

Newsletter April 2021

Members and liaisons of ISO/TC 211, geospatial standard users, and geospatial community,



No, it is not just the sun returning to my home office in the northern hemisphere.

In this edition of the newsletter, I will take off my reading glasses, look beyond my spreadsheets, strategy meetings and internal business activities.



I will go outside, and try to see what I can observe looking in. How does ISO/TC 211 contribute to organizations and nations in reaching interoperability, and contributing to the overall global development goals?



Geodetic Coordinate Reference Systems

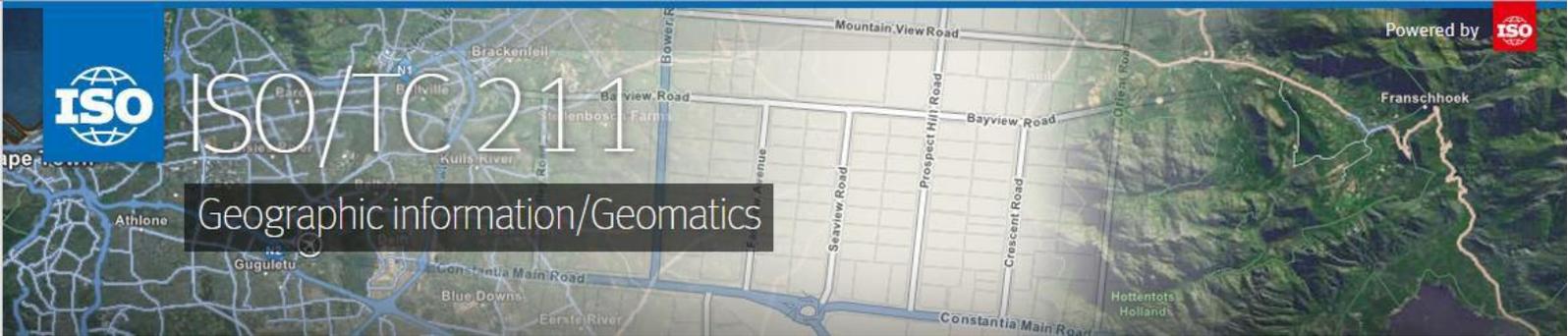
The ISO Geodetic Registry is freely accessible through an online system at <https://geodetic.isotc211.org>. The Registry supports the implementation of the Global Geodetic Reference Frame (GGRF) under the auspices of the UN expert committee Global Geospatial Information Management (UN-GGIM) and its Sub-Committee on Geodesy. The use of the Registry is recommended as the authoritative source of information on geodetic reference systems and transformations in order to foster the interoperability of geodetic data and products among UN Member States.

Many geospatial users today are familiar with the [International Association of Oil & Gas Producers \(IOGP\)](#) EPSG Dataset and Registry. Cooperative efforts are currently underway to investigate the possibilities of linking the ISO and EPSG registries for the benefit of users.

General purpose geospatial standards

The scope of geospatial standardization is well described in the Strategic Pathway 6 on Standards (SP6) of the [UN-GGIM/Integrated Geospatial Information Framework \(IGIF\) Implementation Guide](#), jointly prepared by ISO/TC 211, [Open Geospatial Consortium \(OGC\)](#), and [International Hydrographic Organization \(IHO\)](#), the Standards Development Organizations (SDOs).

Several of these standards are so basic and widely used that we take them for granted. For example, the ISO/TC 211 standards that describe data in a uniform way (specifications, metadata and quality, and geographic point location by coordinates). As a data user, you may want to assess the data, just as a consumer would expect to find an understandable content declaration on a food product.



The UN Sustainable Development Goals of the 2030 Agenda

Other standards are directed towards specific “fundamental data” or sustainable development goals (SDGs). The ISO standards in the areas of Land Administration, Land Cover and Land Use, and Addressing, are all well received in the UN-GGIM community, and are now under revision to better meet the global needs.



In the fight against COVID-19, several countries report the use of the ISO 19160-1 standard on addressing, or a national profile of this standard. In South Africa, the standard for addressing is now freely available. In New Zealand, the Ministry of Health, in May 2020, mandated the use of the addressing standard for public health purposes. In China, address data based on the standard is widely used in monitoring and blocking the contagion chain of the disease. Similar use is found in the Republic of Korea.

