

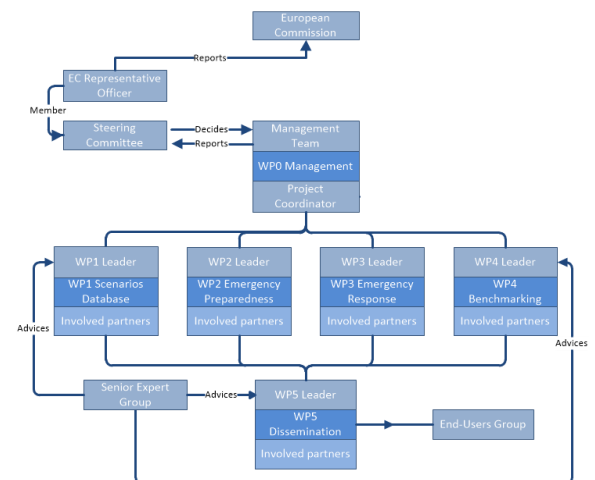


FASTNET



The FASTNET project, coordinated by IRSN (France), started in October 2015 for a period of four years. The project involves a Consortium of 20 partners from 18 countries (including United States of America, Canada and the Russian Federation) as well as the IAEA as a third party.

The FASTNET project addresses both the preparedness and the response to a nuclear emergency by combining the use of complementary methods and tools (deterministic and probabilistic). It has set-up a reference database of accident scenarios, improved the tools needed for a rapid assessment of atmospheric releases and qualified a common expertise methodology. All these outputs will enable Emergency Centres to provide a fast, organized and reliable prediction of accident development and the anticipation of the atmospheric releases in order to better protect the population around most of European NPPs.



PROJECT FACTS AND FIGURES

04

Key outputs:
2 extended tools
1 scenarios database
1 common methodology

29

20 partners
9 members of the End-Users group
Around the world

32

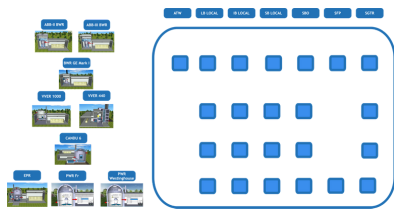
Deliverables and technical reports

108

Descriptions of scenarios including assessment of atmospheric releases

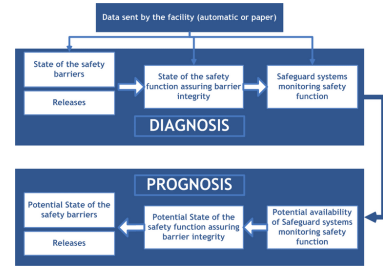


KEY OUTPUTS

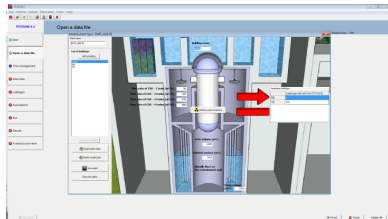


Scenarios database

An accident scenarios database was developed and contains more than one hundred description of scenarios including assessment of atmospheric releases performed by partners using reference codes (ASTEC, MELCOR and MAAP) for the 5 representative NPP designs (PWR, BWR, VVER and CANDU) and a generic concept of SFP.

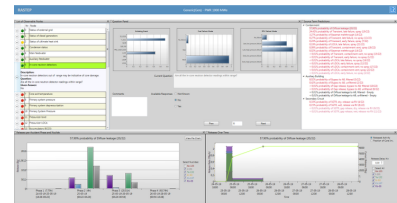


A common methodology



PERSAN

Current expertise methodology as well as tools to assess atmospheric releases used in France (PERSAN) and in Sweden (RASTEP) were extended to the 5 representative NPP designs.



RASTEP

INNOVATIONS EMPLOYED TO ADDRESS THE CHALLENGES

The extension of these method and tools was improved and validated through:

- A training session which was organized in May 2018 in Paris.
- The realization of two exercises:
 - the first dedicated to the best calculation of atmospheric releases and held in December 2018;
 - the second including more widely the management of the protection of the population and organized on February 2019 in Vienna.

SOCIAL OR ECONOMIC BENEFITS ARISING FROM THE PROJECT

- The capitalization and the dissemination of an accident scenarios database including a uniform description of all scenarios;
- The sharing of a common graduated methodology, robust and efficient, in order to be implemented in any Emergency Centres for the management of emergency in all European NPPs and SFP as a common language.

