

# IUR Task Group on Radioecological sensitivity: an operational tool in federating radioecological knowledge

Leaders:

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# Background

- Radioecological sensitivity is a concept used to represent the intensity of a territory's reaction to accidental or chronic pollution.
- For this purpose, a scale of radioecological sensitivity of territories would be useful in standardising representation of the radiological state of the environment following accidental pollution.
- Since 2003 IRSN has been exploring the possibilities of using the radioecological sensitivity concept under the SENSIB project supported jointly by IRSN and ADEME.

# The IUR Task Group

“Radioecological sensitivity: an operational tool in federating radioecological knowledge”

- January 2007:
  - IRSN (France) and the UCSC (Italy) proposed that an international working group be set up to expand this dimension of thought
  - A preliminary core group of 8 members from Austria, Belgium, France, Italy, and Switzerland was set up.
- June 2007:
  - with the help of Francois Brechignac, at that time General secretary of IUR (now IUR President), a collaborative site on the IUR website has been developed for the task group:  
<http://www.iur-uir.org/en/task-groups/sensib>
    - Bibliographic documents
    - Forum
    - Draft documents
      - It was proposed that the task group produces regularly a short document with idea and works existing in this field.

# Membership list

## June 2008

- **MERCAT Catherine** (chair)
- **CARINI Franca** (co-chair)
- **DE CORT Marc**
- **DEMOUGEOT-RENARD Hélène**
- **DUFFA Céline**
- **FROIDEVAUX Pascal**
- **HOWARD Brenda**
- **LOUVAT Didier**
- **PROEHL Gerhard**
- **ROUSSEL-DEBET Sylvie**
- **THIRY Yves**
- **TURCANU Catrinel**
- **IRSN (France)**
- **UCSC (Italy)**
- **EC-DG JRC-Ispra**
- **FSS International (Switzerland)**
- **IRSN (France)**
- **IRA (Switzerland)**
- **CEH (United Kingdom)**
- **IAEA**
- **GSF (Germany)**
- **IRSN (France)**
- **SCK/CEN-Mol (Belgium)**
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# The objective of the Task Group is:

- the sharing of progress in the mapping of radioecological sensitivity (anthropogenic and environmental) of territories
- the building of operational and decisional tools based upon this concept.
- Main areas suggested for the work:
  - how can we simplify representing the effects of radioactive contamination on a territory?
  - Can composite indicators be a useful tool for defining radioecological sensitivity?
  - which are the radioecological criteria shared by stakeholders?
    - criteria/indicators used by decision makers as a basis for decision
    - criteria of significance for people living in the territory of concern
  - how can spatial data be acquired in real time on the status of the main components of environments vulnerable to pollution ?
    - crop recognition, development stage, location of breeding activities
- These various topics should be expanded in line with the involvement of international partners interested in joining the working group.

- The task group was managed by Catherine Mercat-Rommens till January 2009.
- Various documents produced by IRSN under the SENSIB and PRIME project were posted on the website.
- The SENSIB project leader at IRSN, France is now Vanessa Parache.

# The UCSC interest in radioecological sensitivity concerns:

- The sensitivity/vulnerability of the society to the risks of food contamination during an accident. ↻
  - and the research of methods to reduce the system vulnerability.
- The sensitivity of agricultural crops at short term after deposition
  - and the research of methods (satellite observations, aerial photographs?) to know in a reasonable time the kind of crops in the affected areas, and their growing stage.

# Social vulnerability

- Social vulnerability is a measure of both the sensitivity of a population to hazards and its ability to respond to and recover from the impacts of hazards (Cutter and Finch 2008).
- Activities and measures taken in advance intended to enhance the knowledge useful to develop adaptive strategies, do not lower the probability that a disaster occurs, but increase disaster resilience and tremendously reduces the damage (Keim, 2008).