The IEC:
US Committee Activities and Organizational Structure

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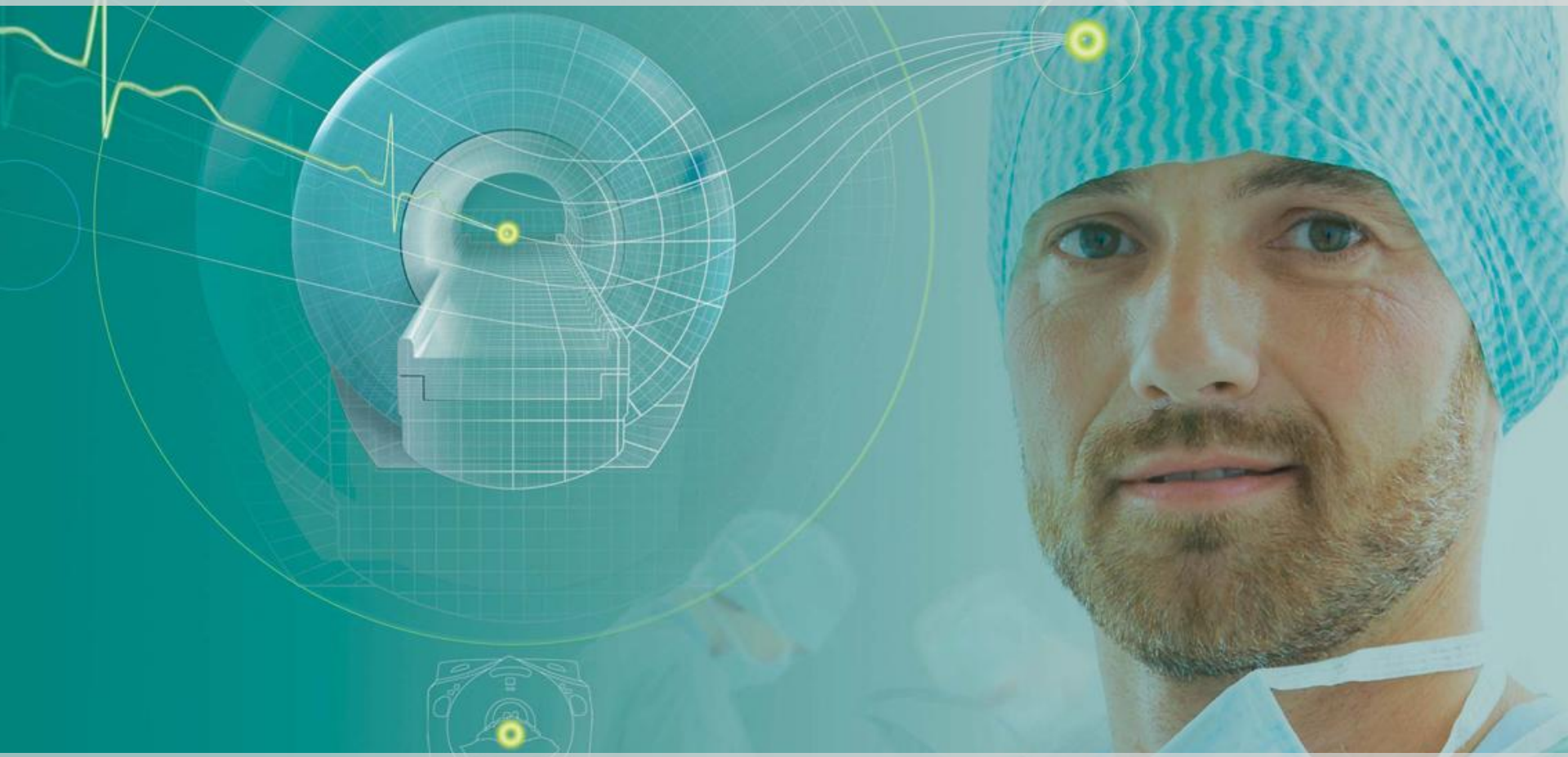
Convener, WG-1
Chair, US TAG for IEC 62C

THE UNIVERSITY OF TEXAS
MD Anderson Cancer Center
Making Cancer History®

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION



TC 62

Electrical Equipment in Medical Practice

IEC Mission

- Leading platform for Standards and Conformity Assessment Systems
- Facilitate international trade and enhance user value
- Encourage national adoption of International Standards
- Ensure technical and market relevance

Which is a key benefit of IEC International Standards?

