



Report to WTO TBT Committee

March 2018

IEC activities in developing and industrializing countries

October 2017 – March 2018

This report to the WTO Technical Barriers to Trade Committee highlights the activities of the IEC, its Members, Affiliates and Regional Centres related to increasing the participation of developing and industrializing countries in IEC International Standardization and Conformity Assessment activities.

IEC Regional Centre activities

IEC Africa Regional Centre

The IEC Africa Regional Centre (IEC-AFRC), located in Nairobi, Kenya, is the focal point for the IEC in Africa, helping to promote awareness of the IEC in the region, increase the use of IEC International Standards and IEC Conformity Assessment Systems, and enhance participation and membership of countries in the region.

Continuing visits to African countries of the IEC

IEC-AFRC Directors continued to tour Africa in order to support the electrotechnical standardization work of countries in the region.

From 6-14 November 2017, IEC-AFRC visited Central African Republic, Chad and Gabon to meet with government representatives and national electrotechnical stakeholders. The objective was to reach out and explain how the IEC, its Regional Centre in Africa and the Affiliate Country Programme could provide support for the electrotechnical standardization and conformity assessment activities in their country.

From 5-8 December 2017, IEC-AFRC provided training on IEC standardization and Conformity Assessment Systems for the IEC National Committees in Algeria and Tunisia.

On 23 January 2018, the IEC together with the African Electrotechnical Standardization Commission (AFSEC), held a capacity building workshop in Johannesburg, South Africa on the IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (IECEE) in the Africa region. Further details are available under the IEC Conformity Assessment activities section below.

From 29 January to 1st February 2018, the Economic Community of West African States (ECOWAS) 1st forum on quality infrastructure was held in Dakar, Senegal. IEC-AFRC was invited by ECOWAS Commissioner in charge of industry and private sector promotion to moderate the topic *Issues and major challenges of the main components of quality Infrastructure*.

From 13-14 February 2018, the Nigeria Electrotechnical Summit was held in Abuja, Nigeria. The IEC National Committee of Nigeria organized the summit and IEC-AFRC was invited to participate in the meeting with the aim of sensitizing the Nigerian electrotechnical stakeholders and experts to further participate in IEC work.

From 19-23 February 2018, IEC-AFRC made a contact tour to Luanda, Angola and Maputo, Mozambique as a way of reaching out, providing support, and sensitizing stakeholders to be active in IEC standardization and Conformity Assessment.

From 27-28 February 2018, IEC-AFRC participated in the Arab Industrial Development and Mining Organization (AIDMO) 50th meeting of the High Consultative Committee for Standardization (HCCS) to provide support on questions relating to IEC standardization and Conformity Assessment.

IEC Asia-Pacific Regional Centre

The IEC Asia-Pacific Regional Centre (IEC-APRC), located in Singapore, has a twofold mission: to promote awareness of the IEC in the region, increase the use of IEC International Standards and Conformity Assessment Systems as well as enhance participation of all countries in the region in the IEC work; and to provide additional staff support to IEC technical committees and subcommittees in the same way the IEC Central Office does at present.

From 8-10 November 2017, IEC-APRC attended the meeting focused on the implementation of the Association of Southeast Asian Nations (ASEAN) Harmonized Regulatory Regime of Electrical and Electronics Equipment in Bandung, Indonesia. Participation at the meeting provided support on the implementation of IEC International Standards and their adoption by ASEAN Member States.

From 5-7 December 2017, IEC attended the ASEAN Consultative Committee on Standards and Quality (ACCSQ) meeting in Siem Reap, Cambodia. ACCSQ has the key role of eliminating technical barriers to trade to support the ASEAN economic region. The IEC Immediate Past President gave an update on the latest developments relating to the IEC Masterplan while the IEC APRC Regional Director updated on the latest and upcoming activities in IEC to encourage active participation from the region.

IEC Latin America Regional Centre

The IEC Latin America Regional Centre (IEC-LARC), located in São Paulo, Brazil, is the focal point for the IEC in Latin America, helping to promote awareness of the IEC in the region, increase the use of IEC International Standards and IEC Conformity Assessment Systems, and enhance participation and membership of countries in the region.

On 7 November 2017, IEC-LARC participated in the 3rd forum on Latin American and Caribbean Labelling Programs in Energy Efficiency held in Bogota, Colombia. This event is important for the harmonization process of labelling programmes in the region.

