



Report to WTO TBT Committee February 2020

The following organizations are mentioned in this report:

ACCSQ ASEAN Consultative Committee on Standards and Quality

AFEO ASEAN Federation of Engineering Organisations
AFSEC African Electrotechnical Standardization Commission
AIDMO Arab Industrial Development and Mining Organization

APCF Asian Pacific Community Fund
ARE Alliance for Rural Electrification
ASEAN Association of Southeast Asian Nations

ASTM ASTM International, formerly known as American Society for Testing and Materials

BIS Bureau of Indian Standards

BSTI Bangladesh Standards and Testing Institution

CEN-CENELEC European Committee for Standardization - European Committee for Electrotechnical Standardization

COPANT The Pan American Standards Commission

COSQC Central Organization for Standardization and Quality Control

DRI Department of Research and Innovation (Myanmar)

EAC East African Community
EEC Eswatini Electricity Company

ESERA Eswatini Energy Regulatory Authority FDA Food and Drug Administration (US)

GSO GCC (Gulf Cooperation Council) Standardization Organization

IMDR International Medical Device Regulators Forum

INACAL National Quality Institute (Peru)

IRENA International Renewable Energy Agency

JISC Japanese Industrial Standards Committee

KATS Korean Agency for Technology and Standards

KEBS Kenya Bureau of Standards
PASC Pacific Area Standards Congress
PEWA Power & Electricity World Africa

PTB Physikalisch-Technische Bundesanstalt, the national metrology institute of the Federal Republic of Germany

RES: West Africa Regional Energy Summit: West Africa
SADC Southern African Development Community
SAEEC Southern African Energy Efficiency Confederation
SARSO South Asian Regional Standards Organization

SWASA Eswatini Standards Authority
TCTP Third Country Training Programme

UNIDO United Nations Industrial Development Organization

The following IEC acronyms are used in this report:

ACAS Affiliate Conformity Assessment status

ACB Academy & Capacity Building
CAB Conformity Assessment Board
IEC-AFRC IEC Africa Regional Centre
IEC-APRC IEC Asia-Pacific Regional Centre
IEC-LARC IEC Latin America Regional Centre

NC National Committee

NEC national electrotechnical committee SMB Standardization Management Board

TC technical committee

IEC activities in developing and industrializing countries

October 2019 - January 2020

This report to the WTO TBT Committee highlights the activities of the IEC and its regional offices, IEC members and countries participating in IEC Affiliate Country Programme, related to the support given to developing and industrializing countries to participate in, and gain value from, IEC international standardization and conformity assessment activities.

IEC Regional Centres activities and regional collaboration

The IEC has six administrative offices around the world with one office located on each continent. IEC activities with developing and newly industrialized countries are primarily managed through three regional centres located in Nairobi, Kenya, Singapore and São Paulo, Brazil in coordination with the IEC Central Office in Geneva, Switzerland.

The IEC seeks to enhance knowledge and competencies within developing and newly industrialized countries so that they can reap the benefits of international standardization and conformity assessment and become active participants in the IEC community.

IEC Africa Regional Centre

The IEC Africa Regional Centre (IEC-AFRC), located in Nairobi, Kenya, is the IEC regional focal point for Africa with the aim of promoting awareness about the IEC and increasing the implementation of IEC International Standards and IEC Conformity Assessment Systems. The IEC supports regional participation in its activities regardless of the individual country's level of commitment. More information about IEC-AFRC is available on the IEC website.

Since the previous report, the IEC-AFRC has participated in a number of events that have allowed it to promote the work of the IEC and encourage the adoption of international standardization and conformity assessment.

On 14 October 2019, IEC-AFRC gave a keynote presentation on *Videos create a global stage* at the World Standards Day celebration hosted by KEBS in Nairobi, Kenya. The event was attended by more than 700 participants.

