



# IEC – Overview

Dennis Chew  
Regional Director,  
APRC  
dch@iec.ch

IEC and IECEx Country Dialogue  
Singapore  
2016-06

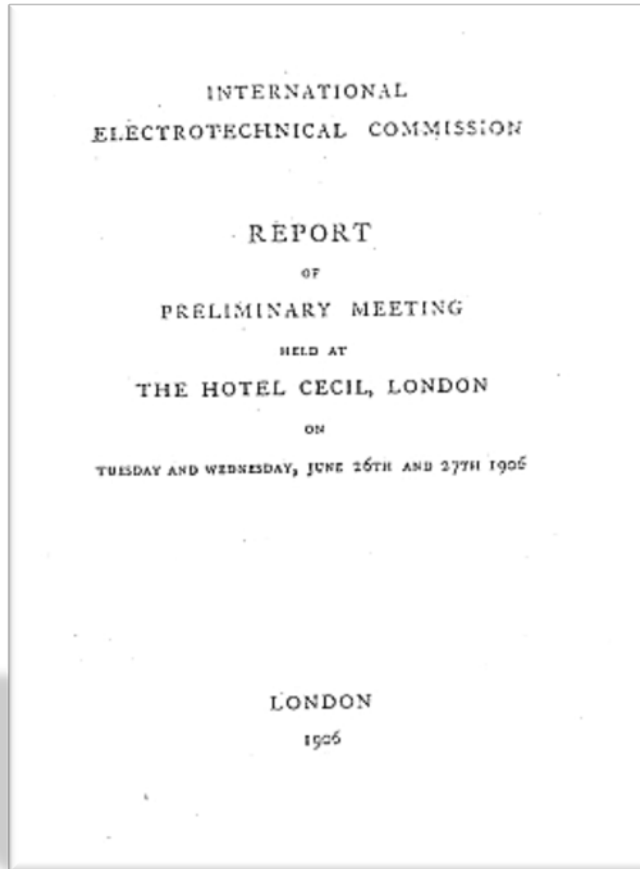
# The world of standards

**International:**  
**IEC**, ISO, ITU,  
OIML

**Regional:**  
Africa (e.g. AFSEC, SADC)  
Americas (e.g. COPANT, CANENA,  
MERCOSUR)  
Asia-Pacific (e.g. ASEAN, PASC)  
Europe (e.g. **CENELEC**, ETSI, EASC)

**National Committees:**  
(e.g. Austria, Brazil, China, France, Germany,  
Indonesia, Japan, Korea, Malaysia, Mexico,  
Philippines, Singapore, UK, USA)

# The organization



- The IEC is a not-for-profit, non-governmental organization founded in 1906
- One member per country
- International Standards and Conformity Assessment Systems for all electrical and electronic components, devices and systems

# How you might “see” the IEC

Hydraulic turbines (TC 4)

