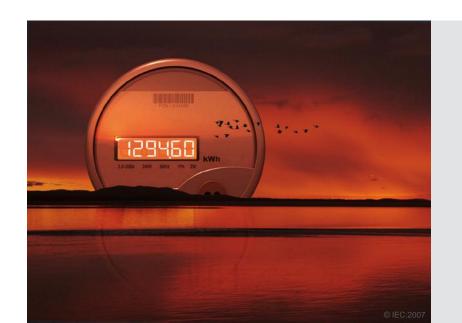


# Helping project developers and policy-makers: Standards and development



Gabriel Barta
IEC Head of tech coord.
IRENA, 2012-10-24



 Founded in 1906 to promote international cooperation on all questions of standardization and related matters in the field of electrotechnology





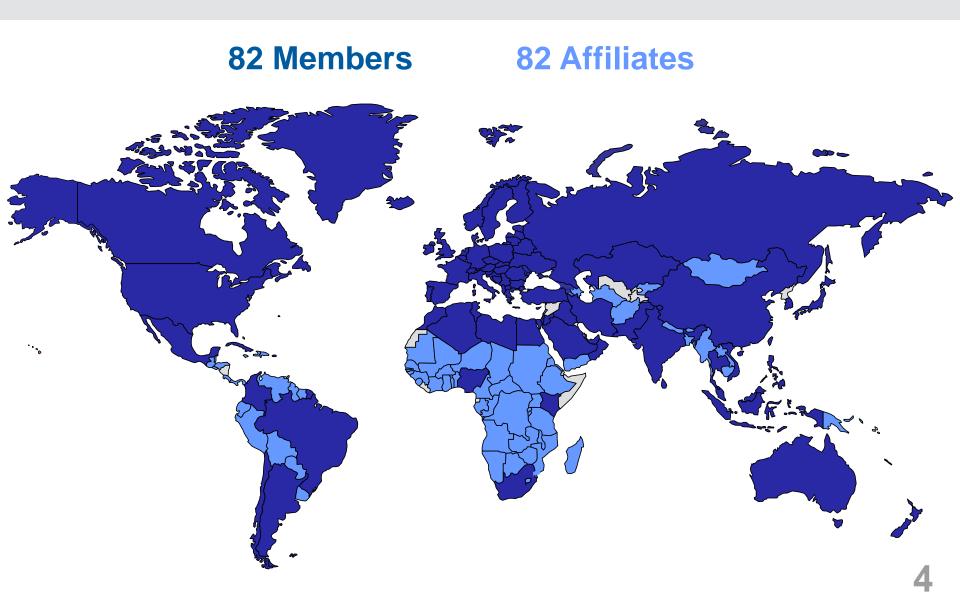
- To achieve this mission, the IEC
  - through its national committee members
  - through cooperative agreements and
  - directly
- Encourages national use of

IEC International Standards and

**IEC Conformity Assessment Systems** 



# IEC Family: 164 countries





# Affiliate Programme in a nutshell (1/2)

- Free Programme to help developing countries comply with WTO TBT Agreement
  - Active participation, but not a kind of membership
- Affiliates use IEC International Standards on national level
  - Access to 200 IEC IS for national adoption
- Assistance to establish National Electrotechnical Committees
- Selection of 10 technical fields to access and comment on working documents (up to and including CDV)
  - Experts with login



### Affiliate Programme in a nutshell (2/2)

- Guidance on IEC Conformity Assessment
- Active participation in IEC General Meetings
  - Attendance to technical meetings as observers
  - Affiliate Forum
- A Leader, a Secretariat, two Coordinators (Africa and Latin America)
- A dedicated website zone and assistance through virtual meetings
  - www.iec.ch/affiliates
- New Affiliate Plus status in 2009

# The IEC in numbers

| • | <b>IEC</b> | family | (members | + | affiliates) |
|---|------------|--------|----------|---|-------------|
|---|------------|--------|----------|---|-------------|

$$82 + 82 = 164$$

Number of technical cttees (TC/SCs)

