Task Group 106: Application of the Commission’s Recommendations to Activities involving Mobile High Activity Sources

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Terms of Reference
To develop a report that describes and clarifies the application of the Commission’s Recommendations on radiological protection of workers, the public, and environment to activities involving mobile high activity sources.

The scope of the report will cover uses of sealed sources in industrial radiography, and other instances in which high activity sources are used in a mobile setting, rather than fixed location. Radiological protection in such situations is unique because the prevailing circumstances are constantly changing, and the location and control of individuals is not defined by any permanent structures or shielding. Further, the circumstances are often complex, with a variety of geometries, constantly changing locations, access restrictions, and environmental conditions such as limited workspaces, vertical heights, working at night, and weather.

The Task Group is the result of solicitation of interest from ICRP to Special Liaison Organisations, and was suggested by the European ALARA Network (EAN) and the International Radiation Protection Association (IRPA).

Considerations
- Justification: noting all factors that may play a rule in the choice of NDT techniques (e.g. ultrasound compared to ionising radiation)
- Optimisation of Protection:
  - Dose Constraints
  - Relationship of Safety Culture to Optimisation and radiological protection
  - Public Exposure, including other workers at work site
- Accident Situations
- Implementation Issues:
  - Radiological Protection Planning in highly variable environments
  - Interaction, Expectations, and Responsibilities with User Company – cooperation and communication
  - Source Control, device safety, operational controls, quality systems for sources and devices, maintenance
  - Human Factors
  - Safety Culture and Organisational Performance Management
  - Monitoring of exposures
  - Multiple methods of protection
  - Training and Qualification
  - Medical surveillance – routine and after overexposures (including a consideration of the lens of the eye)
  - Stakeholder involvement, including workers, employers, user companies, equipment manufacturers, and regulators