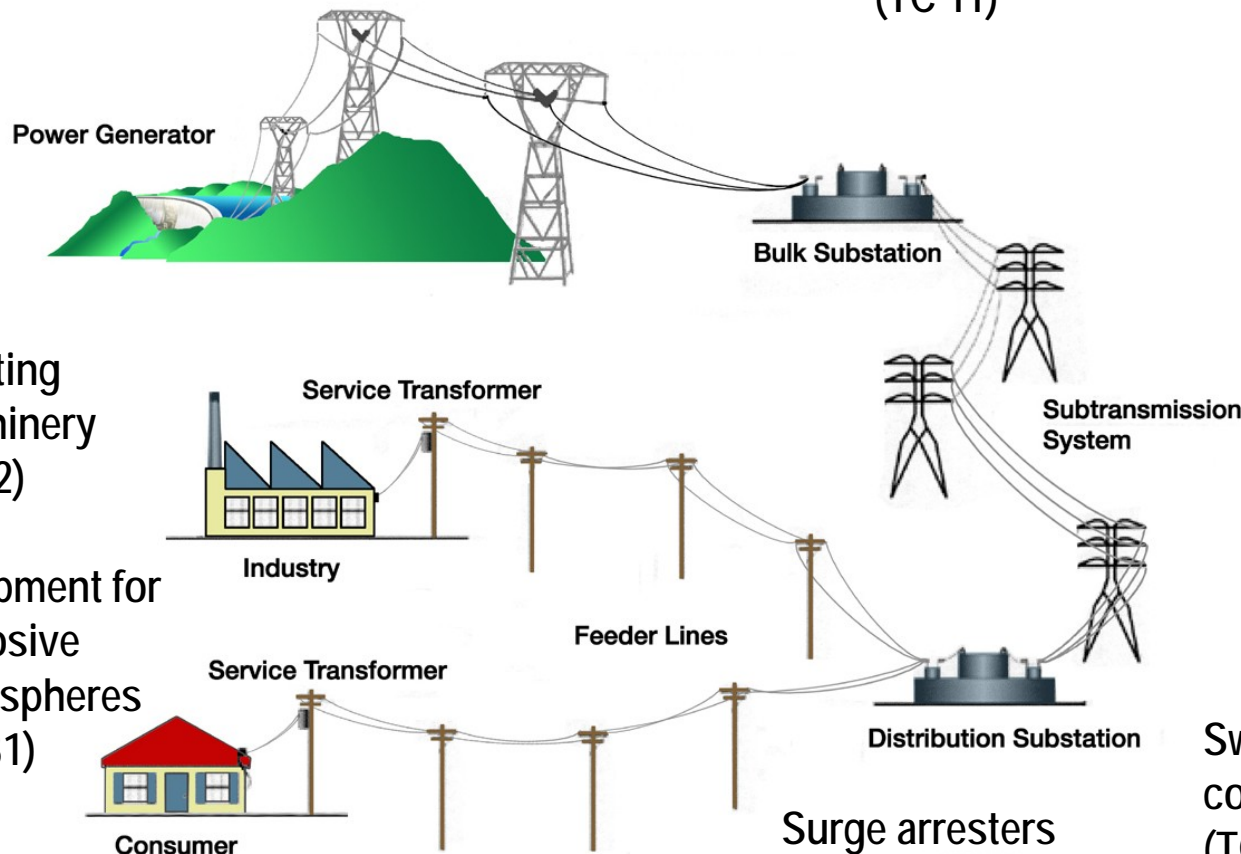
Solar photovoltaic energy systems (TC 82)

Wind turbines (TC 88)

Solar thermal electric plants (TC 117)

Overhead electrical  
conductors  
(TC 7)

Overhead lines  
(TC 11)



Systems aspects for  
electrical energy supply  
(TC 8)  
Grid Integration of  
Large-capacity  
Renewable Energy (RE)  
Generation (SC8A)

Electric cables  
(TC 20)

Switchgear and  
controlgear  
(TC 17)

# But if you look further, at home

Electrical accessories  
(TC 23)