- → From 11-12 November 2019, IEC-AFRC held a contact visit with the national electrotechnical committee (NEC) of the Kingdom of Eswatini, organized by SWASA. During the visit, the IEC provided an overview of its activities to 20 participants representing the NEC and its stakeholders, including EEC, ESERA and SWASA.
- → From 14-15 November 2019, IEC-AFRC attended the 14th SAEEC event held in Pretoria, South Africa. This important energy event provides attendees with the opportunity to better understanding the economic and market forces, new technologies, regulatory developments and industry trends currently shaping the energy sector. Through its participation at the SAEEC event, which was attended by over 200 delegates, the IEC promoted awareness about its work and networked with potential IEC experts. Additional information can be found on the event website.
- From 28-29 November 2019, IEC-AFRC participated in the 53rd meeting of the High Consultative Committee for Standardization of AIDMO held in Rabat, Morocco. More than 50 participants from AIDMO member countries attended as well as representatives from ASTM, COSQC, the League of the Arab States, and GSO. The two IEC Regional Directors updated participants on IEC activities, and specifically about the IEC Conformity Assessment Systems, online deliverables, regional and national adoption of IEC Standards and the IEC Affiliate Conformity Assessment status (ACAS) e-learning modules. The IEC also held several bilateral meetings to discuss an adoption agreement with AIDMO.
- → From 2-3 December 2019, IEC-AFRC participated in the 4th annual RES: West Africa held in Dakar, Senegal. The regional energy summit brought together investors, project leaders and utilities stakeholders to present the latest developments on enhancing the energy mix within West Africa. The conference was attended by over 200 delegates and 12 exhibitors. It was an opportunity for the IEC to network with experts and meet with the NEC of Senegal as well as

website.

PTB from Germany to discuss its project on the quality of photovoltaic (PV) modules sold on the Senegalese market.

IEC Asia-Pacific Regional Centre

The IEC Asia-Pacific Regional Centre (IEC-APRC), based in Singapore, is the focal point for the IEC in the region, helping to promote awareness, increase the use of IEC International Standards and IEC Conformity Assessment Systems and enhance the participation in the activities of the IEC. In addition, IEC-APRC provides support to IEC technical committees and subcommittees. More information about IEC-APRC can be found on the IEC

- → From 5-6 November 2019, IEC-APRC participated in the ASEAN-Australia Digital Trade Standards Initiative Workshop 3 held in Jakarta, Indonesia. The workshop provided an update on ASEAN-Australia Digital Trade Standards Initiative while the training focused on two key topics: stakeholder engagement and cyber security. More information can be found online.
- → Also in early November, the SARSO governing board annual meeting took place in Dhaka, Bangladesh, as part of its mission to manage the development of regional standards. All SARSO members were present. IEC-APRC provided a comprehensive overview of the latest developments in the IEC, from the establishment of new technical committees and the outcome of the 83rd IEC General Meeting to recent work on 5G technology and cyber security. The overall aim was to create awareness around the use of standards.
- The following day, the IEC delivered a training workshop to the secretariat of BSTI following Bangladesh's recent membership to the IEC. The training provided an overview of the processes and tools used in the IEC and how the IEC can effectively support the National Committee (NC) of its new member.
- On 14 November 2019, the IEC NC of Singapore held a workshop on the benefits of standardization and to encourage the participation from young professionals. Over 60 engineers, primarily working in the field of electrotechnology, participated. IEC-APRC provided information on the international aspects of standardization.
- → From 18-20 November 2019, IEC-APRC attended ACCSQ Working Group 1 on Standards (WG 1) meeting held in Brunei Darussalam to examine new areas of standards harmonization in the southern Asia region. The meeting also

- provided the opportunity for IEC-APRC to share information about IEC work relating to smart cities, smart manufacturing, energy efficiency and renewable energy.
- On 26 November 2019, DRI of Myanmar hosted the 52nd meeting of ACCSQ in Yangon. ACCSQ oversees the harmonization of standards, conformity assessment and technical regulations for ASEAN members. Over 60 standardization and regulatory bodies participated and the IEC shared its latest developments with a specific focus on the results from the 83rd IEC General Meeting. A side meeting was held with Director General of DRI to discuss steps to support Myanmar's adoption of IEC Standards and the process for setting up a NEC.
- → From 26-27 November 2019, BIS and CEN-CENELEC hosted a joint workshop entitled Emerging Challenges in New Era of Standardization: Exchange of Best Practices in New Delhi, India. The workshop sought to share best practices, knowledge and experiences between India and Europe, focusing on such topics as how to effectively participate or enhance engagement in international standardization work as well as how to increase the speed and efficiency of the standardization process. About 60 participants from government and industry were present and IEC-APRC gave a presentation to encourage participation in the development of IEC Standards.
- → On 5 December 2019, the US Department of State, the Singapore Ministry of Foreign Affairs and the US Department of Commerce hosted the TCTP Workshop on Smart Cities for ASEAN members and Timor-Leste. Approximately 30 government and industry representatives from across the region participated in the training programme. IEC-APRC provided input for the panel discussion about the role of standardization for smart cities with the aim to help create awareness about IEC standardization work in support of smart cities.
- → Also on 5 December 2019, the IEC participated in the ASEAN Electrotechnical Symposium & Exhibition 2019 held in George Town, Malaysia. The AFEO organized the symposium to promote the harmonization of standards for electrical installations. The 130 attendees were primarily representatives from government bodies and industry stakeholders in the region. More information is available on the IEC website.
- → On 6 December 2019, China Southern Power Grid organized the *China Southern Power Grid International Technology* Forum to provide an international forum for experts to share