From 14-15 November 2017, the IEC together with COPANT, the Pan American Standards Commission, PTB, the German National Metrology Institute and INACAL, the Peruvian National Quality Institute, held an IEC ACAS regional seminar in Lima, Peru. Further details are available under the IEC Conformity Assessment activities section below.

From 23-24 November 2017, IEC-LARC provided an IECEE training course in Santiago, Chile, focused on the interest of Chile to become a member of IECEE with its first national certification body.

From 28-29 November 2017, IEC-LARC participated in the 10th Smart Grid Forum Latin America held in São Paulo, Brazil.

From 6-8 December 2017, IEC-LARC participated in the 20th anniversary of the Cuban Electrotechnical Committee and its National Electrotechnical Day, in Havana, Cuba. IEC-LARC provided

an update on the work of the IEC on global energy interconnection, smart manufacturing and smart cities.

On 12 December 2017, IEC-LARC participated in a web conference on the IECEE CB Scheme for the benefit of the Colombian Technology Development Center of the Electricity Sector (CIDET), a not-for-profit organization based in Bogota, Colombia.

IEC Affiliate Country Programme

The IEC Affiliate Country Programme is aimed at developing countries that do not yet have the necessary infrastructure and technical expertise to participate in IEC activities as a Member. Participants join the Programme free of charge on invitation by the IEC General Secretary and CEO.

Peru becomes a full member of the IEC

After having joined the IEC Affiliate Country Programme in 2002, Peru became an IEC Full Member in December 2017. During its time as an Affiliate Country, Peru benefited to the fullest extent from the Programme by, amongst others, establishing a National Electrotechnical Committee that was fully representative of all the country's interests in the field of electrotechnical standardization and conformity assessment, ordering 400 free IEC publications, adopting and declaring 101 IEC International Standards, submitting technical comments on working documents of the IEC, engaging in the ACAS, and also benefiting from the Mentoring Programme with a partnership with Mexico.

Update on participation

Since our last report, 2 Affiliate Countries have actively participated in the commenting process provided by the Affiliate Country Programme by submitting technical comments on IEC International Standards. Ecuador has submitted comments on publications of IEC Subcommittee (SC) 8B: Decentralized Electrical Energy Systems, and IEC Technical Committee (TC) 14: Power transformers. Tanzania submitted comments on publications of IEC TC 79: Alarm and electronic security systems, and IEC TC 61: Safety of household and similar electrical appliances. All of these technical comments were forwarded to the Secretaries of the respective TCs to be considered at their next TC meetings.

In December 2017, Liberia established its National Electrotechnical Committee (NEC). The NEC President is Assistant

Director for Planning of the Liberia Electricity Corporation, and the NEC Secretary is Coordinator at the National Standard Laboratory of Liberia. The NEC is composed of governmental groups, laboratories, SMEs and agencies.

The same month, Liberia started to benefit from the IEC Affiliate Country Programme by making its first order of IEC publications free of charge. Similarly, following the establishment of its NEC last year, the Bahamas has ordered its first IEC publications.

Five Affiliate Countries have declared the national adoptions of additional IEC International Standards: Gambia, Ghana, Mongolia, Palestine, and Togo. To date, over 6 800 national adoptions of IEC International Standards have been declared under the terms of the IEC Affiliate Country Programme.

IEC Conformity Assessment activities

IEC Affiliate Conformity Assessment Status

As part of its commitment to involve developing countries in all aspects of IEC work, including Conformity Assessment Systems, the IEC is pleased to report that Bhutan and Senegal have both signed the ACAS Pledge. This will allow users in both countries to benefit from capacity building resources in the field of IEC Conformity Assessment, including access to the ACAS e-Learning course.

ACAS events

IEC ACAS-COPANT-PTB regional seminar in Lima, Peru, 14-15 November 2017

The IEC, in collaboration with COPANT, the Pan American Standards Commission, PTB, the German National Metrology Institute and INACAL, the Peruvian National Quality Institute held an IEC ACAS regional seminar in Lima.

On the first day, IEC representatives gave an update on the IEC activities and its Affiliate Country Programme. Delegates shared on their national experiences throughout their participation in the IEC as either Members or Affiliate Countries. Topics included the establishment of a National Electrotechnical Committee (NEC), how to structure a mirror technical committee, how to comment on working documents and participation in the IEC Mentoring Programme.

The second day was focused on the IEC Conformity Assessment Systems – IECEE, IECEx, IECQ, and IECRE – and the IEC ACAS. The representatives of the CA Systems shared information on IECEE certificates, on the IECEx application for mining activities, while other delegates shared on their experience of the application of IEC CA at the national level.

