ISO/TC 59
Buildings and civil engineering works

Newsletter No. 20, December 2021

The ISO/TC 59 secretariat is pleased to present the twentieth newsletter of ISO/TC 59, giving a brief indication of current or recent affairs in our committee. The newsletter is distributed twice a year. Feel free to use this as a forum to inform others of your work or draw attention to areas you would like to highlight with relevance to ISO/TC 59. Please send your contributions to the ISO/TC 59 Committee Manager at ksb@standard.no.

Chairman’s corner

This autumn, we were hoping to see the end of the pandemic which has had a huge influence on our way of living and working. Unfortunately, again we are in a situation where many countries are facing a new lockdown. All our meetings in 2021 have been virtual and we see that, most likely, we must be prepared to communicate only digitally for some time also in 2022.

Regarding digitalisation in a standards perspective – this was also on the agenda at our TC 59/AG 1 meeting in November. We received an update on ISO SMART from ISO/CS and presentations on relevant work in our SC 13 and SC 17. One of the recommendations from this meeting was that machine-readable standards should remain a key issue in TC 59 in the time to come, as it will be important to stay informed and, if possible, contribute to the ongoing development with input from the construction industry.

It is worth emphasising, though, that making standards machine readable does not mean they will become unreadable to people – the machine readability can be seen as an added feature that will help make our standards even more useful to our standards user communities.

On behalf of Kari and myself I would like to thank all of you for your dedication and hard work in 2021 – and best wishes for a peaceful holiday season and a successful 2022.

Kind regards, Øyvind Skarholt

Updated scope of SC 17 "Sustainability in buildings and civil engineering works"

Based on the evolution of the content of the SC 17 work programme and to record what the subcommittee had already done and are planning to do, SC 17 decided to clarify their scope this autumn. A revised scope was first approved by SC 17 and in line with the ISO/IEC Directives, it was then ratified by ISO/TC 59:

Standardization in the field of sustainability of new and existing construction works in the context of the UN Sustainable Development Goals and climate change mitigation and adaptation. The environmental, economic, and social aspects of sustainability and circular economy are included as appropriate.

SC 17 is chaired by Philippe Osset (FR) and the Committee Manager is Karine Dari (AFNOR). The committee has four active working groups and also participates in a joint working group with SC 2 “Terminology and harmonization of languages”.

New standard that connects EPDs with BIM out on final ballot

SC 17/WG 3 "Environmental declaration of products" is in the final stages of finishing a new standard, ISO/FDIS 22057 Sustainability in buildings and civil engineering works – Data templates for the use of environmental product declarations (EPDs) for construction products in building information modelling (BIM). The standard will provide the principles and requirements to enable environmental and technical data provided in EPDs for construction products and services, construction elements and integrated technical systems to be used in BIM to assist in the assessment of the environmental performance of a construction works over its life cycle.

The document, which is out for FDIS ballot until 31 January, gives requirements on structuring EPD information using a data template according to ISO 23386 and ISO 23387 to make EPD data machine-interpretable and to enable their integration into information-driven design, construction, use and end-of-life stages.

ISO/FDIS 22057 is being developed with ISO lead in collaboration with CEN/TC 350 "Sustainability of construction works". Project Leader is the SC 17/WG 3 Convenor, Anne Rønning (NO). The project also has active involvement from SC 13 and CEN/TC 442.

Adapted from ISO/FDIS 22057.

New project approved on resilience design and adaptation to climate change

A proposal for a new standard in TC 59 on adaptation to climate change in the design of buildings and civil engineering works was recently approved. During the balloting period, the proposal was also distributed to related ISO committees with an invitation to provide comments, and we were grateful to receive comments from ISO/TC 268 "Sustainable cities and communities”.