175

Number of working groups

approx. 1 200

Number of experts

approx. 10 500

Number of publications in catalogue

6 513

Number of pubs issued in 2011

446

Conformity assessment systems

3

Valid certificates

>500 000

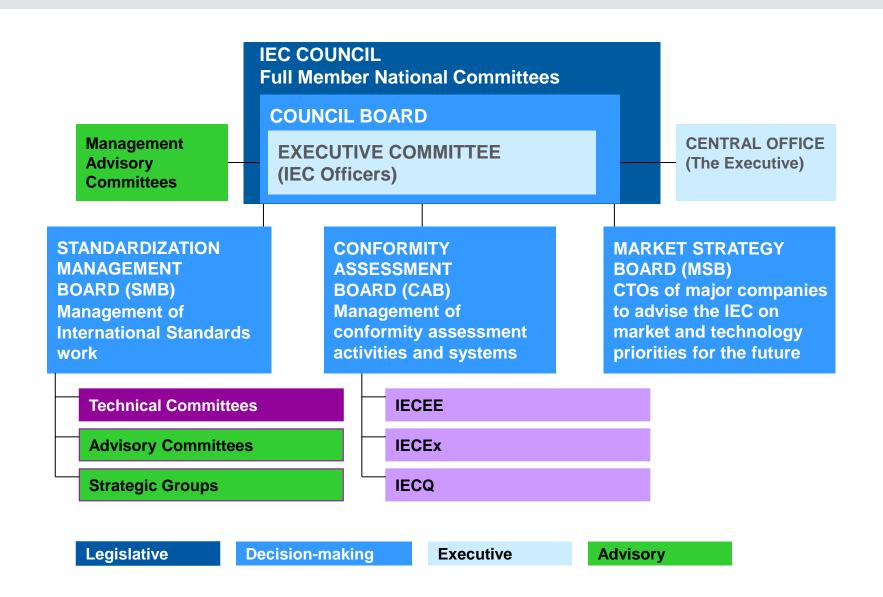
Regional offices (N.Am., S.Am., Asia)

4

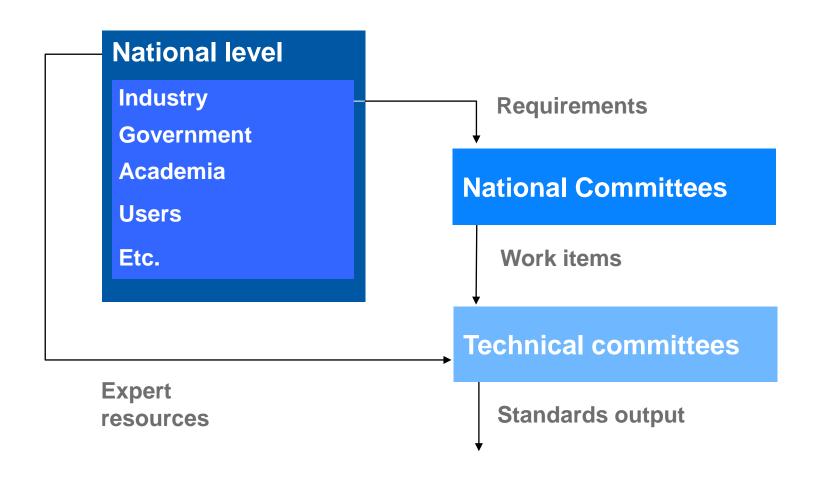




#### **Organization chart**



# IEC functioning





#### **IEC Conformity Assessment Systems**

- Global
- One test, one certification, one mark
- Remove delays and costs of multiple testing and approval:
  - Products get to market more quickly and expense reduced
  - Trade barriers caused by different certification criteria in various countries reduced
  - New markets opened up
- Help to ensure a fair global trading system in accordance with WTO



#### **Benefits to governments**

- International standards are best source for governments for
  - legislation/regulation
  - issuing tenders
- Recognized source for WTO compliance
  - contributing towards fulfilment of the World Trade Organization's Agreement on Technical Barriers to Trades
- Standards provide detailed technical basis for laws and regulations



#### Renewable energy product/system standards

- TC 4: Hydraulic turbines & equipment
- TC 82: Photovoltaics
- TC 88: Wind turbines
- TC 114: Marine energy systems
- TC 117: Solar thermal plants
- **=** ...
- Dozens of working groups
- Hundreds of standards



#### Applying standards & conformity assess.

- Standards cover all relevant aspects
  - products: performance, safety, testing
  - systems: design, interoperation, dynamics
  - installation, commissioning
  - operation, personnel competence
  - maintenance
- Certification provides confidence
  - Funding agencies & insurers reassured
- All stakeholders have contributed



#### Role of standards & conformity assess.

- Assurance of significant properties
  - safety, performance etc.
- Yardstick of the state-of-the-art
  - technology transfer, assurance of quality
- How-to
  - or at least a checklist
- Best technical basis for regulations
- Guarantee of international equivalence



#### Communities & audiences for standards

#### Project managers

- Standards describe the desired final results
- Standards provide technical elements needed

#### Funding agencies

Standards & conformity assessment give assurance of quality and durability

#### Governments

- Standards show international agreement
- Standards & CA provide a level paying field



#### How the IEC plans for the future

- Market Strategy Board
- Major White Papers
  - Coping with the Energy Challenge 2010
  - Grid integration of renewables... Oct. 2012
- Recommendations to governments, research, industry, regulators
  - e.g. the importance of correct incentives
  - e.g. how to target research & investment



# **THANK YOU**