3%

a. Enable new laws to regulate sale of electrical equipment

0%

b. Generate revenue for member states

52%

c. Facilitate international trade and market relevance of products

44%

d. Ensure the highest possible technical performance

2%

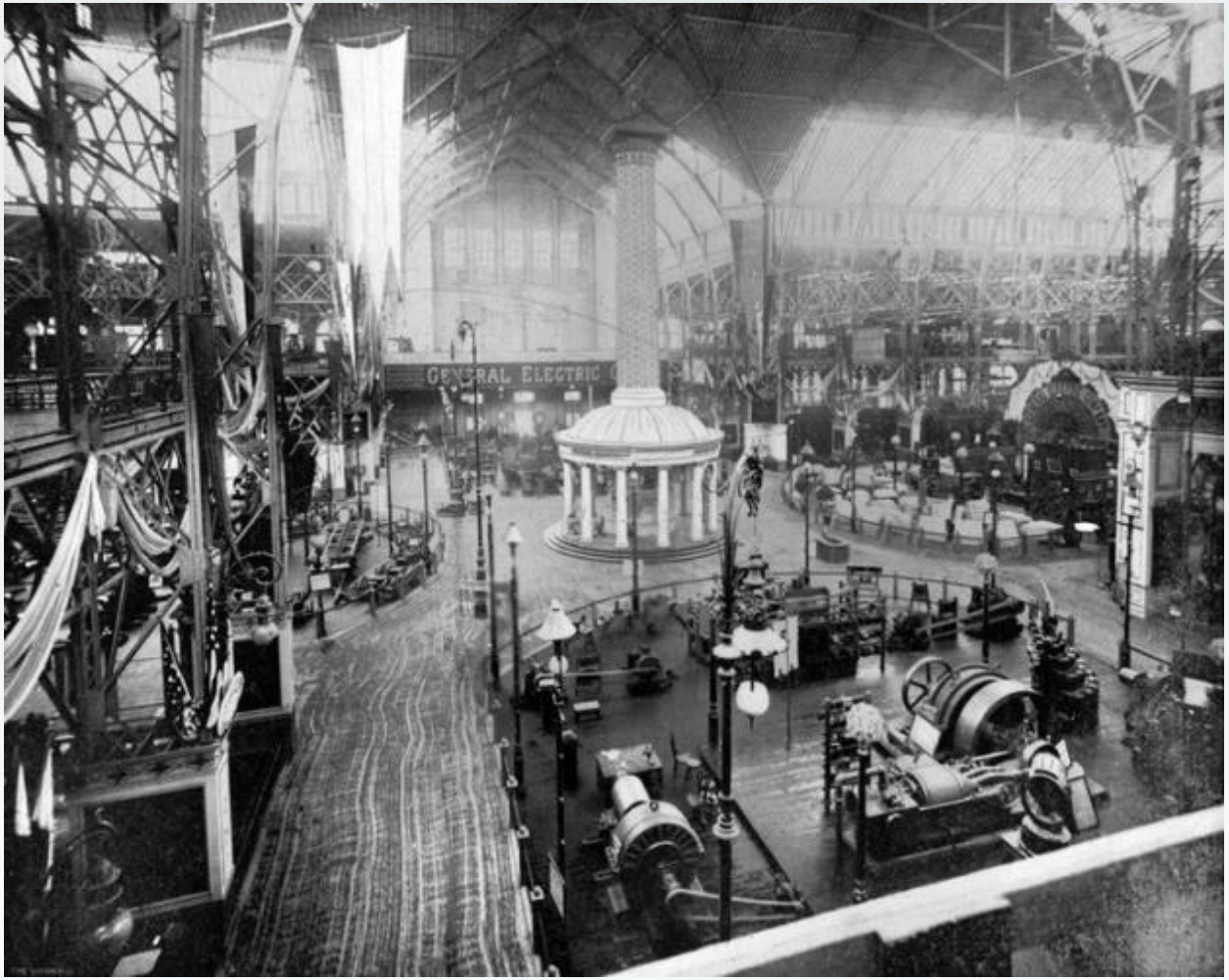
e. Eliminate requirements for testing new products