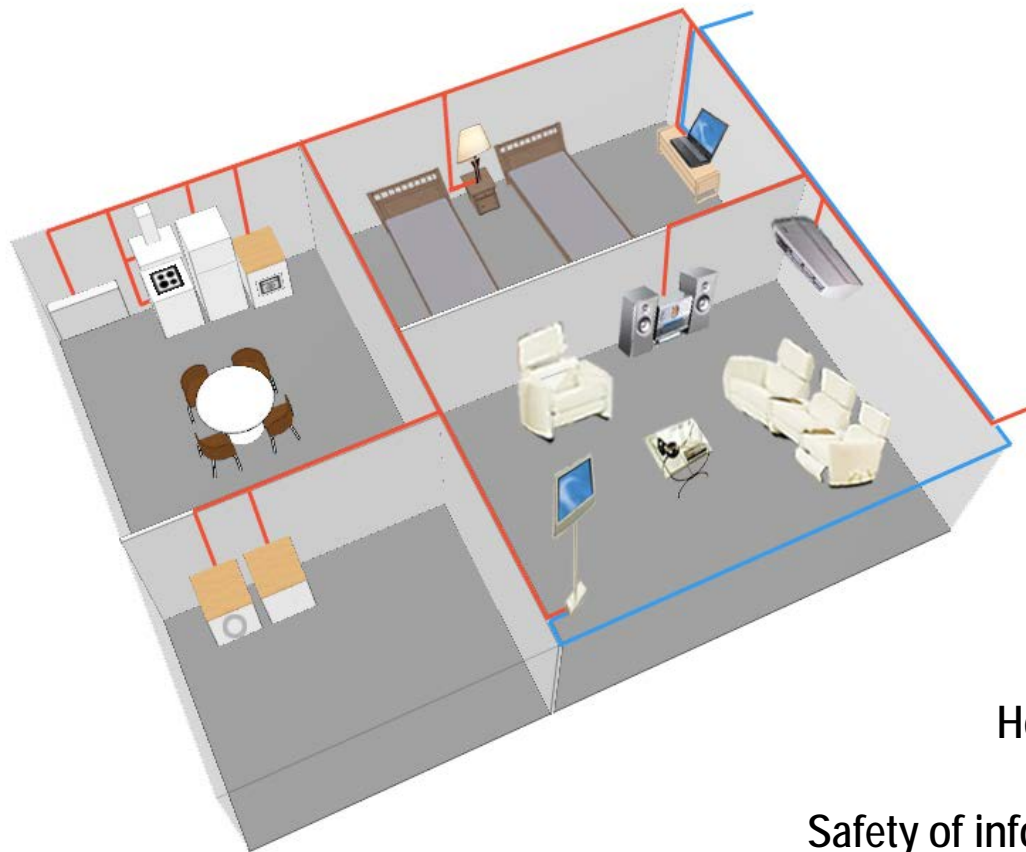
Fuses  
(TC 32)

Winding wires  
(TC 55)

Electric cables  
(TC 20)

Lamps and related  
equipment  
(TC 34)

Electrical installations and protection  
against electric shock  
(TC 64)



Electromagnetic  
compatibility  
(TC 77)

Multimedia  
(TC 100)

Fibre optics  
(TC 86)

Cables, wires,  
waveguides  
(TC 46)

Household appliances  
(TCs 59 & 61)

Safety of information  
technology equipment (TC 108)



A satellite-style world map showing the continents and oceans. The map is centered on the Atlantic Ocean, with North and South America on the left and Europe, Africa, and Asia on the right. The text is overlaid on the map in a bold, yellow, sans-serif font.

**global reach:**  
**98% of world population**  
**96% power generation**  
**167 countries**  
**83 Members      84 Affiliates**

# 83 National Committees

ALBANIA (AM)

ALGERIA

ARGENTINA

AUSTRALIA

AUSTRIA

BAHRAIN (AM)

BELARUS

BELGIUM

BOSNIA-HERZEGOVINA (AM)

BRAZIL

BULGARIA

CANADA

CHILE

CHINA

COLOMBIA

CROATIA

CUBA (AM)

CYPRUS (AM)

CZECH REPUBLIC

DEM. PEOPLE'S REP. OF  
KOREA (AM)

DENMARK

EGYPT

ESTONIA (AM)

FINLAND

FRANCE

GEORGIA (AM)

GERMANY

GREECE

HUNGARY

ICELAND (AM)

INDIA

INDONESIA

IRAN

IRAQ

IRELAND

ISRAEL

ITALY

JAPAN

JORDAN (AM)

KAZAKHSTAN (AM)

KENYA (AM)

KOREA, REP. OF

LATVIA (AM)

LIBYA

LITHUANIA (AM)

LUXEMBOURG

MALAYSIA

MALTA (AM)

MEXICO

MOLDOVA (MD)

MONTENEGRO (AM)

MOROCCO (AM)

NETHERLANDS

NEW ZEALAND

NIGERIA (AM)

NORWAY

OMAN

PAKISTAN

PHILIPPINES

POLAND

PORTUGAL

QATAR

ROMANIA

RUSSIAN FEDERATION

SAUDI ARABIA

SERBIA

SINGAPORE

SLOVAKIA

SLOVENIA

SOUTH AFRICA

SPAIN

SRI LANKA (AM)

SWEDEN

SWITZERLAND

THAILAND

THE FYR OF MACEDONIA (AM)

TUNISIA (AM)

TURKEY

UKRAINE

UNITED ARAB EMIRATES

UK

USA

VIETNAM (AM)