Twenty-four participants (regulators and national standards body members from the region) from 12 countries as well as representatives from the Caribbean Community (CARICOM) Regional Organisation for Standards and Quality (CROSQ) attended the seminar.

IEC ACAS-AFSEC Conformity Assessment workshop in Johannesburg, South Africa, 23 January 2018

The IEC, in collaboration with the African Electrotechnical Standardization Commission (AFSEC), held an IEC ACAS regional workshop, back-to-back with an AFSEC CAC (Conformity Assessment Committee) meeting. The workshop was organized as part of capacity building on conformity assessment for the African region. Topics covered included the IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (IECEE) and its CB Scheme, on the main performance and safety aspects of electrical household appliances, and on the efficiency of electric motors.

The interest for many participants relied on how they could use the IEC CA System for the purpose of controlling the influx of sub-standard electrical goods into their national markets. Even without the infrastructure to be issuing CA certificates at the national level, it is still possible to benefit from the IECEE certificates by recognizing and referring to them.

Twenty participants from 15 countries including IEC Members, IEC Affiliates, and AFSEC Members attended the workshop.

Regional collaboration

APEC meetings in Port Moresby, Papua New Guinea, 25-27 February 2018

IEC participates in the Asia-Pacific Economic Cooperation (APEC) Subcommittee on Standards and Conformance with guest status. At its recent meeting in Port Moresby, IEC, in cooperation with Papua New Guinea and under the auspices of the World Standards Cooperation, floated the idea of an APEC workshop on the use of International Standards and Conformity Assessment Systems in trade agreements. IEC also took the opportunity to have meetings with its Affiliate, National Institute of Standards and Industrial Technology (NISIT) and the Chair of the Electrical

Technical Committee from PNG Power to share on the latest developments in IEC and support Papua New Guinea's plans to commence adoption of IEC International Standards.

**Regional seminar on LEDs and smart cities in
Ho Chi Minh City, Vietnam, 5-6 March 2018**

IEC partnered with Japanese Industrial Standards Committee (JISC) to organize a regional seminar focusing on the requirements and standards relating to LED lighting and smart cities. LED lighting is covered by IEC Technical Committee 34 and its Subcommittees on lamps and related equipment, while smart cities is covered by the IEC System Committee on smart cities. The event, which was hosted by the IEC National Committee of Vietnam, Directorate for Standards, Metrology and Quality (STAMEQ) reached out to about 45 expert participants from 11 economies in Asia. A combination of information exchange among experts from the various economies and sharing by experts to provide a better understanding of current and upcoming IEC International Standards helped create better awareness and knowledge. For LEDs, this would help promote safety and act against dumping of inferior products that do not meet international standards. On smart cities, an area of interest was a project on city service continuity against disasters which focuses on the role of the electrical supply where disaster strikes.

**Cooperation with SARSO in New Delhi, India,
8-9 March 2018**

Following a cooperation agreement signed with South Asian Regional Standards Organization (SARSO) in 2016, both organizations have regularly participated at each other's meetings to further strengthen common activities and to promote awareness and use of IEC International Standards and Conformity Assessment. At the recent meeting in New Delhi, IEC proposed the organization of an ACAS seminar back-to-back with the next meeting of SARSO Sectoral Technical Committee on Electrical, Electronics, Telecom & IT to support its members in the area of IEC Conformity Assessment Systems.

IEC webinar

In order to further improve services to IEC Members and Affiliates alike, the IEC is offering regular webinars and training workshops on a wide range of IEC aspects. These webinars and training workshops are open to all participants. The programme for the year, as well as past events can be viewed on the following link:

<http://www.iec.ch/academy>

Useful brochures/flyers

The IEC and the Sustainable Development Goals

Often behind-the-scenes but nevertheless crucial, the work of the IEC directly impacts 12 of the 17 Sustainable Development Goals set by the UN. The brochure *The IEC and the Sustainable Development Goals* provides a summary, goal-by-goal, of how IEC International Standards and Conformity Assessment Systems are making a difference. (English only)



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.



Secrets of effective participation

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

The purpose of IEC Affiliate Mentoring 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.



