



Agenda Item 21.3:
Updates by other organisations in liaison

Agenda Item 21.3b:
Update from the IEC



2022-09-21

INTERNATIONAL ELECTROTECHNICAL COMMISSION

SUBJECT

Report to 57th CIML Meeting, 18th to 20th October 2022 (online)

IEC in a nutshell

The IEC is a global, not-for-profit membership organization, whose work underpins quality infrastructure and international trade in electrical and electronic goods. Our work facilitates technical innovation, affordable infrastructure development, efficient and sustainable energy access, smart urbanization and transportation systems, climate change mitigation, and increases the safety of people and the environment.

The IEC brings together more than 170 countries and provides a global, neutral and independent standardization platform to 20'000 experts globally. It administers 4 Conformity Assessment Systems whose members certify that devices, systems, installations, services and people work as required.

The IEC publishes around 10'000 IEC International Standards which together with conformity assessment provide the technical framework that allows governments to build national quality infrastructure and companies of all sizes to buy and sell consistently safe and reliable products in most countries of the world. IEC International Standards serve as the basis for risk and quality management and are used in testing and certification to verify that manufacturer promises are kept.

<https://www.iec.ch/homepage>

Main Activities

The two main activities of the IEC are standards development and conformity assessment. These two activities are managed by two Boards, the Standardization Management Board (SMB) and the Conformity Assessment Board (CAB). There is also a third board, the Marketing Strategy Board (MSB), that looks out into the future to new technologies and new standardization and conformity assessment needs. All three boards are reporting to the IEC Board (IB) which reports to the IEC General Assembly (AG).

<https://www.iec.ch/standards-development>

<https://www.iec.ch/conformity-assessment>

Strategic Plan

IEC approved a new Strategic Plan earlier this year. It provides nine goals based on the following three strategic themes:

- Enabling a digital and all-electric society
- Fostering a sustainable world
- Leading on trust, inclusion, and collaboration

CAB, MSB and SMB have developed operational plans to meet the objectives of the Strategic Plan.

<https://www.iec.ch/strategic-plan>

Some Activities of Interest

SDGs

IEC International Standards and IEC Conformity Assessment (CA) Systems contribute to all of the 17 SDGs. They provide the foundation that allows all countries to put in place sustainable, resilient infrastructure to stimulate economic development and innovation and apply global best-practice to manage quality and risk.

IEC International Standards embody global consensus on methodologies, processes, and specifications and are often used in regulations. They enhance access to technology and innovation, promote the development, transfer, and dissemination of environmentally sound technologies, and facilitate participation in global trade.

<https://www.iec.ch/sdgs>

SMART standards

The IEC Board Task Force on SMART Standardization and Conformity Assessment and the ISO SMART Steering Group have developed a collaboration framework to ensure effective coordination (and alignment wherever appropriate) between the two organizations on the topic of SMART standards and conformity assessment. This collaboration framework defines joint activities to optimize the use of resources coming from both sides and avoid duplication of work. It has been endorsed by the IEC Board and by the ISO Council at their February meetings.

Additionally, IEC approved the release of extraordinary funding to support the launch of SMART pilot projects in Q3/2022. The IEC Secretariat has established an Implementation Group, consisting of project management and IT resources, to assist with piloting the SMART Standards Concept.

DAC

The Diversity Advisory Committee (DAC) has the task to propose guidance, to the IEC Board for its selection process of members of the other bodies reporting to the IEC Board. Guidelines may include appropriate skills and competencies matrices, gender aspects, geographical considerations, best practices for diversity performance indicators and recommended monitoring measures, as needed at any level of the Commission.

Such guidelines and provisions of recommendations shall also be available to National Committees for consideration in their nominations, including for membership on the IEC Board.

AI with Trust conference

The AI with Trust conference organized jointly by IEC and the Swiss Federal Department of Foreign Affairs (FDFA) took place on 16-17 May 2022 in Geneva. It brought together numerous speakers and participants from around the world, both in person and online.

The conference explored the interplay between legislation, standardization and conformity assessment and what is needed to harmonize international efforts for artificial intelligence. It was a follow-up to the 13 October 2021 online workshop on the same topic.

The IEC Secretariat, together with FDFA, is now considering the development of a platform to continue the dialogue between relevant stakeholders.

<https://www.aiwithtrust.org/>

World Standards Cooperation (WSC)

The CEOs of IEC, ISO and ITU met in May 2022 to discuss the ongoing collaboration of the three organizations under the auspices of WSC. The CEOs were updated by the ITU on World Standards Day activities, and by the IEC on the G20 International Standards Summit. The three organizations also shared information about their plans to participate in COP27.

The WSC members met for the annual meeting in February 2022 which included a keynote address by a COP26 Climate champion. A high-level meeting took place with the WTO in March 2022 which identified potential areas for closer collaboration.

World Standards Day

WSD has selected the theme of SDGs as part of its multi-year campaign with a focus on sustainable environment in 2022. A website initially launched in 2021 provides many tools and resources for members to participate and promote WSD. The aim is to increase awareness about the role of standards for the achievement of SDGs with a broader public.

<https://www.worldstandardsday.org/home.html>

G20

Under the auspices of the Italian G20 Presidency, UNI and CEI, together with IEC, ISO and ITU organized the 2021 International Standards Summit on 28 October 2021 to highlight how standardization organizations can contribute to sustainability. It also included a media conference. The panel session was attended by the leaders of the three organizations and resulted in a [call to action](#) for G20 members. As a result, the [final declaration of the G20](#) expressly mentioned the need for standardization.