- technical expertise in the field of power grids. IEC-APRC provided a keynote address during the technology forum.
- On 12 December 2019, JISC, with support from the IEC and APCF, organized a seminar in Kuala Lumpur, Malaysia, entitled Standards to Support Applications of New Digital Technology. Some 30 participants from Indonesia, Japan, Malaysia, Singapore, Thailand and Vietnam attended, representing standardization bodies, industry and academia. It was an opportunity for IEC-APRC to encourage the participation in IEC work related to electronics assembly, semiconductor devices and electromagnetic compatibility (EMC).

IEC Latin America Regional Centre

The IEC Latin America Regional Centre (IEC-LARC), located in São Paulo, Brazil, is the focal point for IEC activities in Latin America. It promotes awareness of IEC work, encourages the adoption of IEC International Standards and IEC Conformity Assessment Systems, and advocates participation and membership by countries in the region. More information about IEC-LARC is available on the IEC website.

- On 26 November 2019, IEC-LARC participated in the International Quality Seminar organized by INACAL in Lima, Peru. Due to local interest and plans to generate more energy from renewable sources, IEC-LARC gave a presentation about IEC quality and clean energy. The event was opened by the Production Minister and reached an audience of 200 individuals from government, academics and industry stakeholders.
- On 4 December 2019, by invitation from the General Directorate of Standards of the Secretariat of Economy of Mexico, the IEC participated in the seminar *International* Vision for Standardization and Conformity Assessment. Before an audience of 500 participants representing government, regulatory agencies, standardization, accreditation, metrology and conformity assessment bodies, academia and stakeholders from the private sector, the IEC gave a presentation on the current and future challenges and trends in international standardization.

List of upcoming events:

- → UNIDO workshop, 23-29 February 2020, Phnom Penh, Cambodia
- → EAC meeting, 26-29 February 2020, Arusha, Tanzania
- → SADC 35th annual meeting, 8-13 March 2020, Dar es Salaam, Tanzania

- → ARE Energy Access Investment Forum with Zambia NEC, 17-28 March 2020, Lusaka, Zambia; Dar es Salaam, Tanzania; Moroni, Comoros
- → PEWA conference, 30 March-2 April 2020, Johannesburg, South Africa
- → DRC NEC, 5-10 April 2020, Goma, DRC
- → WTO TBT National Workshop, 22-24 April 2020, Peru, Lima
- → 2020 COPANT General Assembly, 26-29 April 2020, Rio de Janeiro, Brazil
- → Africa Utility Week Conference, 11-15 May 2020, Cape Town, South Africa
- → PASC, 18-21 May 2020, Vladivostok, Russia

Collaboration with the WTO

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Through its regional centres, the IEC continues to pursue its close collaboration with the WTO TBT Committee.

Since the previous report, the IEC has participated in the WTO TBT Regional Workshop for French-speaking African countries held on 1-3 October 2019, in Abidjan, Côte d'Ivoire. The aim of this workshop was to train participants on the TBT agreements.

IEC Affiliate Country Programme

The IEC Affiliate Country Programme is aimed at providing assistance to developing countries that do not yet have the necessary infrastructure and technical expertise to participate fully in IEC activities as an IEC member. Participants join the programme free of charge on invitation from the IEC General Secretary and CEO.

It offers an efficient and well-organized programme designed to help affiliate countries develop the appropriate knowledge and competencies. Participants can benefit from a quota of free IEC International Standards, online e-learning materials, webinars, standardized and customized training, capacity building events, mentoring arrangements as well as personalized support from the IEC Central Office and its regional offices.

