

**Note to ENSREG on the
Seminar on Safety of Nuclear Power Plants
against Aircraft Impacts
*25 September 2012, Luxembourg***

HLG_p(2012-20)_102

**Note to ENSREG on the
Seminar on Safety of Nuclear Power Plants against Aircraft Impacts
25 September 2012, Luxembourg**

Background of the Issue:

- Based on the circumstances of the Fukushima accident, the European Stress Tests were originally designed to assess the adequacy of existing safety margins in nuclear installations with regard to impacts from extreme earthquakes and flooding. The assessment of the adequacy of current safety margins is, however, also relevant if the situation is provoked by indirect initiators, such as grid disturbances, forest fires or airplane crashes. The national Stress Tests of Belgium, Germany, Slovenia and the Netherlands extended the scope of work to include also aircraft crashes.
- The *security* aspects of aircraft impacts on nuclear power plants (NPPs) have been considered by the Council's Ad-hoc Group on Nuclear Security, which identified in its public report a number of good practices to be followed by Member States.

Objective and Scope of the Seminar:

- To address the safety aspects of airplane crashes, the Commission organised on 25 September 2012 in Luxembourg a seminar with 45 participants representing nuclear safety regulators from 18 EU Member States¹, from Switzerland, the USA and Japan, as well as Commission services.
- Objectives were to identify similarities and key differences in national approaches, and to look for need of follow-up work to develop a more coherent and consistent understanding of the safety relevance of the issue.

Conclusions of the Seminar:

- The participants found that an interesting exchange of information and views on the safety implications of aircraft crashes on NPPs has taken place.
- Not least because of the different levels of institutional responsibility and transparency vis-à-vis the public, the importance of a proper separation between safety and security aspects was confirmed.
- Significant differences were found in the national approaches to deal with the assessment of the safety implications with regard to existing and new NPPs:
 - Design requirements for new NPPs require that – following impact of a large aircraft – no releases to outside of the containment shall take place.
 - Due to the historical development of the relevance of the issue, the situation is different for existing NPPs, and it is not clear if methodologies applied and implications developed are coherent and consistent across countries.
 - Therefore, the Commission recommends to ENSREG that there is added value in working on the safety side of the issue in a European context to develop a coherent methodology and to arrive at comparable approaches on related safety issues.

¹ Including 11 of the 14 EU Member States that currently operate NPPs plus Lithuania.