Chair's corner

I embarked on the new role as Chair of TC 59 in March, and I am starting to learn more about the important work all subcommittees and working groups are doing. Together with Kari, I have had a digital visit with the subcommittee chairs to discuss challenges, opportunities, and progress for our standard production.

I am delighted to hear ideas of new work items and the need for new standards in the future. I also hear about challenges, like how to recruit more experts and how to reach out to younger people to be a part of our consensus process.

Climate change is the main global challenge for the future. The world's construction industry has been a part of the problem, but therefore we must provide parts of the solution. Our industry must reduce carbon emission and the carbon footprint in what we do. We must build resilience against the environmental consequences of climate change.

I believe that TC 59 should continue to deliver good standards for buildings and civil engineering works. However, we must listen to the market needs. In the future, standards will be implemented through software. We must therefore make sure that standards become machine readable and machine interpretable.

I am looking forward to learning more about the different subcommittees' work, and I hope to see several of you in Lima in November.

Best regards,
Jøns Sjøgren
TC 59 Chair
CEO Construction Products Norway

News from SC 8 "Sealants"

Revision of ISO 11600

ISO 11600 Building construction — Jointing products — Classification and requirements for sealants specifies the types and classes of sealants used in building construction according to their applications and performance characteristics. The requirements and respective test methods for the different classes are also given in this document.

The current version from 2002 will now be revised. During the time the project has been registered as a preliminary work item, round-robin tests have been organized for higher movement sealants and several experts have been participating in the tests. The Project Leader for the revision is Lorna Williams (UK).

Change of CM

There has been a change of committee manager in SC 8 "Sealants", Lumin Qian, who graduated from East China University of Science and Technology and obtained her master's degree in chemical engineering in 2013, became SC 8 Committee Manager in January. Before she started working in standardisation, she worked with chemical engineering in the automobile industry.

By Lumin Qian, SC 8 Committee Manager

New edition of ISO 21931-1 on sustainability assessment

The new ISO 21931-1:2022 Sustainability in buildings and civil engineering works — Framework for methods of assessment of the environmental, social and economic performance of construction works as a basis for sustainability assessment — Part 1: Buildings is now available. The document is part of a standards series in two parts where Part 2 covers civil engineering works.

The 2022 edition comes with a broader scope than its predecessor from 2010, which described a framework for methods of assessment of environmental performance. This new edition identifies and describes issues to be taken into account in the development and use of methods of assessment of the environmental, social and economic characteristics, aspects and impacts of new or existing buildings.

These relate to the building’s design, production of construction products, materials and components, construction, operation, maintenance and refurbishment and end-of-life processes.

ISO 21931-1 is applicable to the assessment of the building (or part thereof) and the external works within its site (curtilage).

The standard has been developed by SC 17/WG 4 "Environmental performance of buildings” under the leadership of Tomonari Yashiro (Japan).

Text adapted from ISO 21931-1:2022.

Photo: Pixabay.com

First plenary of SC 19 "Prefabricated building" completed

The new subcommittee SC 19 "Prefabricated building" had its first plenary meeting on 20 and 21 June. The meeting was held as a virtual meeting and 20 participants from 9 ISO members, the TC 59 leadership and ISO/CS attended.

At this meeting, the members agreed on an adjusted scope. This will now be balloted for ratification in TC 59. It was also agreed to establish a Chair’s Advisory Group (CAG) for discussion of key issues and provision of strategic advice to the SC. There will be a call for members to this group and participation is limited to P-members and liaisons. A working group will also be set up to start working on terminology specific for prefabricated building. A call for candidate convenor will be launched.

Provided that TC 59 agrees, the new SC will also take over the responsibility for a set of relevant standards directly under TC 59 that were developed by former subcommittees that have since been disbanded. This will also be balloted in TC 59.

SC 19 is chaired by Boyue Yin (China) and the Committee Manager is Binhui Lin (SAC).
ISO 22057 Data templates for use of EPDs in BIM is published

In April, ISO 22057 Data templates for the use of environmental product declarations (EPDs) for construction products in building information modelling (BIM) developed by SC 17 “Sustainability in buildings and civil engineering works” was published. The new standard enables the use and availability of environmental data sourced from environmental product declarations (EPD) in Building Information Modelling.

The new standard from SC 17 provides 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.

ISO 22057 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.

This document is applicable to structuring generic LCA data for use within a BIM environment, as these data are required in the absence of suitable EPD data to enable assessment of the environmental performance at the construction works level.

According to ISO 22057, environmental data from EPDs can be incorporated in a common data model, called data template. The data templates describe any construction product in a way that can be traced to a credible source, such as the product standards that determine how product performance should be declared and the methods it is tested against. This data model provides all actors with a common technical language that enables them to capture and share accurate and reliable information, which now also includes environmental data currently available in the standardised EPD format.

Today, carbon footprint calculations and life cycle assessment studies (LCA) are becoming an integral part of project requirements, and there is a growing need to develop common processes for working with sustainability goals in an efficient way.

ISO 22057 was written by SC 17/WG 3 “Environmental declaration of products”, convened by Anne Rønning (Norway).

By Marianne Werner, Secretary of SC 17/WG 3.

2022 TC 59 plenary week in Lima

We are very grateful to the Peruvian member body, INACAL, for inviting us to Lima. While all meetings are planned as hybrid meetings, we do hope as many of you as possible will be able to travel, as we are very much looking forward to meeting face to face again.

Meeting in Lima are SC 13 “Organization and digitization of information about buildings and civil engineering works, including building information modelling (BIM)”, SC 17 “Sustainability in buildings and civil engineering works” and SC 18 “Construction procurement”, all with working groups, as well as TC 59 “Buildings and civil engineering works”.

The meeting week starts on Monday 28 November and ends with the plenary meeting of TC 59 on Thursday 1 December at 15:00-19:00 (PET).

New project proposed on seismic resilience assessment and strategies

The Standardization Administration of China (SAC) is proposing a new technical report for development in TC 59/WG 4 “Resilience of buildings and civil engineering works”. The proposed title is “Buildings and civil engineering works – Seismic resilience assessment and strategies – Compilation of relevant information”.

According to the proposal, the proposed document will collect and summarize the relative documents on the assessment framework and metrics and enhancement guidelines for seismic resilience issued in various countries and regions. It will provide engineers, governments, and other stakeholders with principles and strategies for improving the seismic resilience of new and existing buildings through

- assessment methods of seismic resilience, including engineering resilience, economic resilience, and social resilience of buildings and civil engineering works before, during, and after earthquakes, and
- improvement methods of seismic resilience, including the engineering resilience of new and existing buildings and civil engineering works, and the organizational resilience and ambient resilience related to engineering resilience.

The proposed document may also be of relevance to other ISO committees and the balloting period until 1 August will be used to inform these committees for potential collaboration. They are also invited to provide feedback on the proposal.

Published since the previous newsletter (December 2021)

ISO 4781:2022, Building and civil engineering sealants — Determination of application life (SC 8)
ISO 4784:2022, Building and civil engineering sealants — Determination of surface cure time (SC 8)
ISO 11617:2022, Building and civil engineering sealants — Determination of changes in cohesion and appearance of elastic weatherproofing sealants after exposure of statically cured specimens to artificial weathering and mechanical cycling (SC 8)
ISO 22057:2022, 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) (SC 17)
ISO 21931-1:2022, Sustainability in buildings and civil engineering works — Framework for methods of assessment of the environmental, social and economic performance of construction works as a basis for sustainability assessment — Part 1: Buildings (SC 17)
ISO 22058:2022, Construction procurement — Guidance on strategy and tactics (SC 18)