Ghana and Uganda are new IEC Members

In November 2019, Ghana officially became IEC Associate Member. Ghana joined the IEC Affiliate Country Programme in 2001 and has since successfully benefited from the programme by accessing some 400 IEC publications free of charge and

declaring the national adoption of 493 IEC International Standards. Ghana also benefited from the ACAS programme and signed the ACAS Pledge in 2013, followed by the signing of the ACAS Declaration in 2018.

In January 2020, Uganda became IEC Associate Member following an active participation in the IEC Affiliate Country Programme since 2001. Within the terms of the programme, Uganda ordered 388 IEC publications and declared the national adoption of 269 IEC International Standards. Uganda signed both the ACAS Pledge and ACAS Declaration in 2018.

→ 173 countries are currently part of the IEC family: 62 full members, 26 associate members and 85 affiliate countries

Update on participation

In November 2019, the Kingdom of Eswatini established its NEC with a senior energy officer from the Ministry of Natural Resources and Energy as its President and a standards development officer from SWASA as its Secretary. NEC stakeholders include representatives from the agriculture industry, government entities and commissions, consumer associations, universities, regulators, professional and teaching institutions.

In December 2019, Uzbekistan declared the establishment of its NEC. Its President is the Director of the Institute of Standards at the National Scientific-Research Institute for Standardization, Certification and Technical Regulation while the Secretary is from UZSTANDARD agency, the national body for standardization, metrology and certification. The NEC is mainly constituted of private sector representatives, professional and teaching institutions, governmental groups, consumer associations as well as power generation and distribution authorities.

The IEC commenting process is a benefit granted to countries that actively participate in the IEC Affiliate Country Programme. Active participation is defined as having selected up to 11 IEC technical committees and appointed an expert to participate in each of the selected TCs as well as having established a NEC. In December 2019, Ecuador submitted one comment form to the IEC Affiliate secretariat, regarding the committee draft stage document IEC 60076-25 on power transformers. The comment was forwarded for consideration by the secretariat of the relevant technical committee before the end of the committee draft commenting stage and included in the compilation of comments. More information about the commenting process for affiliate countries is available on the IEC website.

The national adoption trend continues in IEC affiliate countries. In November 2019, Mali declared the national adoption of its first 12 IEC International Standards. In December 2019, Uzbekistan declared the national adoption of 71 IEC International Standards and was granted the Affiliate Plus status, which allows countries to access an additional 200 IEC Standards. Two other countries have also declared additional adoptions since the last report: Mongolia in November 2019 and Myanmar in December 2019.

→ Out of the 85 IEC affiliate countries, 32 benefit from the IEC Affiliate Plus status. This entitles them to access 400 free copies of IEC International Standards for adoption instead of 200, and gives them priority, if they wish to participate in the IEC Affiliate Mentoring Programme.

To date, 8 374 national adoptions of IEC International Standards have been declared under the terms of the IEC Affiliate Country Programme since its launch in 2001.

Mentoring programme

The IEC is pleased to report the renewal of the partnership within the IEC Affiliate Mentoring Programme between the NC of the United Kingdom and the NEC of Namibia. The renewal was signed on 24 October 2019 during the 83rd IEC General Meeting and extends the previous partnership agreement for an additional two-year period. During the meeting, the representatives from Namibia and the United Kingdom established the objectives and plans for their partnership. Namibia has shown great interest in learning how to strengthen its existing NEC through various funding models and fully functional mirror committees.

IEC conformity assessment activities

As an organization, IEC has two core pillars: international standard development and conformity assessment. Since its establishment in 1906, the IEC is well known for its standardization work in the electrotechnology sectors. However, in support of standardization, the IEC has also been operating conformity assessment activities for over 40 years by providing the framework and systems that support an internationally accepted standardized way of conducting testing, inspection and certification of equipment, components, processes and assessment of competent persons. This is facilitated by the operation of conformity assessment

schemes and programmes being run within dedicated IEC Conformity Assessment Systems:

- → IECEE covering equipment, components, EMC, via the certification bodies scheme, www.iecee.org
- → IECEx covering equipment, components, services and personnel certification in the explosive atmospheres' domain, www.iecex.com
- → IECQ covering electronic components and processes associated with the supply chain, www.iecq.org
- → IECRE covering equipment, components and systems for the renewable energy sectors, www.iecre.org

IEC Conformity Assessment Systems and the services they provide are gaining greater attention and use among developing and newly industrializing countries.

