Introduction to ISO, TC-85 and SC-5

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Introduction to ISO
Structure of ISO
ISO TC85/SC-5
Standards Development
Harmonization and NSAG
EPRe
INTRODUCTION TO ISO

- ISO – International Organization for Standardization
- Is the world’s largest developer of voluntary International Standards
- Was founded in 1947
- Has published 23852 International Standards covering almost all aspects of technology and business
- Has 165 member states
- Is based in Geneva, Switzerland
- Has 160 full time staff
- Is supported in producing Standards and Guidance by numerous volunteers: participants from the member states
STRUCTURE OF ISO

TC1

TC85
Nuclear Energy, Nuclear Technologies And Radiological Protection

TC290

SC2
Radiological Protection

SC5
Nuclear Installations Processes & Technologies

SC6
Reactor Technology

WORKING GROUPS
ISO/TC85/SC5 (1 of 3)

SCOPE:
Standardization and promotion of good practices associated with the planning, construction, operation and decommissioning of installations, processes and technologies involving radioactive materials. Nuclear installations, processes and technologies.

EXCLUSIONS:
Specific enabling technologies and techniques for non-peaceful applications; sealed sources, radiation processing, nuclear power plants and research reactors (with regard to nuclear criticality safety while fuel is loaded in the reactor core).
Currently 5 WGs:

- Analytical Techniques
- Transport of Radioactive Materials
- Characterisation and Waste Management
- Criticality Safety
- Decommissioning

75 published standards
21 P-member states
7 O-member states
123 Registered Experts serving across Working Groups
Participating states (P)
- Argentina
- Belgium
- Bulgaria
- Canada
- China
- France
- Germany
- India
- Iran, Islamic Republic of
- Italy
- Japan
- Korea, Republic of
- Netherlands
- Pakistan
- Russian Federation
- Spain
- Sweden
- Switzerland
- USA
- Ukraine
- United Kingdom

Observer states (O)
- Finland
- Hungary
- Mongolia
- Poland
- Romania
- Slovakia
- South Africa
STANDARDS DEVELOPMENT (1 of 2)

- ISO Standards are developed by recognised experts in the field, supplied by the Member States, and who:
  - Have expert knowledge
  - Have experience in application
  - Understand and anticipate the challenges within the field

- Standards Development Process is a *gated process*
  - Member states are balloted between each stage in the process
    - Ensures developing standard remains useful to the member state
    - Ensures continued support from the member state
- Published standards are reviewed periodically (5 years)
  - Ensures they remain ‘fit for purpose’
STANDARDS DEVELOPMENT (2 of 2)

**Full ISO Development Process**
- (3 years)
- New Standards

**Reduced ISO Development Process**
- (2 years)
- New Standards

**Optimum ISO Development Process**
- (18 Months)
- Modifications to existing Standards only

**KEY:**
- Mandatory Stage
- Optional Stage
ISO HARMONIZATION INITIATIVE

The ISO Harmonization initiative:

- Allows and encourages collaboration with other Organizations that produce Standards and Guidance
- Intent is to produce a harmonized, complimentary set of Standards and Guidance for use within the industry
- Currently collaboration exists between ISO/TC85 and the following Groups:
  - IAEA (NUSSC, TRANSC, WASSC, WATEC)
  - OECD NEA
  - EUROPEAN COMMISSION (EURAD)
  - EDRAM
The ISO NSAG (Nuclear Safety Advisory Group) Initiative:

- Agreement in place with IAEA which allows:
  - Access to ISO experts to support:
    - Development of Safety Standards
    - Review of Safety Standards
    - Proposals for projects undertaken by ISO in support of IAEA Safety Standards
EMERGENCY PREPAREDNESS AND RESPONSE

- A new area of work within ISO
- Proposed by Japan
- We will create a new Working Group
  - May sit directly beneath ISO/TC85 or within the scope of SC5
- We wish to ensure work undertaken by ISO in this area is supportive of and complimentary to the work of the IAEA
- Due to NSAG initiative, we are able to offer experts to support IAEA in development and review of Safety Standards in this area
THANK YOU