



2016-04-11

ISO/TC 92/SC 4 "Fire Safety Engineering"

Report of Task Group 1

Title of WG: TG1 – Advisory Group

Convenor: **Daniel NILSSON**

Benoît SMERECKI (France – AFNOR) Secretary:

Support (NSB): **AFNOR**

Membership: SC4 Chair and secretariat; Working groups' convenors;

representatives of SC4 liaisons, additional co-opted

member, and observers

Meeting(s) held since the last ISO/TC 92/SC 4 meeting:

33rd meeting, 2016-04-11, Linz, Austria

Progress of the work

Number of WI in handling: (See details in the table next

page)

None

Other businesses:

- Co-ordination of the work of SC4/WGs
- General work
 - Management of the liaison and co-ordination with TPMG, other SCs of ISO/TC 92, other ISO/TCs or international structures and associations

- Organisation of next meetings
- Future of SC 4

Report of actions:

- TG 1 meeting was convened by Daniel NILSSON.
- Information given by the secretariat about SC 4 and general information concerning the ISO procedures:

- O-Members: 14P-Members: 30
- Number of published ISO documents under the direct responsibility of SC 4 (Number includes updates): 20

B. SMERECKI gave information regarding the new ISO procedures:

- All voting periods in the Directives will now be expressed in weeks rather than months, where 1 month = 4 weeks
- Obligation for P-Members to vote on Systematic Reviews
- NWIPs now need approval by ballot (Electronic ballot) using the CIB (Committee Internal Balloting tool)
- Justification supporting approval of NWIP now optional
- New edition of ISO/IEC Directives Part 2 on May 2016
- Clarification of length of chairs' terms of office
- According to sub-clause 1.12.1 of the ISO/IEC Directives, Part 1: 2015, ISO Working Group convenors shall be appointed by the committee for up to three-year terms. There is no limit to the number of terms that a convenor may be appointed, however, the three-year term limit must be honored.

Consequently, SC 4 will have to reappoint the following Convenors with a resolution:

ISO/TC 92/SC 4/TG 1 - Daniel Nilsson

ISO/TC 92/SC 4/WG 1 - Takeyoshi Tanaka

ISO/TC 92/SC 4/WG 6 - Colleen Wade

ISO/TC 92/SC 4/WG 9 - Kazunori Harada

ISO/TC 92/SC 4/WG 11 - Rita Fahy

That will be done at the next SC 4 meeting in Linz.

- It is now possible to prepare a Committee website, and TG 1 agreed to create its own SC 4 website in order to promote its activities. The Secretary with the assistance of the Convenors and Chair will prepare a proposal of a web page specifically dedicated to SC 4.

- Documents published by Geneva (ISO/CS):

- ISO 16733-1:2015 "Selection of design fire scenarios and design fires Part 1: Selection of design fire scenarios" (Revision of ISO/TS 16733:2006)
- ISO 16730-1:2015 "Procedures and requirements for verification and validation of calculation methods – Part 1: General" (Revision of ISO 16730:2008)
- ISO/TR 24679-3:2015 "Performance of structure in fire Part 3: Example of an open car park"
- ISO/TS 29761:2015 "Selection of design occupant behavioural scenarios and design behaviours"

- Reports of the Convenors:

. WG 1

- Regarding the document (NP TR 16576) giving examples of objectives and functional requirements prepared by three countries (France, New Zealand and Japan), WG 1 will finalize the document in Linz in order to ballot the DTR after the Linz meeting.
- The second topic to be considered is the revision of ISO 23932:2009 "General principles" (NP ISO 23932-1) led by D. NILSSON. A TG meeting has been planned on Thursday after the WGs meetings in order to progress the revision.
- The working document for the example of a shop with dry cleaning activity (PWI ISO/TR 23932-2) will be presented in Linz by Joël KRUPPA, Project Leader.
- The subject related to the survey of performance-based Fire Safety Design practice has been registered at the New Proposal stage A new draft questionnaire will be reviewed at the WG 1 meeting. The objective is to circulate the questionnaire after the Linz meeting.
- A presentation will be made by M. DEY on how ISO standards can be improved for use in emerging markets and developing countries.