23 Associate Members



# 84 Affiliates and 10 potential

## AMERICAS

Antigua & Barbuda  
Bahamas  
Barbados  
Belize  
Bolivia  
Costa Rica  
Dominica  
Dominican Republic  
Ecuador  
El Salvador  
Grenada  
Guatemala  
Guyana  
Haiti  
Honduras  
Jamaica  
**Nicaragua**  
Panama  
Paraguay  
Peru  
Saint Kitts & Nevis  
Saint Lucia  
St Vincent & the Grenadines  
Suriname  
Trinidad & Tobago  
Uruguay

## AFRICA

Angola  
Benin  
Botswana  
Burkina Faso  
Burundi  
Cameroon  
Central African Rep.  
Chad  
Comoros  
Congo  
Côte d'Ivoire  
DRC Congo  
**Djibouti**  
**Equatorial Guinea**  
Eritrea  
Ethiopia  
Gabon  
Gambia  
Ghana  
Guinea  
Guinea Bissau  
Lesotho

## Liberia

Madagascar  
Malawi  
Mali  
Mauritania  
Mauritius  
Mozambique  
Namibia  
Niger  
Rwanda  
Senegal  
Seychelles  
Sierra Leone  
South Sudan  
Sudan  
Swaziland  
Tanzania  
Togo  
Uganda  
Zambia  
Zimbabwe

## ASIA

Afghanistan  
Armenia  
Azerbaijan  
Bangladesh  
Bhutan  
Kyrgyzstan  
Lebanon  
**Maldives**  
Mongolia  
Myanmar  
Nepal  
Palestine  
**Syria**  
**Tajikistan**  
Turkmenistan  
Uzbekistan  
Yemen

## ASIA-PACIFIC

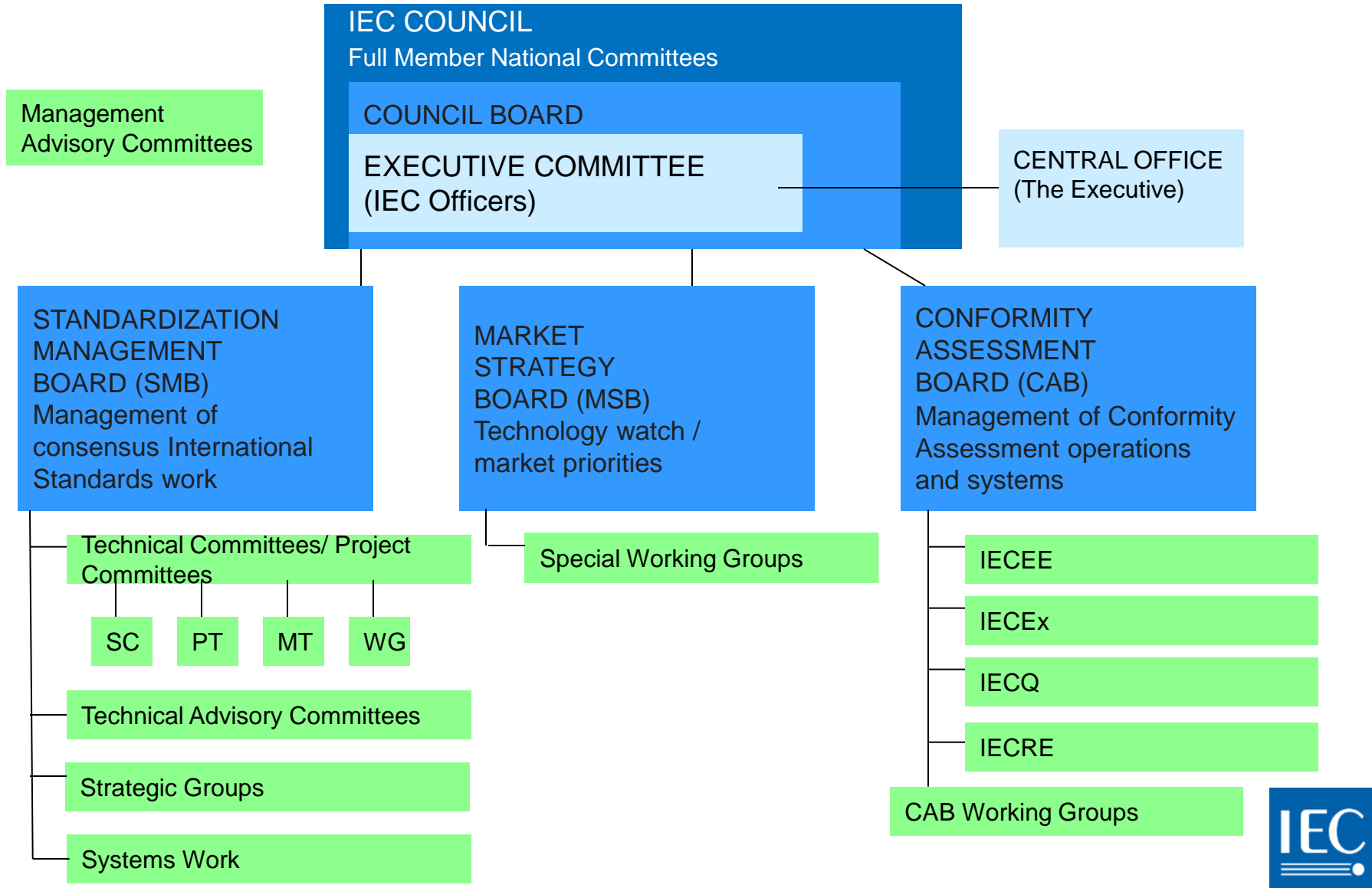
Brunei Darussalam  
Cambodia  
Fiji  
Lao PDR  
Papua New Guinea  
**Solomon Islands**  
**Samoa**  
**Tonga**