IEC affiliate conformity assessment status

As part of its commitment to involve developing countries in all aspects of IEC work, including IEC Conformity Assessment Systems, the IEC is pleased to announce that Gambia has signed the ACAS Declaration. This will allow users in this country to benefit from capacity building resources in the field of IEC conformity assessment activities, including access to the ACAS e-learning course.

83rd IEC General Meeting in Shanghai, China, 21-25 October 2019

The annual general meeting includes management meetings such as IEC Council, IEC SMB and IEC CAB, as well as a vast technical platform for IEC international experts to meet and work on their ongoing projects. IEC affiliate delegates can attend any plenary technical meeting of their choice as observers, upon confirmation given by the technical committee's officers. The general meeting provides IEC affiliates with the opportunity to become more familiar with the development of IEC International Standards and to meet IEC international experts. The theme of the 83rd IEC General Meeting was *Better Quality Better Life – Reliability, Safety, Efficiency*.

Events intended to IEC affiliate delegates are the Affiliate forum and the Affiliate NEC Secretaries and Chairs workshop. Other

workshops such as the Workshop for industrializing countries and the Regulator Forum were open to all delegates.

Affiliate forum

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The theme of the Affiliate forum was *Ordering standards under* the terms of the Affiliate Country Programme. It explained the free quota of 200 to 400 IEC International Standards, depending on the level of participation by each country (IEC Affiliate or IEC Affiliate Plus status), which is one of the key benefits of the IEC Affiliate Country Programme. The forum was also an occasion for the IEC Affiliate Leader, Rojas Manyame, to report on new developments in the programme and its main achievements over the past twelve months.

Affiliate countries were invited to present case studies on standards implemented in their respective countries. Presentations were given by the Ethiopia NEC President and Brunei Darussalam NEC Secretary, based on their experience in ordering IEC publications. The IEC Head of Sales and Business Development also provided a presentation on the sales rights of affiliate countries.

Other presentations included capacity building for affiliates and the possibility for affiliates to comment on draft IEC Standards.

Workshop for industrializing countries

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The Workshop for industrializing countries focused on the theme of the UN Sustainable Development Goals (SDGs) and how standards can help. The workshop brought together 107 participants.

The first session, opened by the IEC Affiliate Leader, provided a high-level perspective on topics such as trade, the role standards play to support SDGs and recommendations by the IEC. Speakers included representatives from the WTO, IRENA and the IEC SMB. In the second session, speakers from China, Kenya and Peru shared information about their priorities, including suggestions on how the IEC can contribute. The panel discussion following the two sessions illustrated the wide scope of the SDGs as well as the various approaches that can be taken to achieve them.

Affiliate NEC Secretaries and Chairs workshop

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The NEC Secretaries and Chairs workshop focused on the commenting process on publications at committee draft and committee draft for vote stages, as well as on working documents within the scope of technical committees selected by each NEC.

It was attended by 34 participants from 19 countries as well as three regional organizations and the WTO.

The IEC Affiliate Leader discussed the commenting process and its importance for affiliate countries since they can directly influence the final version of an international standard. He recommended collecting comments and creating national mirror technical committees, a process already implemented by many affiliate countries and regional organizations. By doing so, affiliates can absorb and disseminate technical knowledge within their countries, exchange information with other countries, have prior knowledge of market trends and ultimately contribute to more comprehensive global standards.

The WTO Counsellor to Trade and Environment Division gave a presentation on the relationship between trade and standards and the role of the TBT Agreement. Other presentations included the commenting guidelines by the IEC-AFRC Regional Director, the organization of mirror technical committees by the NEC of Tanzania and the experience of serving as a mentor by the President of the NC of Mexico.

During the second panel, representatives from countries which had previously participated actively in the IEC Affiliate Country Programme and have since become IEC members shared their experiences. This included presentations by NC representatives from Peru and Côte d'Ivoire. The third panel brought together representatives from leading regional standardization bodies in Africa, Americas and Asia including AFSEC, COPANT and SARSO.

