

Public demand for environmental transparency: challenge of providing information on radioactivity in the environment

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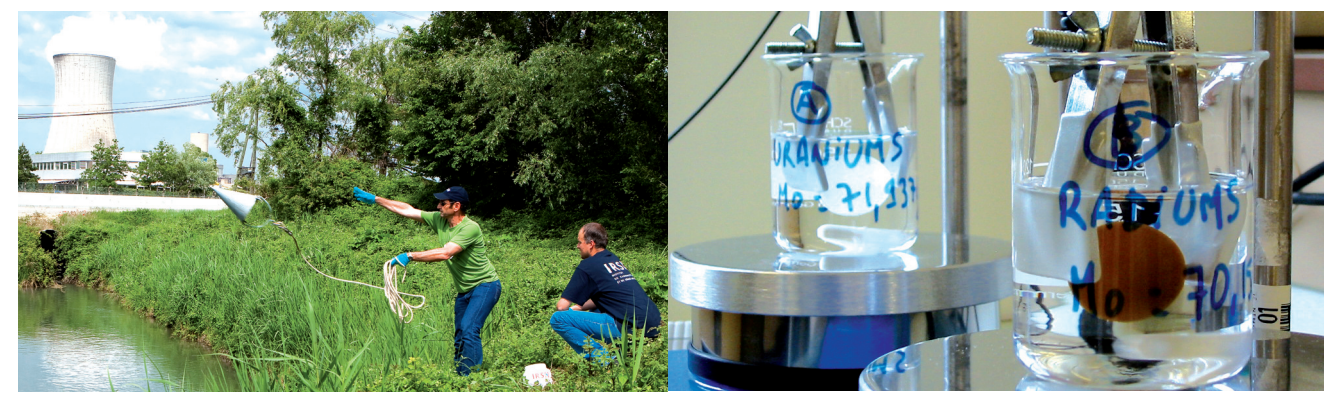
The French Nuclear Safety Authority (ASN) fosters the implementation of “the public’s right to reliable and accessible information on nuclear security” (TSN Act). Concerning environmental transparency, the launch of www.mesure-radioactivite.fr in 2010 is one decisive step forward. ASN ensures that the accessibility of information is continuously improved. Providing the public with the assistance of an index of environmental radioactivity is currently being experimented.

The radiological monitoring of the environment in France

In application of the Euratom Treaty (art. 35), the French monitoring of the environmental radioactivity is carried out by:

- the licensees around the nuclear facilities in accordance with the terms of their discharge licences;
- the Institute for Radiological Protection and Nuclear Safety (IRSN) through:
 - remote-monitoring networks (air and water) providing real-time results on the national territory,
 - measurement of 25,000 environmental samples each year.
- Independent laboratories.

A national network (RNM) was created in 2003 by the Public Health Code to collate and ensure transparency on nationwide environmental measurements.



An innovative website to fulfil the public demand for environmental transparency

Issued by the national network under the aegis of ASN, www.mesure-radioactivite.fr gives the public access to the results of radioactivity measurements carried out by certified laboratories.

A rich database

A single database managed by IRSN to centralize information on environmental radioactivity:

- More than 640,000 measurements:
 - 70% on air, gases and aerosols,
 - 30% on water, fauna, flora and food products.
- Around 17,000 new environment data each month.