# Types of participation

- **IEC is a voluntary association of National Committees that fully represent electrotechnical interests in their countries**
  - **Government, industry, testing laboratories, academia, consumer groups...**
- **Membership – one member per country**
  - **Full Members (60) ex: India, Japan, Korea**
  - **Associate Members (23) ex: Sri Lanka, Viet Nam**
- **Affiliate Country programme**
  - **84 participants**
  - **18 in Asia-Pacific**

# IEC structure



# Council

- IEC policy
- Long-term strategic objectives
- Financial objectives
- Presidents of Full Member National Committees, IEC Officers, Past Presidents, CB members,
- One statutory meeting each year at General Meeting



# CB: Council Board

- **Implements Council policy**
- **Makes policy recommendations**
- **Receives reports from SMB, CAB and MSB**
- **15 individual members elected by Council, IEC Officers**
- **Usually two meetings a year, one during GM, chaired by the President, Dr Junji Nomura**





# MSB: Market Strategy Board

**Vice President Yinbiao Shu – Convenor**

**Top-level Technology Officers appointed from industry and (ex officio) the IEC Officers as members. The MSB meets at least once a year**

- **Provides IEC CB (Council Board) with strategic recommendations based on market and technology trends**
- **Provides leading information, internally and externally, on fast moving markets industry trends, technology, and environmental developments**



# Market Strategy Board



# CAB: Conformity Assessment Board

- Responsible for setting the IEC's conformity assessment policy, promoting and maintaining relations with international organizations on conformity assessment matters
- 15 elected members
- Chaired by Vice President Ulrich Spindler





# IEC Conformity Assessment Systems and the CAB

## CAB - Conformity Assessment Board

### **IECEE**

IEC System of  
Conformity  
Assessment  
Schemes for  
Electrotechnical  
Equipment and  
Components

### **IECEX**

System for  
Certification to  
Standards  
Relating to  
Equipment for  
use in Explosive  
Atmospheres

### **IECQ**

Quality  
Assessment  
System for  
Electronic  
Components

### **IECRE**

IEC System for  
Certification to  
Standards relating to  
equipment for use in  
Renewable Energy  
Applications



# SMB: Standardization Management Board

Responsible for the technical work

- **177 TCs/SCs**
  - Nearly 15 000 experts
- **Strategic Groups**
- **Advisory Committees**
- **Systems Work**
- **15 elected members**
- **Chaired by Vice President James E. Matthews III**