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 170 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 170 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

84

National committees with full members (61) and associate members (23)

86

Affiliates with adoption (46), with NEC (53)

203

Technical committees (104) and subcommittees (99)

20 000

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

10 163

International Standards in catalogue (as per 2017-12-31)

4

Global Conformity Assessment Systems

>1 million

Conformity Assessment certificates issued

Annex A

84 IEC National Committees (as per 2018-03-02)

Albania	Associate member	Latvia	Associate member
Algeria	Full member	Lithuania	Associate member
Argentina	Full member	Luxembourg	Full member
Australia	Full member	Malaysia	Full member
Austria	Full member	Malta	Associate member
Bahrain	Associate member	Mexico	Full member
Belarus	Full member	Moldova	Associate member
Belgium	Full member	Montenegro	Associate member
Bosnia & Herzegovina	Associate member	Morocco	Associate member
Brazil	Full member	Netherlands	Full member
Bulgaria	Full member	New Zealand	Full member
Canada	Full member	Nigeria	Associate member
Chile	Full member	Norway	Full member
China	Full member	Oman	Full member
Colombia	Full member	Pakistan	Full member
Croatia	Full member	Peru	Full member
Cuba	Associate member	Philippines, Rep. of the	Full member
Cyprus	Associate member	Poland	Full member
Czech Republic	Full member	Portugal	Full member
Denmark	Full member	Qatar	Full member
Egypt	Full member	Romania	Full member
Estonia	Associate member	Russian Federation	Full member
Finland	Full member	Saudi Arabia	Full member
France	Full member	Serbia	Full member
Georgia	Associate member	Singapore	Full member
Germany	Full member	Slovakia	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
Iraq	Full member	Switzerland	Full member
Iran	Full member	Thailand	Full member
Ireland	Full member	The Former Yugoslav	
Israel	Full member	Rep. of Macedonia	Associate member
Italy	Full member	Tunisia	Associate member
Japan	Full member	Turkey	Full member
Jordan	Associate member	Ukraine	Full member
Kazakhstan	Associate member	United Arab Emirates	Full member
Kenya	Associate member	United Kingdom	Full member
Korea, DPR of	Associate member	United States of America	Full member
Korea, Republic of	Full member	Vietnam	Associate member
Kuwait	Full member		

Annex B

86 IEC Affiliates (as per 2018-03-02)

Afghanistan	January 2007	Kyrgyzstan	December 2003
Angola	July 2002	Lao PDR	June 2002
Antigua and Barbuda	May 2002	Lebanon	November 2001
Armenia	November 2001	Lesotho	July 2005
Azerbaijan	June 2011	Liberia	November 2016
Bahamas	July 2012	Madagascar	April 2005
Bangladesh	November 2001	Malawi	November 2001
Barbados	November 2001	Mali	November 2001
Belize	April 2002	Mauritania	May 2002
Benin	November 2001	Mauritius	November 2001
Bhutan	July 2006	Mongolia	December 2001
Bolivia	November 2001	Mozambique	March 2003
Botswana	November 2001	Myanmar	November 2007
Brunei Darussalam	November 2001	Namibia	November 2001
Burkina Faso	November 2001	Nepal	November 2001
Burundi	April 2002	Niger	September 2006
Cambodia	November 2001	Palestine	April 2009
Cameroon	March 2005	Panama	April 2003
Cabo Verde	January 2017	Papua New Guinea	May 2004
Central African Republic	April 2008	Paraguay	December 2001
Chad	June 2008	Rwanda	November 2001
Comoros	November 2001	Saint Kitts and Nevis	September 2013
Congo	June 2008	Saint Lucia	April 2002
Congo (Dem. Rep. of)	November 2001	Saint Vincent and the Grenadines	January 2008
Costa Rica	February 2000	Senegal	April 2002
Côte D'Ivoire	September 2003	Seychelles	November 2001
Dominica	May 2002	Sierra Leone	March 2003
Dominican Republic	August 2005	South Sudan	April 2013
Ecuador	April 2003	Sudan	April 2004
El Salvador	February 2008	Suriname	November 2008
Eritrea	August 1999	Swaziland	June 2003
Ethiopia	June 2002	Syria	July 2016
Fiji	November 2001	Tanzania	November 2001
Gabon	February 2007	Togo	April 2006
Gambia	March 2008	Trinidad and Tobago	January 2007
Ghana	November 2001	Turkmenistan	December 2001
Grenada	November 2001	Uganda	November 2001
Guatemala	November 2001	Uruguay	September 1996
Guinea	January 2007	Uzbekistan	October 2015
Guinea Bissau	November 2006	Yemen	April 2002
Guyana	November 2001	Zambia	March 2002
Haiti	May 2002	Zimbabwe	November 2001
Honduras	August 2007		
Jamaica	November 2001		



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