The work to develop ISO/AWI 4931-1 Buildings and civil engineering works – Principles, framework and guidance for resilience design – Part 1: Adaptation to climate change will take place in TC 59/WG 4 "Resilience of buildings and civil engineering works" under the leadership of Dr HE Jing (China). The new standard will provide a framework, principles, and specific guidance for resilience design adaptive to climate change (RDACC) in buildings and civil engineering works.

This type of design method will be applicable not only to new construction, but also to the renewal, retrofit, and replacement of buildings or civil engineering works. The development track is 36 months.

Several new experts have been appointed to WG 4 to participate in this project, and anyone not yet appointed but wishing to join are encouraged to contact their national ISO member body for further information and possible appointment.

Photo: Pixabay.com
**Accessibility and usability performance of houses**

In June, SC 15 “Framework for the description of housing performance” published a new standard, ISO 15928-7:2021 *Houses — Description of performance — Part 7: Accessibility and usability*. This document belongs to the ISO 15928 series, which has the purpose to identify the methods used to describe the performance of houses. Each part in the series relates to a different attribute.

Part 7 includes the description of relevant parameters necessary to ensure accessibility and usability in houses and it also includes features to ensure safety during daily use, i.e., reasonable consideration to prevent accidents like tripping, falls, or collision. The purpose is to provide a standardized system of describing performance that can be used to specify performance requirements and performance levels, or to rate houses in terms of accessibility, usability, and safety during use.

It can be used to facilitate trade in housing systems and products, to facilitate innovation in housing by providing a systematic framework for evaluation and acceptance, and to establish user needs in technical engineering terms to facilitate communication among all stakeholders.

The document can also be useful in increasing consumer product awareness and in developing quality systems for houses. The standard was developed by SC 15/WG 7 "Accessibility and usability", which is convened by the SC 15 Chair, Satoshi Kose (JP). The secretary is the SC 15 Committee Manager, Tatsuo Fuji (JISC).

Adapted from ISO 15928-7:2021.

**News from SC 2 “Terminology and harmonization of languages”**

The new edition of ISO 6707-3 *Buildings and civil engineering works — Vocabulary — Part 3: Sustainability terms* is well under way. The project involves experts from both SC 2 and SC 17 "Sustainability in buildings and civil engineering works" and is being developed in SC 2/JWG 3, which is convened by Gerry Pettit (UK). The Project Leader is Marina Kupriyanova (RU).

The English text of the DIS for the revision of ISO 6707-3 has just been approved, so SC 2 is very excited and is working hard to process the comments so the standard can be published in the middle of next year.

Once completed, the standard will be published with English and Russian in a single volume. This is the same format as was employed for ISO 6707-1:2020 *Buildings and civil engineering works — Vocabulary — Part 1: General terms*.

By Mike Roberts, SC 2 Committee Manager

**ISO/TR 23262:2021 GIS (geospatial) / BIM interoperability**

This new technical report was published in May 2021. Its scope is to investigate barriers and propose measures to improve interoperability between the geospatial and BIM domains. The report was developed by SC 13/JWG 14, which consists of experts from ISO/TC 211 “Geographic information/Geomatics” and SC 13. The working group is convened by Jacky Chi Ho Lau (buildingSMART Norway) and co-convened by Morten Borrebæk (Norwegian Mapping Authority). The secretary is Stefan Baek Jensen (SN).

By using the framework for enterprise interoperability in ISO 11354-1:2011, the report identifies three topics for further work:

- linking abstract concepts in BIM and GIS standards,
- geospatial and BIM review of vocabularies, and
- information exchange guidelines between BIM and GIS.

A new work item has been proposed to develop a new technical report in collaboration with ISO/TC 211 for geospatial and BIM review of vocabularies. Closing date for the ballot is 12 January 2022.

By Stefan Baek Jensen, Secretary of SC 13/JWG 14

**Published since the previous newsletter (June 2021)**

ISO 21265:2021, *Building and civil engineering sealants — Assessment of the fungal growth on sealant surfaces* (SC 8)