# A highly strategic tool

- **Standardization strategy belongs at the highest level**
- **Quality management depends on Standards and conformity assessment**
- **Significant market advantages**
- **Direct impact on revenue**







# Early market information

- **Technical and business intelligence**
- **Anticipate new Standards, better understand conformity assessment requirements**
- **In step with new regulations**
- **Preempt new requirements**

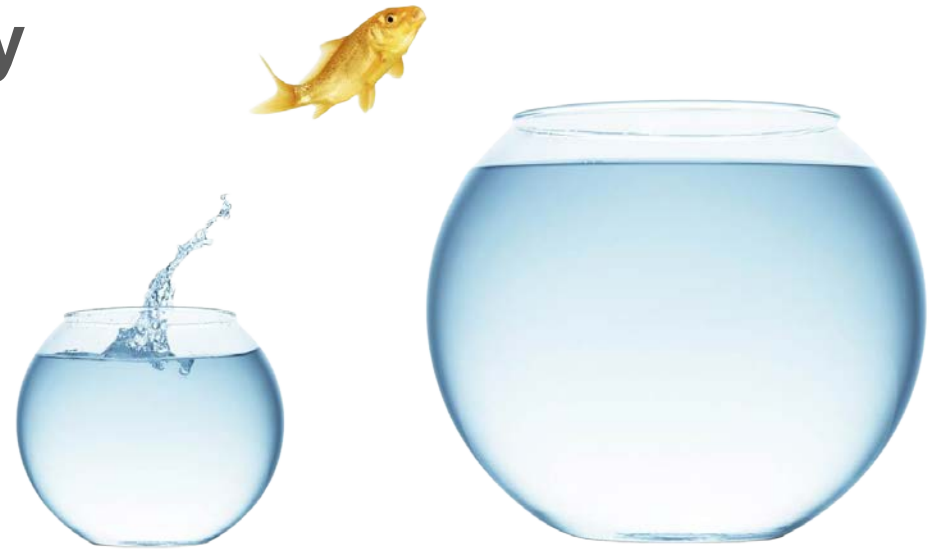






# Expand markets

- **Help define solutions for the whole industry**
- **Identify customer needs**
- **Get valuable insights that stimulate innovation**
- **Identify new markets earlier**





# World's biggest think-tank

- Access to world-class experts
- Networking breaks: opportunity to discuss ideas and challenges
- 20 000 experts at the global level
- Different backgrounds, many needs = better Standards





# Send the right experts

To influence standardization process:

- Experts must be briefed on national industry needs and goals
- Have the right technical expertise
- Able to share and communicate





# Best practice, more know-how

- **Positive impact on expert career**
- **Better understanding of industry trends**
- **Global perspective of industry challenges and opportunities**
- **Global networking opportunity**







# Public Commenting

on Draft Standards (CDVs)

[Welcome](#)[List of CDVs](#)[myComments](#)

## Welcome to IEC Public Commenting

### Why comment?

Not only do you get to **preview** Draft IEC Standards (CDVs), over a two month period before final approval, you also have the opportunity to **help shape** International Standards in your field.

Your comments will be reviewed by the IEC National Committee of the country you live in, which can decide to propose them as national input for the final draft of the IEC International Standard.

### Get started commenting!

[LOGIN](#)

Using your existing IEC login or [create an account](#).