IEC Regulator Forum

The safety, efficiency and reliability of medical equipment is of crucial importance to developed and developing countries alike. A regulators symposium at the 2019 IEC General Meeting in Shanghai highlighted how IEC Standards and IEC Conformity Assessment Systems harmonize policy at regional and international level to support and facilitate trade, as well as to protect consumers against unsafe technology and counterfeit goods.

The IEC Head of Membership, Governance and Strategy chaired a panel of international experts. IMDR, a voluntary group of regulators from around the world was represented by an executive member of the US FDA. The Vice-Chair of IECEE spoke about testing and certification. IEC TC 62 Secretary explained the development process for standards covering electrical equipment in medical practice, diagnostic imaging equipment and equipment for radiotherapy, nuclear medicine and radiation dosimetry.

One of the goals of the IEC regulators programme is to bring the public and private sectors together to boost global industry and trade in an efficient and sustainable manner.

IEC Academy activities

The IEC ACB provides training and capacity building workshops for the IEC community, including affiliate countries.

Since the last report, the IEC ACB organized public webinars in November 2019 on the topics of terminology and the Frankfurt Agreement, which seeks to harmonize international and European standards. Recordings and slides from these webinars are available on the IEC website.

From 18-20 December 2019, IEC ACB, together with IEC-APRC and IEC Young Professionals Leader from Germany, moderated a workshop on standardization for future leaders, hosted by KATS in Incheon, Republic of Korea. The aim of the workshop was to align training efforts, specifically for future leaders, and to prepare for a regional event in Republic of Korea in May 2020. Several new training approaches were discussed and tested during this event.

As a new member of the IEC, representatives from Ghana were invited to participate in a webinar training session on standardization processes and procedures on 14 January 2020. It is the first in a series of webinars to prepare new IEC members for active participation in IEC work, train experts and future leaders as well as to support the strengthening of the national standardization infrastructure. More information about IEC ACB is available on the IEC website.

Useful brochures/flyers

The IEC and the Sustainable Development Goals

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Often behind-the-scenes but nevertheless crucial, the work of the IEC directly impacts all the 17 Sustainable Development Goals set by the UN. The brochure *Contributing to Sustainable Development Goals* provides a summary, goal-by-goal, of how IEC International Standards and Conformity Assessment Systems are making a difference.





Secrets of effective participation

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The aim of this pocket guide is to give you general pointers that can accelerate your learning curve and hopefully increase the efficiency of your participation.





IEC Affiliate Mentoring: a gateway to new markets

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The purpose of the IEC Affiliate Mentoring Programme is to enhance participation at all levels (standards development, management, conformity assessment) by encouraging national committees to share their expertise with developing countries who participate in the IEC Affiliate Country Programme.





Welcome to the IEC

A useful flyer to help communicate about IEC. It gives a basic overview of IEC structure, work and partnerships. Do not hesitate to download or ask for hard copies.





Annex A

88 IEC national committees (as per 2020-01-30)

Albania Associate member Korea, Republic of Full member Algeria Full member Full member Kuwait Argentina Full member Latvia Associate member Australia Full member Lithuania Associate member Austria Full member Luxembourg Full member Bahrain Associate member Malaysia Full member Bangladesh Associate member Malta Associate member Belarus Full member Mexico Full member Belgium Full member Moldova Associate member Bosnia & Herzegovina Associate member Montenearo Associate member Associate member Brazil Full member Morocco Full member Netherlands Full member Bulgaria Canada Full member New Zealand Full member Chile Full member Full member Nigeria China Full member Associate member North Macedonia Colombia Full member Norway Full member Côte D'Ivoire Associate member Oman Full member Croatia Full member Pakistan Full member Cuba Associate member Peru Full member Cyprus Associate member Philippines, Rep. of the Full member Czech Republic Full member Poland Full member Denmark Full member Portugal Full member Egypt Full member Qatar Full member Estonia Associate member Romania Full member Finland Full member Russian Federation Full member France Full member Saudi Arabia Full member Georgia Associate member Serbia Full member Germany Full member Singapore Full member Slovakia Ghana Associate member Full member Greece Full member Slovenia Full member Hungary Full member South Africa Full member Iceland Associate member Spain Full member India Full member Sri Lanka Associate member Indonesia Full member Sweden Full member Iran Full member Switzerland Full member Iraq Full member Thailand Full member Ireland Full member Tunisia Associate member Israel Full member Turkey Full member Italy Full member Uganda Associate member Ukraine Japan Full member Full member Jordan **United Arab Emirates** Full member Associate member Kazakhstan Associate member **United Kingdom** Full member Kenya United States of America Associate member Full member Korea, DPR of Associate member Vietnam Associate member