A pedagogical website

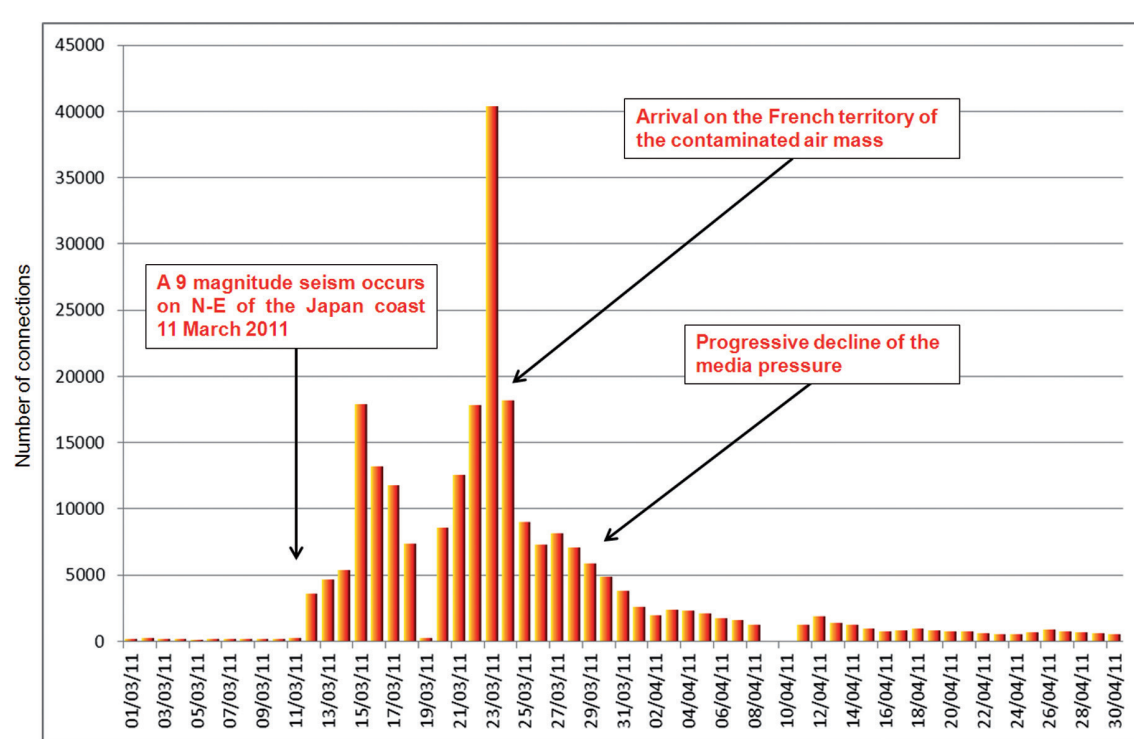
- Educational contents to explain the radioactivity phenomenon, its biological impacts and the environmental measurements.
- 3 different ways to find values: map-based search interface, guided and thematic search, advanced research engine.

Pluralistic and reliable information

- Quality of the measurements guaranteed by a demanding laboratory approval system granted by ASN decision:
 - conformity of the practices to the requirements of the standard EN ISO/IEC 17025,
 - more than forty specialized inter-laboratory comparison tests organised by IRSN to cover the environmental compartments and various radionuclide measurements.
- 59 approved laboratories transmitting results of sampling.
- Licensee's data confronted with measurement results of approved laboratories belonging to nature protection association and universities.



Feed back of two years of use



Peak in website use following Fukushima accident (March/April 2011)

Two years after its launch, www.mesure-radioactivite.fr is now recognized as a baseline website and has found a positive feedback from abroad:

- more than 12,5 million pages consulted in 2011,
- more than 221,000 visitors,
- from more than 20 different countries.

The number of website hits is very reactive towards radiological events and their media coverage. This has clearly been observed at three occasions in 2011:

- Fukushima accident (11 March),
- furnace explosion at CentraCo installation (12 September),
- higher observed natural radioactivity (end of September).

Developments in progress

Harmonising the declarations

Following an extensive study of the data transmitted in 2010 to the national network, ASN proposed some fifty more precise rules governing the declaration of measurement results.

→ This harmonising process will permit better inter-comparison of the data.

Providing the assistance of a colour code

A three colour index of environmental radioactivity, established by a pluralist working group constituted by ASN, is being experimented in 2012. This provisional information

tool, based on the model of existing atmospheric quality scale, is aimed at providing the public with key reference points.

Meeting the public expectations

An on-going user survey conducted by a commercial society, independent from the licensees and associations, will guide further improvements on www.mesure-radioactivite.fr.

Expectations and use of the website are tested as well as public response to the index assistance projected. The survey results are expected for May 2012.

ASN is committed to enabling the public to understand and interpret the results of environmental radioactivity measurements. ASN is therefore initiating practical tools such as the index of environmental

radioactivity and is convinced the tools will provide a benefit to meet the challenge of accessible and shared environmental information.