Which is a key benefit of IEC International Standards?

c) **Facilitate international trade and market relevance of products**

Ref: http://www.iec.ch/about/activities/standards.htm

St. Louis 1904: palace of electricity



Scope of the IEC

Millions of devices and systems that use or produce electricity and contain electronics.

Interoperability, safety, performance, EMC, waste management and environment














one test…

one certification…

many countries

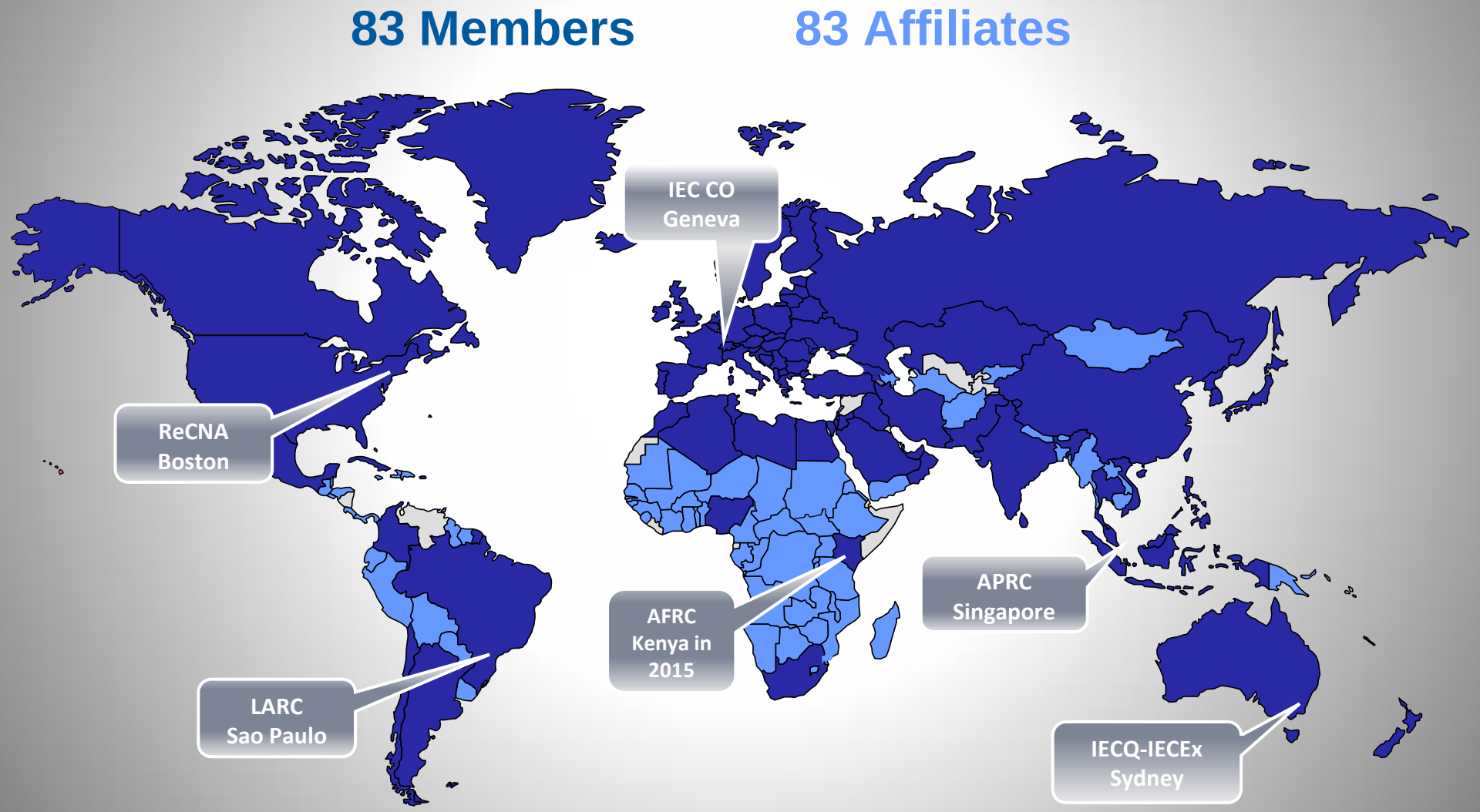
global knowledge platform

<15 000 experts
> 170 TC/SCs
7 000 International Standards
> 1 million certificates issued

