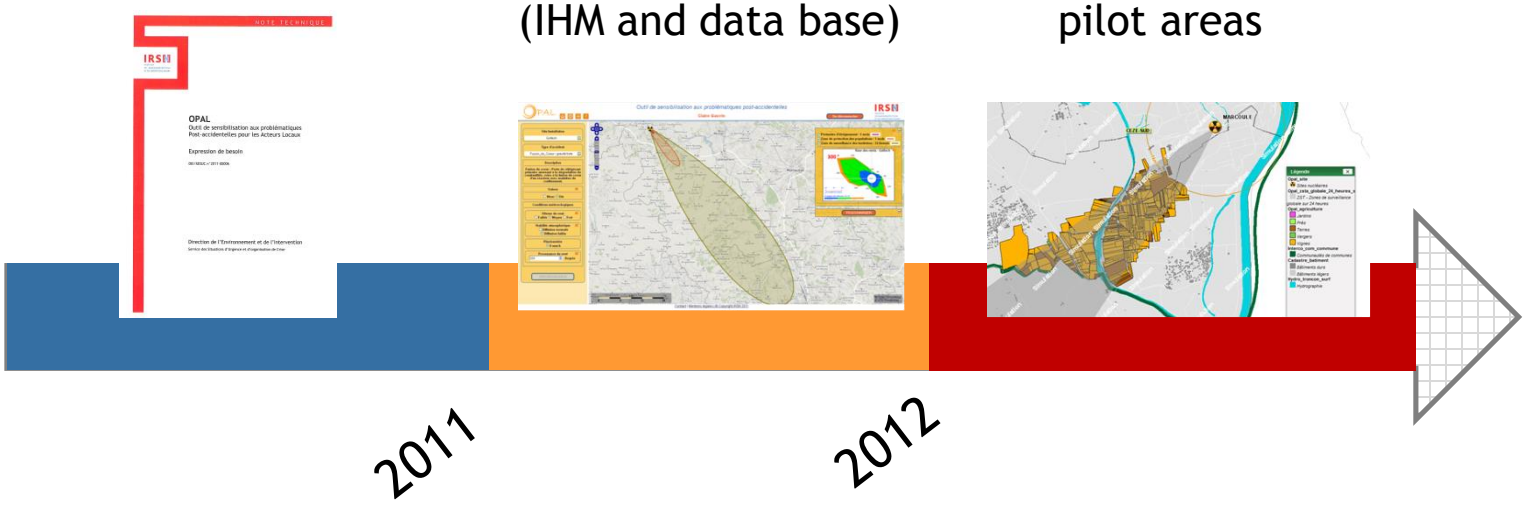
❑ Launch a common action under the partnership ANCCLI/IRSN (2010-2013) with the underlying objectives :

- ➢ To develop an awareness tool
- ➢ To teach 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

Expression of requirements

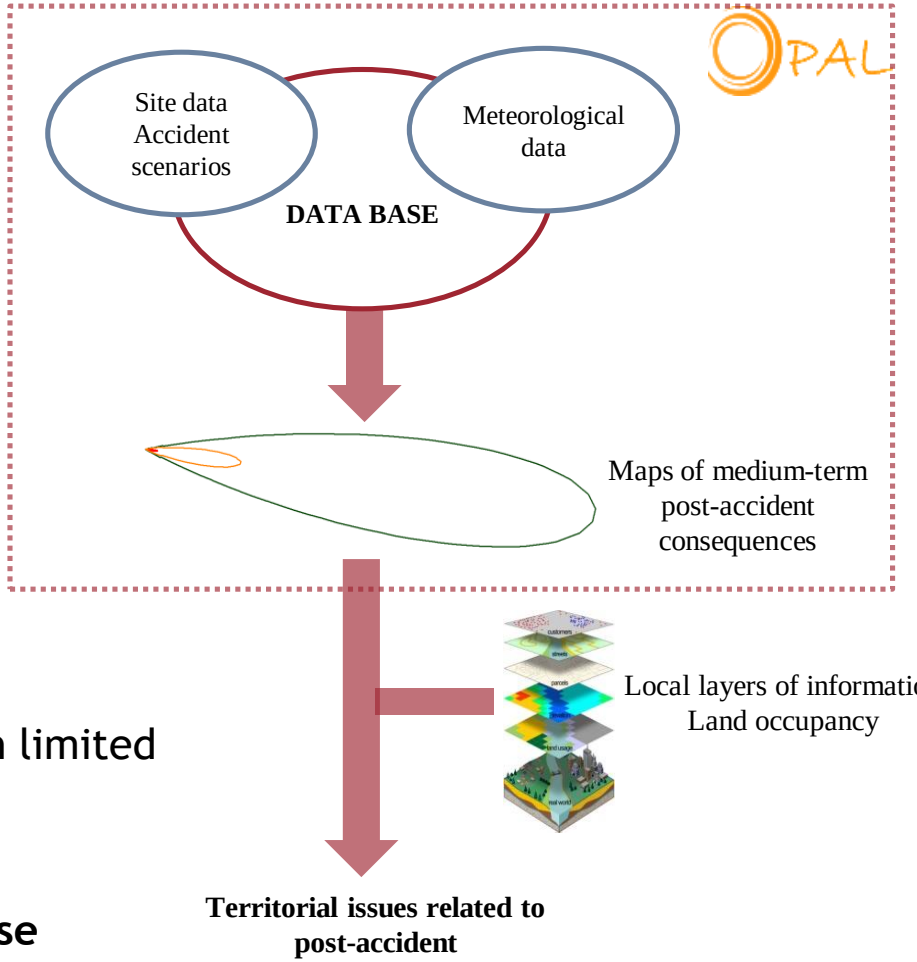
Tool development (IHM and data base)