New technique and new users



ISO/TC 211 standards are being developed to align with the strategic business environment of the committee, which now reaches far beyond traditional mapping. ISO/TC 211 is visible to varying degrees (depending on the level of maturity for cooperation) in other ISO committees in the fields of: Sustainable Cities, Smart Cities, Digital Twins, Artificial Intelligence and BIM.

A successful joint work is the ISO/TC 211 and ISO/TC 204 Intelligent Transportation Systems

...a breakthrough in 2020...

alignment of the geographic concepts for autonomous vehicles. This collaboration had a breakthrough in 2020, when the two TCs reached an agreement on how to proceed with a common data model for both communities. In the years to come, users and stakeholders from all over the world will benefit from this effort by decreasing transformation costs for the public sector and speeding up time to market for the industry. **(Figure: Courtesy ITS Norway)**

Digital transformation

The digital transformation of public administrations, also involving business and citizens, includes moving out of our traditional domain in the direction of location enablement and location intelligence. New users are involved but their requirements are not necessarily known, and the geospatial literacy may vary. However, they need geospatial information. In a study of the infomediary sector in the European Union it was found that geospatial data is the most requested type of data by the business community.

Location data should rely on geospatial standards as developed by the SDOs. Initial work can now be seen in finding ways to align geospatial standards to meet the needs for location in public administration, and the liaison relations between the geospatial community and the international and regional bodies in this field are important.

Knowledge transfer

A Guide to the Role of Standards in Geospatial Information Management



The Standards Guide developed by the SDOs and endorsed by UN-GGIM is now under revision for its third version, and planned to be launched in connection with the upcoming UN-GGIM 11th session. The need for awareness, guides for using standards, examples and use cases cannot be overestimated.

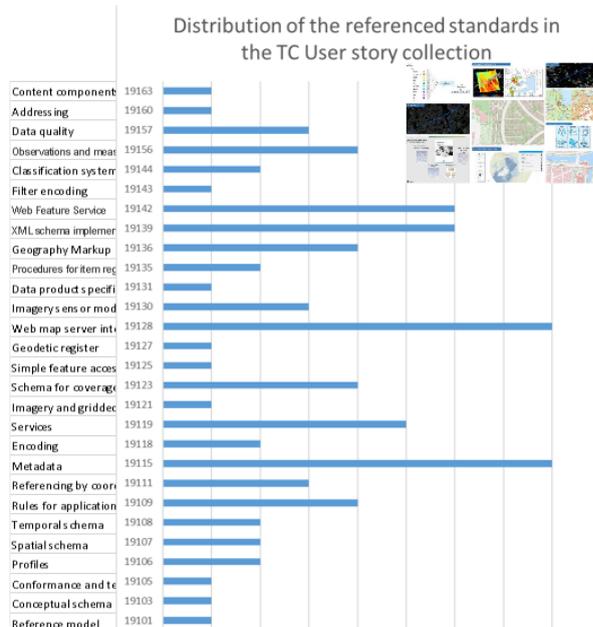
The Guide complements the IGIF Strategic Pathway 6 on Standards (SP6), providing the specific guidance and options to be taken by countries when implementing the IGIF. This Guide, and the IGIF, have been developed as a result of extensive consultations with experts from around the world working under the auspices of the UN-GGIM.

Advancing implementation of standards

The ISO/TC 211 User Story collection is a response to user feedback on the need to demonstrate that not only are standards adopted in legislation and national framework, they are also in operation.

At the ISO/TC 211 web site some 20 stories with over 80 references to standards are found. This is however only the tip of the iceberg (as we see in other parts of this newsletter). Not surprisingly, standards for describing data and sharing data through web services are frequently appearing in user stories.

In addition, the Defence Geospatial Information Working Group (DGIWG) and IHO standards are based on standards from ISO/TC 211 and OGC.



Finally, I feel lucky every day to work with so many dedicated and inspiring people within this amazing committee.

I hope to see you at the 52nd plenary week, scheduled for June 4–11. Keep an eye on the committee website of LinkedIn.

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[ISO/TC 211 web site](#)

[ISO/TC 211 LinkedIn page](#)

The Newsletter is made by Outreach at ISO/TC 211. On the [committee website](#) you find more on published standards, ongoing projects (programme of work), and meetings. Find earlier versions of the newsletter [here](#). For any questions or comments, please contact the committee manager Mats Åhlin, Swedish Institute for Standards (SIS) mats.ahlin@sis.se.