

Aurengo Mission: information file

26 April 2006

On 25 February 2002, following the difference of opinion between OPRI and IPSN on the evaluation of the consequences of the Chernobyl accident in France, and more specifically in Corsica, the Ministers for Health and the Environment entrusted a mission on this subject to Professor André Aurengo, a specialist in nuclear medicine, appointing him chairman of a working group in charge of mapping the contamination caused by this accident in France and deducing the corresponding doses and risks to which the French population were subjected.

The working group was put together in the course of 2002 and included experts from various fields and players interested in the subject. Of course IRSN, a newly created public establishment replacing OPRI and IPSN, actively took part in this group. This group met five times between 7 January 2003 and 3 June 2004. As part of this mission, Professor Aurengo drew up a critical analysis on the research work carried out by IPSN then IRSN which led to the fallout maps published in 2003. IRSN questioned the soundness of this scientific enquiry based on the measured data used and the theoretical basis of his mathematical model in a report given to Professor Aurengo in March 2004 (IRSN/DEI no. 04-02 report). Further to this discussion and during regular exchanges with Professor Aurengo, IRSN undertook a new study between September 2004 and November 2005, aimed at better taking into account the phenomena at the origin of the deposits and the more comprehensive data available at the time (IRSN/DEI no. 2005-03 report). The latter enabled more in-depth modelling and a better estimation of the relative uncertainties attached to the different parameters used to describe the complex physical phenomena leading to the radioactive deposits.

The cartographic results of this additional work, conducted according to a method agreed upon by Professor Aurengo, did not produce results that were significantly different from those of 2003. IRSN considered that these new results consolidated earlier works while at the same time enriching them, especially with regard to the estimation of uncertainties and the limitations that had to be respected regarding the interpretation of maps.

However, as Professor Aurengo did not share this point of view, it proved impossible to continue the mission normally. Indeed, IRSN did not have the opportunity of presenting its latest work to the working group which had not held a meeting since 3 June 2004.

Faced with this situation and with the 20th anniversary of the Chernobyl accident drawing nearer, the Ministers, in consultation with the Director General of IRSN and Professor Aurengo, asked IRSN's Scientific Board to assess the work conducted by the Institute's scientific teams since 1997, taking into consideration the critical analysis mentioned above and IRSN's response in order to put a close to the debate.

The Scientific Board's opinion was presented to the Ministers in a letter from IRSN's Director General on 4 April 2006 (letter to the Minister for Health - letter to the Minister for the Environment). This opinion confirms the scientific validity of the Institute's work, draws attention to the great uncertainties surrounding their results due to the complexity of the physical phenomena and the insufficient number of measurements on radioactive deposits in the field and it puts forward recommendations for future crisis management.

The Ministers have taken note of this assessment and have decided to end the mission that was initiated in 2002.

Within this context, Professor Aurengo wished to give the Ministers a personal summary drawing up an overall assessment of the investigations conducted firstly by the working group and then at his personal initiative.

In order to ensure transparency and accessibility to information, IRSN, in agreement with the Minister for Ecology and Sustainable Development and the Minister for Health, is publishing this personal summary on its website, although it has not taken part in writing this summary and it does not share all the conclusions.