IEC is a voluntary association of National Committees

USNC represents US manufacturers, research & development, and consumers

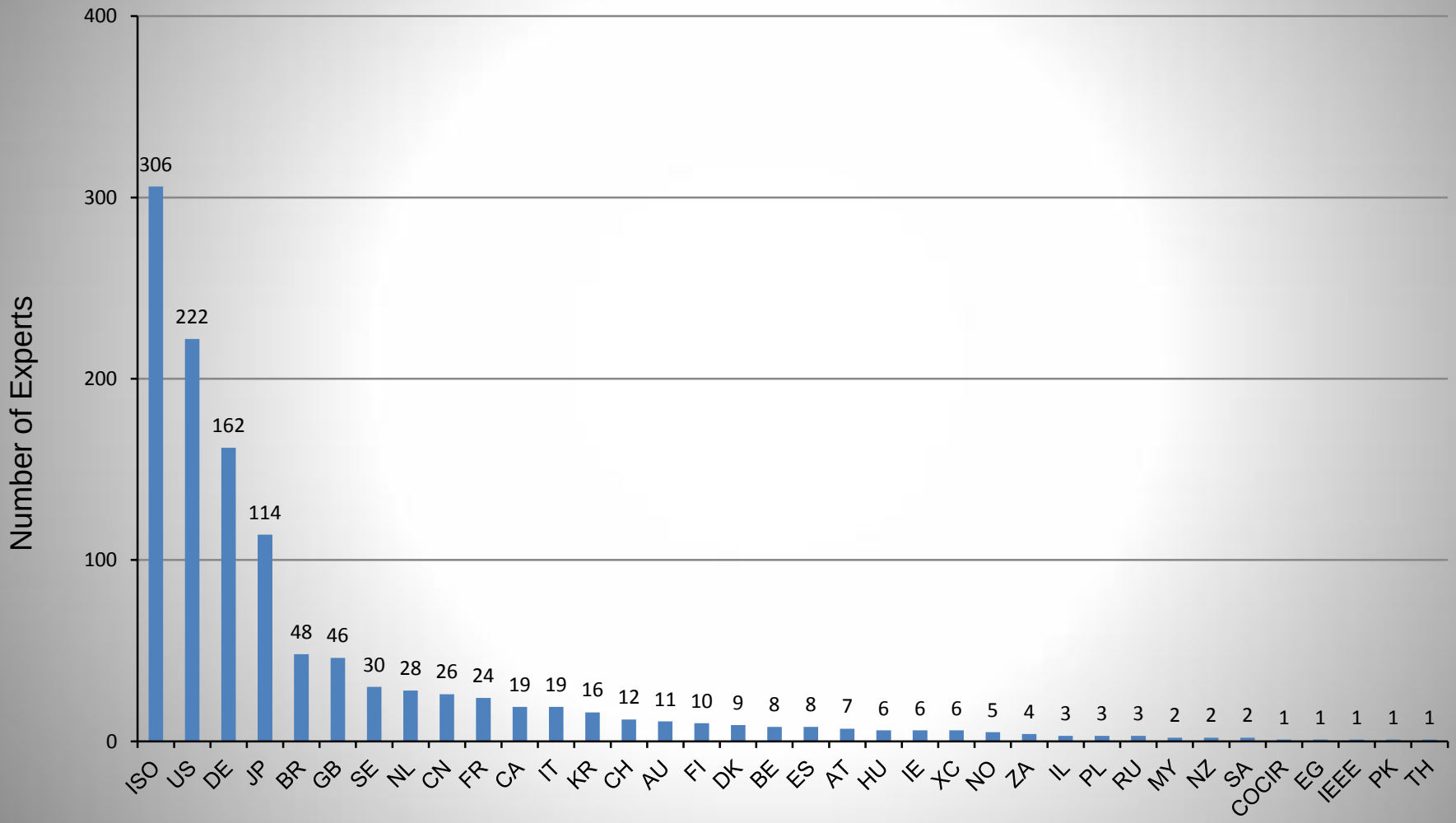
IEC Family: 166 countries



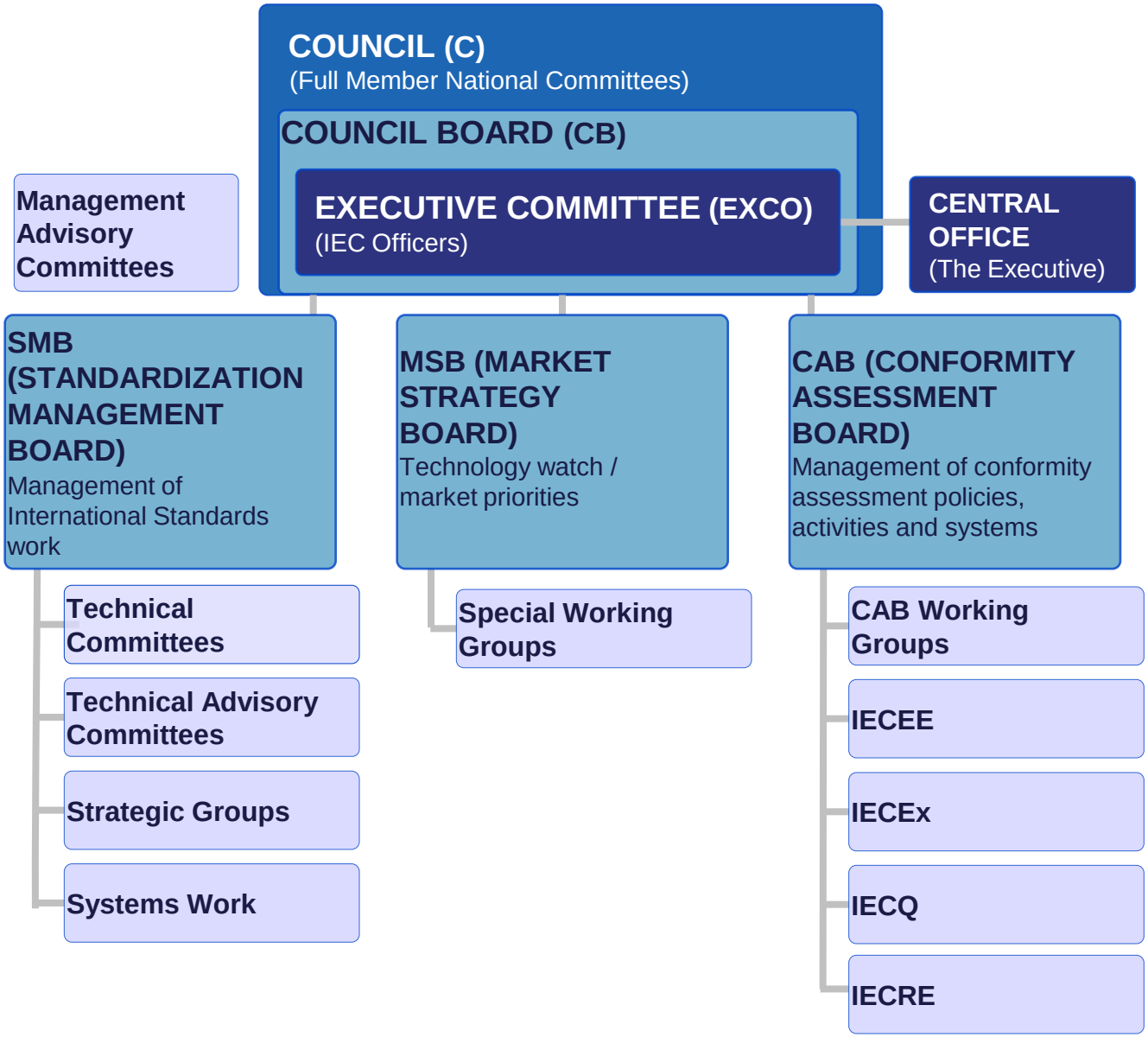
IEC in figures

Number of TC/SC		97 + 77 = 174
Number of WG/PT/MT		1 320
Number of experts		over 13 500
Number of pubs. in catalogue	(incl. 6178 IS)	6939
Number of pubs. issued in 2014	(incl. 418 IS)	487
Number of active projects (2014/12/31)		1577
Average development time (in 2014)		32.5 Months