Preparations are now underway for the 2022 edition of the G20 International Standards Summit which will take place in Bali, Indonesia on 20 October as an official side-event of the G20 Ministerial Meeting. The event is organized by the Indonesian Standardisation Agency

BSN, together with the IEC, ISO and ITU, with the participation of the World Trade Organization (WTO). It will showcase how the institutional framework of the international standards bodies can help governments and regulators to implement objectives related to health, digital transformation, sustainable energy transition and the SDGs. Like in 2021, the G20 country members of the IEC, ISO and ITU will prepare a statement and a call to action will be shared with the G20 countries.

Climate change and COP26

The IEC has applied for observer status at the United Nations Climate Change Conference (UNFCCC) which should allow for participation in COP27. Discussions are underway on how the IEC can showcase to regulators how standards contribute to climate mitigation.

Close cooperation between IEC and ISO resulted in a [Climate action kit](#) with input by 13 IEC members with use cases on how standards have been used for regulatory action in support of the environment. The kit was shared in advance of COP26 and on the [IEC website](#).

In his opening speech at COP26, the UN Secretary General underlined the need for an expert group to prepare standards in this context. The IEC, ISO and ITU reacted with a media release and a letter offering their global, consensus-based institutional framework for this purpose.

Digital Transformation

There are a number of initiatives that have been undertaken at various levels, within IEC, on the standards development side and the conformity assessment side on the topic of digital transformation. Various internal working groups have been established and liaisons setup with external organizations (for example with OIML DTG).

IEC CA Systems' activities

IECEE

As a step towards a new normal, IECEE successfully hosted its first hybrid Committee for Testing Laboratories (CTL) meeting in Boston, US. The IECEE Management Committee meeting (CMC) took place in June in Halifax, CA.

<https://www.iecee.org/>

IECEX

A new IECEX working group, which cooperates with ISO TC 197 *Hydrogen technologies* and IEC TC 105 *Fuel cells*, has prepared a final proposal on the integration of ISO TC 197 standards and hydrogen fuel dispensers to be covered by IECEX certification for consideration at the September 2022 annual IECEX Management Meeting. This will enable special provisions for IECEX certification of hydrogen fuel dispensers and Certification of Persons on Hydrogen Safety, including support for the emerging green hydrogen economy.

The IECEX Executive Secretary participated in a panel discussion on hydrogen organized by IRENA.

<https://www.iecex.com/>

<https://www.youtube.com/watch?v=Q7pqu8J9OJA>

IECQ

Working Group 14 on *Green Approach* and IEC TC 111 on *Environmental standardisation* continue with work on CA services covering eco-design based on IEC 62430 with discussions underway on appropriate CA services for Carbon Footprint Declarations.

<https://www.iecq.org/index.htm>

IECRE

G-554 Small Wind reached final drafting stage for the process of conformity assessment certification of small wind turbines. The adjustments and modifications for the IECRE Peer Assessment process reached an important milestone with the approval of the updated operational documents. The IECRE RE Management Committee (REMC) meeting is scheduled to take place face-to-face in Frankfurt from 10-14 October, accompanied by several working group and stakeholder meetings.

<https://www.iecre.org/>

Affiliate Country Programme

As of August 2022, 86 countries participate in the Affiliates Country Programme (ACP). Somalia and Timor Leste are the most recent countries to have joined the programme.

During the 2021 General Meeting, the ACP organized three events which were attended by 88 delegates from 38 countries.

- [Affiliate Forum](#) entitled *How to establish a NEC and attract power utilities and regulators in the NEC work?* presented three case studies from Costa Rica, Côte d'Ivoire and Uzbekistan.
- [Workshop for Industrializing Countries](#) entitled *UN SDG 5 on Gender Equality and diversity*.
- [Affiliate NEC Secretaries and Presidents Workshop](#) entitled *How to attract local companies and stakeholders* with case studies from Ecuador, Israel, Mongolia, and Norway to encourage affiliate countries to implement similar strategies.

As part of the Affiliate Conformity Assessment (ACA) activities, two workshops took place on IECEx and the IECRE wind energy scheme.

Congo and Cote d'Ivoire concluded a mentoring partnership.

Young Professional programme

Since its inception in 2010, the IEC Young Professionals (YP) Programme has welcomed 753 YPs of which 218 have maintained an active involvement at the international level.

The YP Programme is held each year in conjunction with the IEC General Meeting (GM).

A total of 109 YPs from 46 IEC National Committees participated in the 2021, of which 40 participated in person and 69 remotely.

The YPs were able to observe either SMB or CAB meetings to learn more about the IEC standardization and conformity assessment work. A *Standard in a Day* bootcamp, organized by the IEC Academy, allowed YPs to contribute to the development of a standard. They learned about different roles and IEC processes, including drafting, commenting, and consensus building.

Following its success in 2021, the *Standard in a Day* bootcamp will be held again at the 2022 IEC GM, followed the next day by a CA Bootcamp, where the YPs will be asked the question, "you now have a standard, what's next?" where they will learn about the different users of standards (manufacturers, governments, consumers, retailers, conformity assessment bodies, etc), their perspectives and their needs.

<https://www.iec.ch/acp>