8th Joint INMM/ESARDA Workshop

STATEMENT

Title:

ENEA activities in the fields of nuclear non proliferation, safeguards and R&D

G.Giorgiantoni

Contribution WGs. WG1. Topics A, B, C. WG4. Topics A,B,C

Italian Framework

ENEA is the Italian Agency for The Energy, Environment and the Sustainable Economic Development. Since 2004 the Institute has special agreements with the Italian Ministry of the Economic Development, by means of a pluriennal Convention for R&D and for the fulfilments of the obligations that the country has for the Additional Protocol. The Institute is one of the founders of the ESARDA Association, in which has a delegate in the Steering Committee (Ing. Giorgio Giorgiantoni). The Institute also is active in the area of the export control since there is the needing to keep the International Treaties, difficult to be updated, the national trading procedures, synchronous with the industrial technological development.

WG1

STATEMENT:

The role of the social media is of the maximum importance. Public usually is informed through a too emotional and superficial way, nuclear technologies are still seen as dangerous and even ignored as an important industrial sector suitable to create real jobs, also in those countries in which electrical generation from nuclear is not adopted. In the social media important technical concepts should be diffused in a simple and equilibrated way, i.e. that the international treaties allow the exchange of nuclear technologies between the various countries for pacific uses, that there is a robust international control system and that there is an increasing consensus among the various countries in the world in signing the non proliferation protocols. In general the technical information that is exchanged through the media is poor but the experts in nuclear technologies are not so good in the dissemination of these important aspects. If there is a fire in a NPP that affects an electric transformer, it’s a normal fire, not a nuclear accident. Social media should focus these aspects and contribute to the dissemination of balanced information. Special TV and newspaper dedicated services may contribute to the good information. Furthermore, our experience for strategic trade controls is based on the advise of senior and long experience scientists working for our Ministerial Committees especially in the fields of chemistry, nuclear, mechanics and electronics. A generational gap especially in nuclear sciences and practical experience in the national public bodies may occur and should be absolutely avoided as a consequence of the declining importance of the industrial sector in the national turnover. The aspect of security after the 2016 summit should improve the aspect of R&D coordination in principle and the case by case consideration, (i.e. the HEU fuel repatriation from research reactors), to avoid the sharp decline of national important R&D activities.
STATEMENT:

The most important aspect is to counteract the generational gap, the loss of importance and economic appeal of the nuclear sciences. Nuclear Sciences should be disseminated to the young students in the correct way starting from the high school. In many cases only ideological prejudice devoted to the actual politically correct renewable sources is reported, with the result that this can be transponded in the professional life. Only good education in the natural sciences in the early age can at first give the right framework to the growth of personal opinions and awareness. If this aspect is not improved, the centres of excellence and research infrastructures are something regarded as alien costly facilities in which the final scope is unclear and that can be considered a useless burden especially by the politicians, which are interested especially to the near term consensus. When a nuclear practice or experience is considered, an impressive number of disciplines are involved. In Europe this aspect is well understood only in these last years; the attempts are still at a very early stage and much more emphasis should be placed in this aspect, since high level education is still organized in defined disciplines. In general, practical, thematic, interdisciplinary cases should be examined remembering that the knowledge of the exact situation is at first required, then the integration of a great number of technologies (DB, law, International Treaties etc.) should be achieved.