## The handling of nuclear emergencies in Argentina

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## **Abstract**

In 1998, the Executive signed the decree 1390, which defined the scope and the procedures corresponding to the Nuclear Activity Law. In this decree, the new functions of the Nuclear Regulatory Authority (ARN) are described, being the most important related to preparation and response for a nuclear emergency the following ones:

- ARN must provide protection from harmful effects of ionizing radiations under normal conditions and emergency situations.
- ARN must advise the Executive in case of radiological and nuclear emergencies.
- ARN shall establish the criteria for the emergency plans of the facilities and train the members of neighbor public to the facilities in case of nuclear emergencies.
- The emergency plans developed by local, provincial and national authorities must be approved by the ARN.
- ARN shall lead the actions within the area covered by the emergency plans of the facilities. Security Forces and the Representatives of Civil Institutions shall report the designated ARN officer.

The ARN recognized immediately the responsibility imposed by this law and, at the same time, the opportunity of improving the handling of emergencies through a centralized direction of the operations. Under this frame, ARN created the Radiological Emergencies Intervention System (SIER) with the goal of taking charge of the preparation and the handling of emergency situations.

From the beginning, the purpose of the SIER was to improve the preparation and response to nuclear emergencies in a regular form, bearing in mind the cultural and socioeconomic situation of the country, as well as the local peculiarities. The first steep to achieve such a target was to gain the confidence of other organizations included in the response on the ARN technical and operational aptitude to lead the actions inside the emergency area and, later, to establish the pertinent arrangements.

The strategy chosen by ARN to respond to nuclear emergencies consists in establishing an expert team and a decision-making team at its Headquarters, with the responsibility of conducting the whole emergency. At the same time, the ARN shall deploy a team to the emergency area, led by the Operative Head of Nuclear Emergencies Response- "Jefe Operativo de Emergencias Nucleares (JOEN)" - who is in charge of the response at the local level (up to about ten kilometers). The JOEN is also responsible for the coordination of other organizations included in the response at the local level.

This paper presents the organization of the preparation and response in case of nuclear emergencies that was developed in Argentina, considering the particular responsibilities assigned to ARN by the current legislation. In addition, three essential topics in this working scheme - the training of the members of the public, the coordination of the different organizations and the development of knowledge and skills in ARN relevant areas- are developed.

KEYWORDS: Emergencies, Emergency Preparedness, Emergency Response.