Annex B

85 IEC affiliates (as per 2020-01-30)

Afghanistan	2007	Kyrgyzstan	2003
Angola	2002	Lao PDR	2002
Antigua and Barbuda	2002	Lebanon	2001
Armenia	2001	Lesotho	2005
Azerbaijan	2011	Liberia	2016
Bahamas	2012	Madagascar	2005
Barbados	2001	Malawi	2001
Belize	2002	Mali	2001
Benin	2001	Mauritania	2002
Bhutan	2006	Mauritius	2001
Bolivia	2001	Mongolia	2002
Botswana	2001	Mozambique	2003
Brunei Darussalam	2001	Myanmar	2007
Burkina Faso	2001	Namibia	2001
Burundi	2002	Nepal	2001
Cabo Verde	2017	Nicaragua	2019 May
Cambodia	2001	Niger	2006
Cameroon	2005	Palestine	2009
Central African Republic	2008	Panama	2003
Chad	2008	Papua New Guinea	2004
Comoros	2001	Paraguay	2001
Congo	2008	Rwanda	2001
Congo (Dem. Rep. of)	2001	Saint Kitts and Nevis	2013
Costa Rica	2001	Saint Lucia	2002
Djibouti	2019 March	Saint Vincent and	
Dominica	2002	the Grenadines	2008
Dominican Republic	2005	Sao Tome and Principe	2018
Ecuador	2003	Senegal	2002
El Salvador	2008	Seychelles	2001
Eritrea	2001	Sierra Leone	2003
Eswatini (Kingdom of)	2007	South Sudan	2013
Ethiopia	2002	Sudan	2004
Fiji	2001	Suriname	2008
Gabon	2007	Syrian Arab Republic	2016
Gambia	2008	Tanzania	2001
Grenada	2001	Togo	2006
Guatemala	2001	Trinidad and Tobago	2007
Guinea	2007	Turkmenistan	2001
Guinea Bissau	2006	Uruguay	2001
Guyana	2001	Uzbekistan	2015
Haiti	2002	Yemen	2002
Honduras	2007	Zambia	2002
Jamaica	2001	Zimbabwe	2001

About the IEC

The IEC, headquartered in Geneva, Switzerland, is the world's leading publisher of international standards for electrical and electronic technologies. It is a global, independent, not-for-profit, membership organization (funded by membership fees and sales). The IEC includes 173 countries that represent 99% of world population and energy generation.

The IEC provides a worldwide, neutral and independent platform where 20 000 experts from the private and public sectors cooperate to develop state-of-the-art, globally relevant IEC International Standards. These form the basis for testing and certification, and support economic development, protecting people and the environment.

IEC work impacts around 20% of global trade (in value) and looks at aspects such as safety, interoperability, performance and other essential requirements for a vast range of technology areas, including energy, manufacturing, transportation, healthcare, homes, buildings or cities.

The IEC administers four conformity assessment systems and provides a standardized approach to the testing and certification of components, products, systems, as well as the competence of persons.

IEC work is essential for safety, quality and risk management. It helps make cities smarter, supports universal energy access and improves energy efficiency of devices and systems. It allows industry to consistently build better products, helps governments ensure long-term viability of infrastructure investments and reassures investors and insurers.



A global network of 173 countries that covers 99% of world population and electricity generation



Offers an affiliate country programme to encourage developing countries to participate in IEC work free of charge



Develops international standards and runs four conformity assessment systems to verify that electronic and electrical products work safely and as they are intended to



IEC International Standards represent a global consensus of state-of-the-art know-how and expertise



A not-for-profit organization enabling global trade and universal electricity access



Key figures

88

national committees with full members (62) and associate members (26)

affiliates with adoption (51),

with NEC (58)

207

technical committees (107) and subcommittees (100)

20 000

experts from industry, test and research labs, government, academia and consumer groups

10 771

international standards in catalogue (as per 2019-01-01)

4

global conformity assessment systems

>1 million

conformity assessment certificates issued





International Electrotechnical Commission

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