### About the IEC

The IEC is the world's leading organization

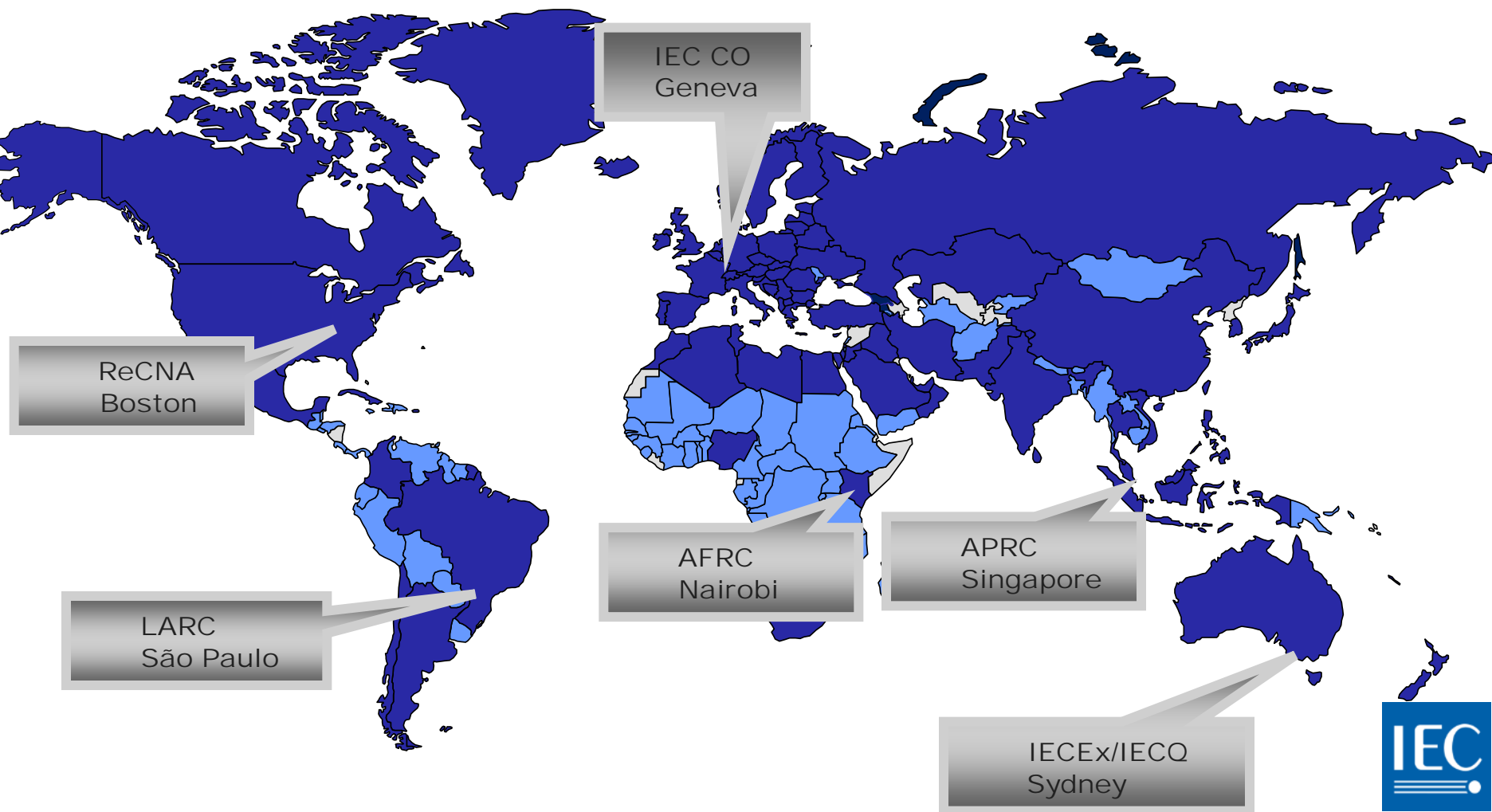
### How we work

IEC International Standards represent a

### What is a CDV?

Before passing to the approval stage, a

# IEC offices



# **Mission**

- **Promote awareness of IEC in the region**
- **Increase use of IEC International Standards**
- **Enhance participation of all countries in the region in the Commission's work**

**All of the above will be achieved by improved communications with businesses, industries and governments in the region**



# IEC-APRC key activities

- **Promotional**
  - Participation in Regional Groups/Events
  - Information Sessions and Training Activities
  - Venue for AC/WG/MT meetings
- **Technical**
  - Support to 54 TCs/SCs
  - Advisory Committees – ACTAD and ACEE





# IEC in figures

- IEC Family (Members & Affiliates) 83 + 84 = 167
- Number of Technical Committees 212
- Number of Working Groups over 1 450
- Number of experts approx. 20 000
- Number of pubs. in catalogue over 9 000
- Conformity Assessment Systems 4
- Number of CA certificates approx 1 mio
- Regional offices 5





# Thank you for your attention

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