ISO-TC 85 / SC 5 / WG 4
”Standards relative to transport of radioactive material”

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The ISO-TC85

- ISO/TC 085 "Nuclear energy, nuclear technologies, and radiological protection"
- NSAG Nuclear Safety Advisory Group
  - analyses draft IAEA safety standards and gives feedback to NUSSC
  - Identifies new work items, in addition and in reference to IAEA standards
- SC-2 Radiological Protection
- SC-5 Nuclear Installations, Processes and Technologies
  - WG1 Analytical methodology in the fuel cycle
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Scope and portfolio of the SC5/WG4

The Working Group 4 defines its scope as follows

- The scope of the Working Group 4 is to develop and maintain international standards associated with the equipment and procedures used for the transport of all radioactive material, including material from the nuclear fuel cycle, research activities, the industry, and for medical use, in order to improve safety, consistency and efficiency.

Currently 3 International Standards in the WG4 portfolio

- ISO 7195 “Packaging of uranium hexafluoride (UF₆) for transport” - 2005
- ISO 10276 “Trunnions for packages used to transport radioactive material” - 2010
- ISO 12807 “Safe transport of radioactive material - Leakage testing on packages” - 2018
ISO 7195 Packaging of uranium hexafluoride (UF6) for transport

- Since 1996, compliance with this standard is a requirement of IAEA SSR-6 and all modal regulations based on, for packages containing 0.1 Kg or more of UF$_6$
- These cylinders are the only existing means of transport to deliver UF$_6$ to or from enrichment plants
- Historically, ISO 7195 is based on ANSI-14.1
ISO 7195 revision

- Need for updating ISO 7195
  - ANSI.14-1 was revised in 2012,
  - It was clearly identified a need to update the ISO standard and to align the content of the two standards in view to better guaranty the equivalency of the two standards

- Revision process initiated in 2012
  - After many meetings and several votes (NWIP, CD, and DIS ballots), the last step before publication (FDIS vote) was about to begin when a letter sent by the French authority on behalf of several European authorities, arguing that the content of the draft will contradict requirements of the ADR, compromised the conditions necessary to launch the FDIS vote.
  - The project has to be withdrawn, as the dead line for publication as assigned by ISO was compromised.
  - The project for revision of the standard was officially withdrawn by the ISO after a dedicated ballot held in February 2018, with the possibility of relaunching a draft revision of the standard as soon as a consensus is reached on the draft.
SC5/WG4 Meetings on ISO 7195

- **Paris 7-9 November 2017**
  - 14 participants from 6 countries + WNTI, dedicated to ISO7195 revision project to try to solve the issue
  - Resolution to withdraw the project for revision of the standard and to reinitiate it as soon as a consensus can be reach on the draft

- **Helsinki 16-17 May 2018**
  - 10 attendees from 6 countries + WNTI
  - The work begun in Paris continued but consensus could not be reached

- **Paris 28-30 August 2018**
  - 12 attendees from 6 countries + IAEA, including representatives from European competent authorities
  - The meeting focused on the ISO 7195 draft essentially
  - E-mail exchanges between participants have continued to date to agree on the text and content of the draft revision of the standard
  - *It seems that a consensus has finally been reached.*
ISO 7195 new project for revision

– The following step will be for the WG4 to approve a resolution to allow the re-initiation of a NWIP by the TC85/SC5 secretariat for the revision of this standard this will be done by the next weeks

– As the scope of the standard does not extent it will be possible to use the fast track procedure (18 months schedule) and to register the revision directly at the DIS stage in the ISO process without NWIP and CD ballots. If the DIS stage does not result in technical comments, then it will be possible to skip the FDIS stage and to go directly to the publication stage

– This registration will be performed before the end of this year, making possible the publication of the revised standard by the end of 2019, (11 months the from preparation of the DIS vote to publication).
ISO 10276

  - CD ballot took place from June 19th to August 14th, 2018
  - A meeting to solve the comments took place on 15 and 16 November in Berlin, the results will be made available for all the WG members
  - The DIS vote shall be initiated at the latest on 4th of January 2019
ISO 12807

- This standard has been successfully revised
- The new edition has been published in September 2018, the French should be published soon
New Projects

- Potential future projects identified in Conshohocken
  - Securing of packages during transport
    • On the base of TCSC 1006 and TCSC 1079
  - Design, manufacture, approval and operation of an ISO freight container for use as an Industrial Package (IP-2)
    • On the base of TCSC 1090 (UK industry standard)
  - Measurement of radiation level and surface contamination
    • On the base of ANSI N14.36

- A first draft of the standard relative to Design, manufacture, approval and operation of an ISO freight container for use as an Industrial Package (IP-2), has been circulated to the WG members with the proposal to submit for a NWIP and to adopt the default procedure for development of ISO standard (36 months schedule, including NWIP, CD, DIS and FDIS votes)
Thank you for your attention