. WG 6

ISO 16733-1 was published on 1st September 2015.

Consequently, there will be a new discussion on development of ISO/TS 16732-2 on design fires. C. WADE would be pleased to move this subject from the preliminary stage to the NP stage.

Other topics:

- Discussion on example(s) of ISO 16733-1 Design Fire Scenarios
- SC3/SC4 Work Items from Joint Matrix
- A presentation will be made at the WG 6 meeting in Linz by Chris Jelenewicz on SFPE Task group on design fires.

. WG 7

- ISO 16730-1 was published on 15th August 2015.

NP ISO 20414 "Verification and validation protocol for building fire evacuation models" with E. RONCHI as the Project Leader was successfully balloted and approved on 12th September 2015. A new working document was prepared and circulated to WG 7 for comments.

- Systematic review (SR) for ISO/TS 13447:2013 (Deadline for voting: 10th May 2016) In Linz, WG 7 will consider the following other items:
- Development of data for validation and assessing range of applicability of FSE calculation methods. D. BREIN and J. WIESE will present ideas in this field of activities (In connection with the Information Bus).
- Assessment of input data for FSE calculation methods A new discussion of future activities in WG 7 has been planned.

. <u>WG 9</u>

K HARADA reported on the following items:

ISO 24678 « Requirements governing algebraic equations »

- Part 1: General requirements (New document)
- Part 2: Fire plume (Revision of ISO 16734:2006)
- Part 3: Ceiling jet flows (Revision of ISO 16736:2006)
- Part 4: Smoke layers (Revision of ISO 16735:2006)
- Part 5: Vent flows (Revision of ISO 16737:2012)
- Part 6: Flashover related phenomena (Previously DIS 24678)

Deadline for voting on ISO/DIS 24678-6: <u>23rd March 2016.</u> The voting results will be considered in Linz.

- Part 7: Radiation heat flux received from an open pool fire (Previously NP ISO 29763)
- Part 8: Flame spread on a solid surface in a compartment (Previously PWI 18318)

New texts have been prepared and will be considered at the Linz meeting.

- Other topic:

PWI ISO 20709 on quick calculation methods for performance-based fire safety design of enclosures"

SC3/SC4 Joint activities – « Fire growth capability » and « transport and losses of effluent and effluent components » in zone and CFD models

. <u>WG 11</u>

WG 11 will work on the working document WD ISO/TR 17886 on design of evacuation experiments.

In relation with the SC3/SC 4 matrix, there will be a discussion on a proposed document for the impact of smoke on evacuation

. WG 12

The process to review ISO/TS 24679:2011, looking at possible changes to the TS to convert it to an IS is in progress. In Linz, there will be a presentation and a discussion on a new draft of

ISO/WD 24679-1 prepared by D. DHIMA. N. BENICHOU will participate to the discussion with Skype.

Furthermore, WG 12 will work on example documents to be published as separate Technical Reports.

- For Part 2 (Example of an airport terminal), some changes were made by China and DTR 24679-2 has been circulated to SC 4 for comments by 10th May 2016.
- Regarding the Japanese example (Part 4), it was agreed to launch the DTR ballot, but improvements have to be made by Japan before.
- There has been no real progress on the NZ example (Part 5).
- The new working draft of the second French example (WD 24679-6) will be presented by M. HEIDARI in Linz.
- C. DAGENAIS will report on the progress of the example proposed by Canada.
- Other topics: data needed for FSE practitioners for structures.

. WG 13

WOON HYUNG KIM informed the attendees that WG13 will consider the following topics on active fire protection systems:

- General document (PWI 20710-1) with WOON HYUNG KIM as the Project Leaders
- Estimation of detection time (PWI 201710-2) with JONG HOON KIM as the Project Leader

A Presentation of Rack Storage fires will be made in Linz.

JONG HOON KIM has some health problems et has to stop his WG 13 activities as the Project Leader for the time being.