Implementation on pilot areas

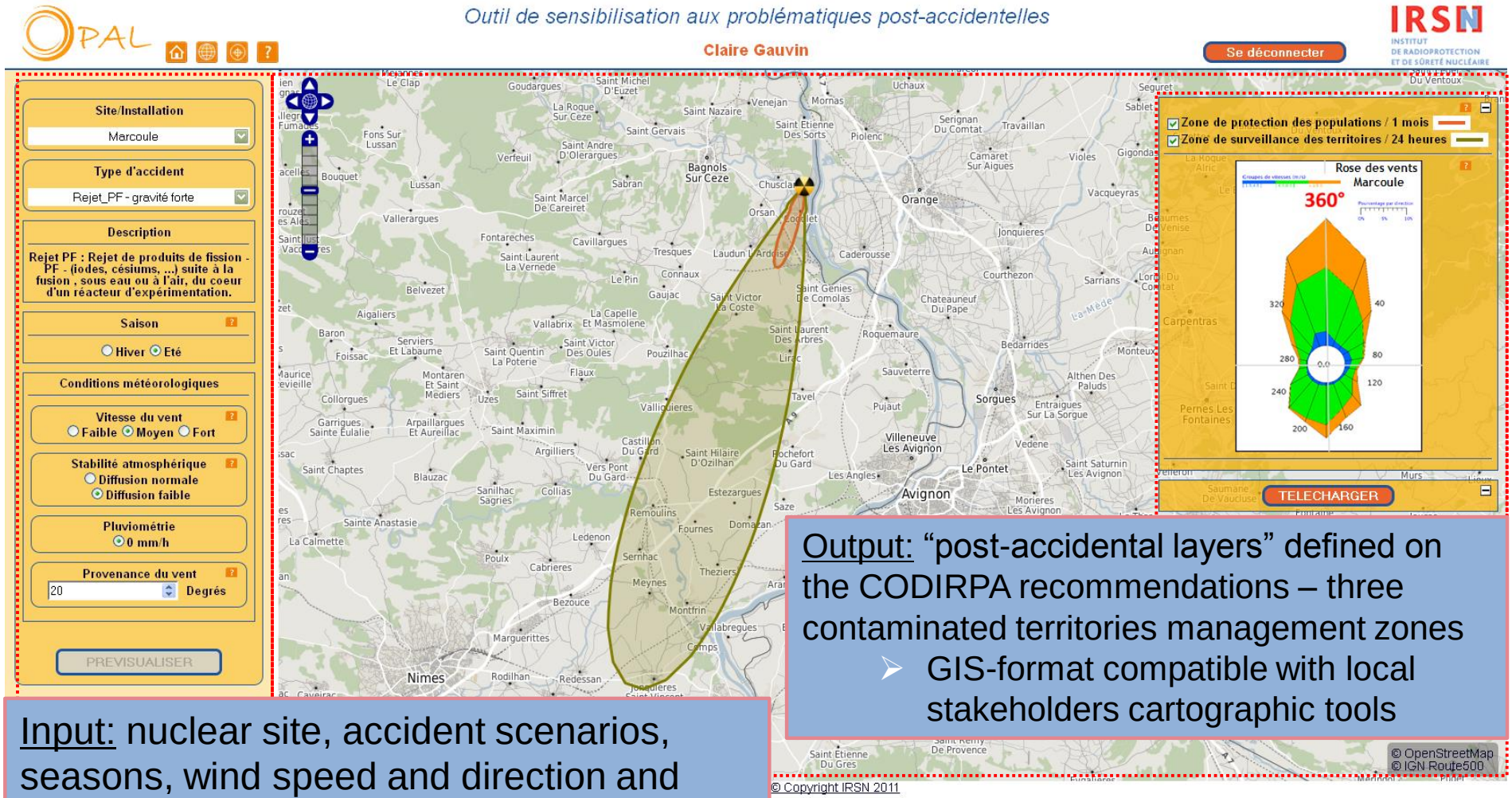


OPAL (awareness tool)

- 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:
  - Severe accident scenarios with limited consequences
  - Post-accidental phase
  - **Education and training purpose**
  - **Not relevant for expertise and emergency response management**



Output: "post-accidental layers" defined on the CODIRPA recommendations – three contaminated territories management zones

- GIS-format compatible with local stakeholders cartographic tools

Input: nuclear site, accident scenarios, seasons, wind speed and direction and atmospheric stability

CODIRPA recommendations

Relocation Perimeter

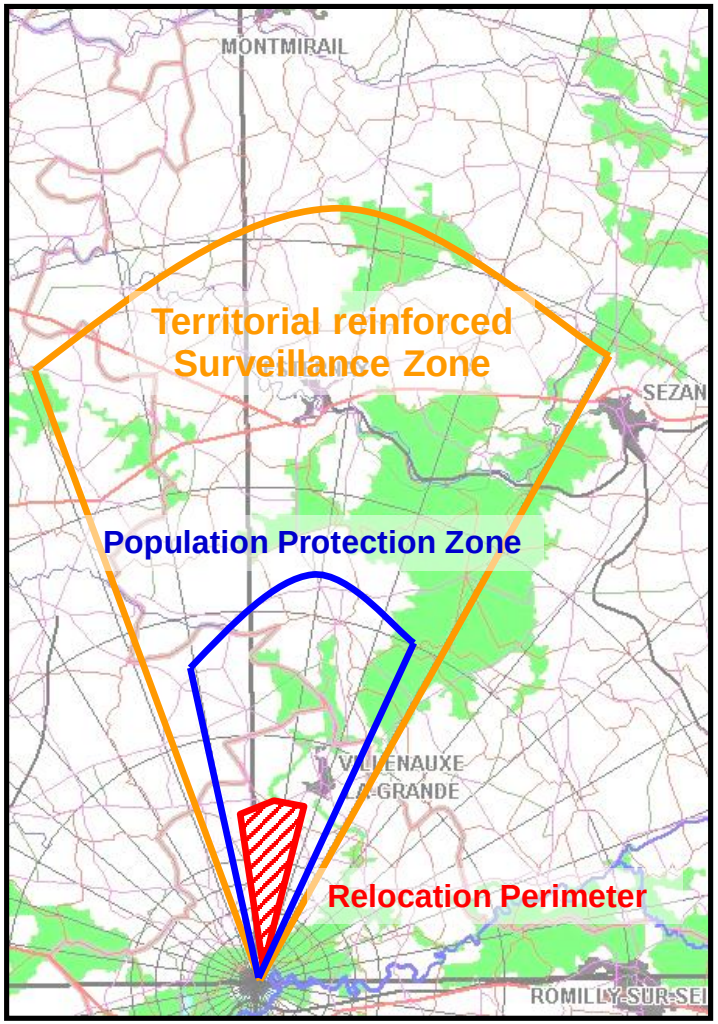
- Highest external exposure
- Population have to be relocated

Population Protection Zone

- No population relocation but require measures to reduce resident exposure
- consumption or sale of foodstuff produced in the ZPP would be prohibited, regardless of their level of contamination

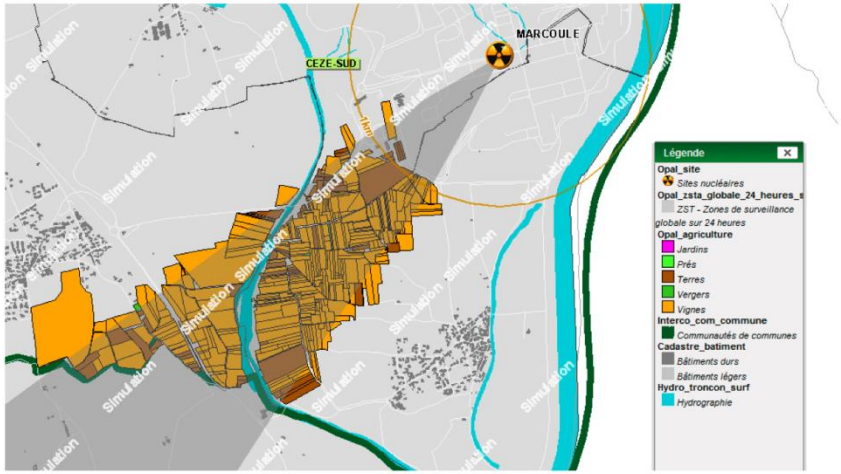
Territorial reinforced Surveillance Zone

- 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) started the experimentation at the beginning of 2012:
  - Identification of the districts possibly affected by atmospheric deposition following various accident scenarios (gravity, weather condition and wind direction) with OPAL *(ongoing)*
  - Determination of local issues by interviews with involved mayors *(ongoing)*
  - Cartographic representation for data mining *(ongoing)*:
    - drinking water, vineyards, sensitive establishment , …
  - Integration of results in “Local Prevention Plan”



Conclusion

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

- Scope of OPAL:
  - Severe accident scenarios with limited consequences
  - 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, <u>in preparedness</u>, to help local stakeholders with the management of post-accidental situations by:
  - 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