This unexpected event will modify the WG 13 activities. And there will be a short meeting in Linz, on Tuesday morning (9:00 - 10:30).

WOON HYUNG KIM informed the attendees that he would like to organize an International Workshop on Active Fire Protection Systems, at the Seoul meetings on Wednesday 19th October 2016 + a Fire test lab tour at KICT.

Other business:

- In Gaithersburg, TG1 agreed to set up a Task Group managed by V. MOZER in order to investigate further development of Fire Risk Assessment (FRA) standards in SC 4, to identify the potential work to be done and to establish target dates. V. MOZER reported at the Linz meeting. He prepared a draft report for discussion. The objectives of this report are to:
- 1. Summarize the current state of the art for fire risk assessment at ISO level.
- 2. Propose updates, revisions and other changes to current and development of new FRA standards.
- 3. Prioritize the future activities and give a time schedule.

Three types of FRA documents has been proposed:

- 1. General principles documents Theory documents
- 2. Method-specific documents Toolkit documents
- 3. Example documents

A FRA TG meeting has been planned on Tuesday morning (10:30-12:30).

- Regarding the European activities, It was reported that CEN/TC 127/WG 8 has planned to prepare a complete independent and practical Technical Report (CEN/TR). The preliminary work will consist on a technical report describing all the procedures to be applied in FSE. The technical methods and data will be produced in a second step. This first preliminary report should be based on ISO 23932 but not only because it should include other basic parts of different ISO standards. In order to avoid any wording confuse, it was proposed to name this TR "European Application of FSE principles to the design of a building "or "European FSE basics application" (Proposed new title). It is proposed that Daniel JOYEUX (France) will manage this item.

There is an informal liaison between CEN and ISO, because the Vienna Agreement has not been applied. It was reminded that D. NILSSON attends regularly the CEN/TC 127/WG8 meetings in order to liaise the activities.

Next CEN/TC 127/WG 8 meeting: Brussels on 21st April 2016.

- A Joint SC3-SC4 meeting will be held on Thursday 14th April 2016 (9:00 10:00). E. GUILLAUME will prepare materials in order to organize the future activities. Furthermore, a workshop on the procedures and rules for drafting standards will be held the same day in Linz (10:00 12:30).
- Regarding the ISO/TC92/ WG 13 activities (New working group set up in Gaithersburg with D. PARISSE as the Convenor), ISO/TR 17755 "Fire safety Overview of national fire statistics practices" was published in English in April 2014 and in French in January 2015. The first revision will be launched in 2017. This review will be an opportunity to specify some points already addressed in the first version, to improve the items already developed especially concerning wild land fires and to integrate other interested countries (Future ISO/TR 17755-1). Furthermore, a new work item was proposed to achieve a specific terminology guide dedicated to fire statistics and was approved. ISO/CD 17755-2 has been circulated to ISO/TC 92 for comments by 9th May 2016. The third part (Future work) will be dedicated to the methodology for collecting fire statistics. A workshop on statistics could be held in Japan in March 2017.
- A presentation on the SFPE activities was made at the TG 1 meeting by Chris JELENEWICZ. This presentation will be circulated to SC4.
- In Linz, a lab visit will be held on Tuesday (17:00 17:30).
- D. NILSSON reminded that the SC 4 objectives were finalized and approved in Gaithersburg and have to be included in the TC 92 Business Plan. That would be done at the next TC 92 plenary meeting. In addition, SC 4 has to focus now on the activities and on the work program. New work items could be identified. Input from the Delegates and from the ISO members will be useful.

Next SC 4 meetings:

- 17th 21st October 2016 South Korea Seoul
- 27th 31st March 2017 Japan Tsukuba (Plenary meeting)
- Fall 2017 Europe
- Spring 2018 America
- Fall 2018 Netherlands (Plenary)

Resolutions to be taken at the Linz SC4 meeting:

- Resolution in order to re-appoint for a new period of 3 years the following Convenors: Daniel NILSSON, Takeyoshi TANAKA, Colleen WADE, Kazunori HARADA and Rita FAHY.