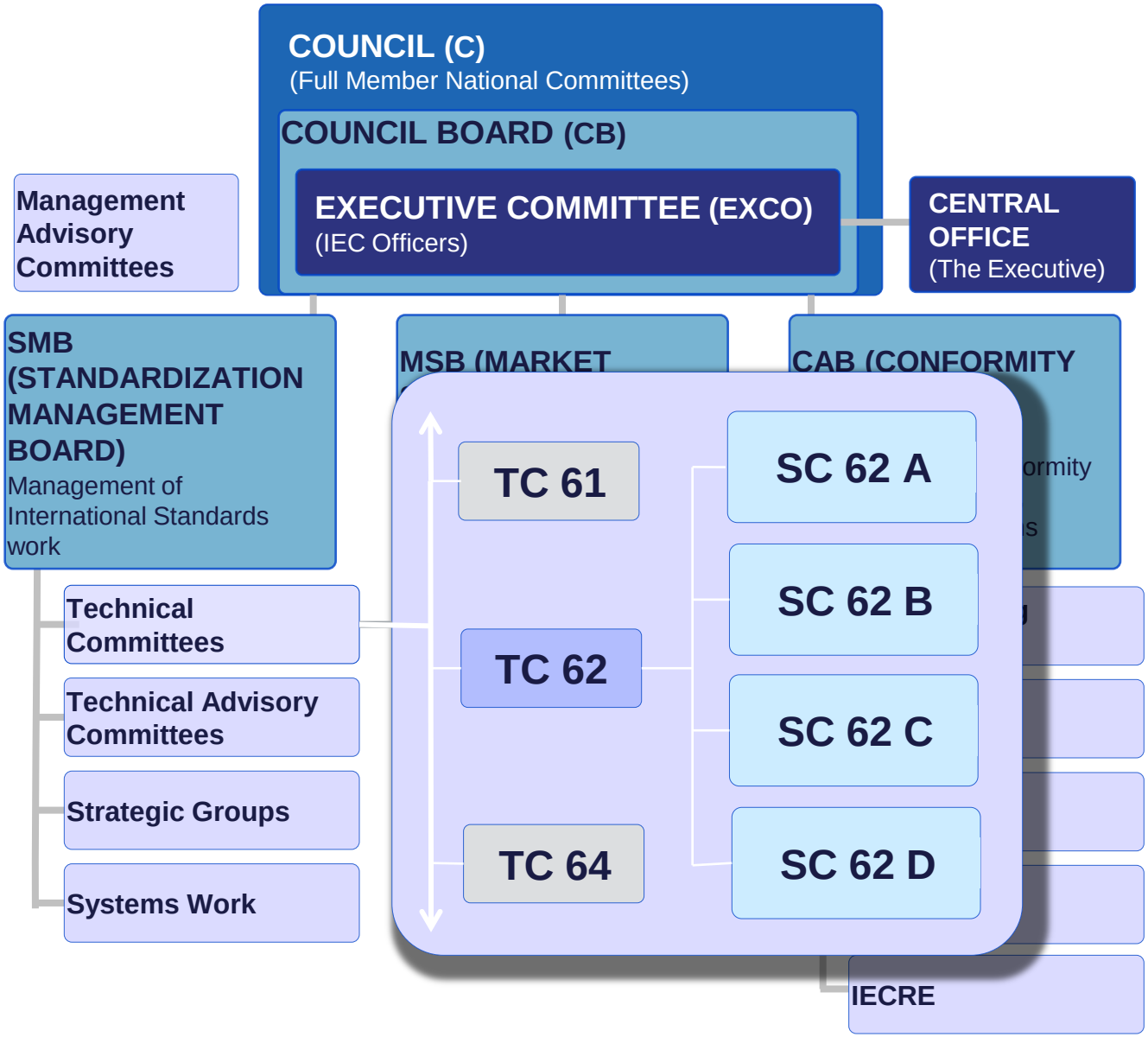
TC 62 in figures – Experts by NC



Structure of the IEC



Structure of the IEC



Technical Committee 62

- 62A - Common Aspects of electrical equipment used in medical practice
  - Fundamental aspects of safety; general requirements,
- 62B - Diagnostic imaging equipment
  - Safety requirements for specific equipment such as CT, MR, x-ray tubes; characteristics and performance guidelines
- 62C - Equipment for radiotherapy, nuclear medicine and radiation dosimetry
  - Safety requirements for specific equipment such as linac, IGRT, gamma units; characteristics and performance guidelines
- 62D - Electromedical equipment
  - Safety requirements for specific equipment such as cardiac defibrillators, shortwave therapy, high-frequency surgery; characteristics and performance guidelines

TC 62 in figures

	TC 62	SC 62 A	SC 62 B	SC62 C	SC62 D
P - Members	28	30	29	26	26
O - Members	19	16	17	19	21
Number of Experts	1172	528	205	109	445
Total participation in all groups	1930	875	302	159	553
(the same Expert can be active in several groups)					
Number of WG/PT/MT	0	24	17	4	24
Number of pubs. in catalogue	1	48	55	39	60
Current active projects	0	14	7	6	17

Adoption of IEC Standards

- In Europe:
  - IEC standards selected for "parallel voting" by CENELEC
  - When approved, assigned "EN" number
  - Standards adopted as written and carry the force of law
  - However, up to EC members to enforce

Adoption of IEC Standards

- In US:
  - IEC standards (or sections) incorporated into ANSI standards, FDA regulations, NEMA guidelines, etc.
  - IEC standards can be used as written; FDA requires vendor to report compliance
- Elsewhere?

IEC publications

- International Standard (IS)
- Technical Specification (TS)
- Publicly Available Specification (PAS)
- Technical Report (TR)

What is an IEC International Standard?

- technical guidelines or characteristics developed by experts representing all stakeholders
- based on international consensus
- always voluntary

How are IEC IS developed?

- established standards development process
- National Committees involved at each stage
- Technical Committees established for specific fields of activity

Standards development stages

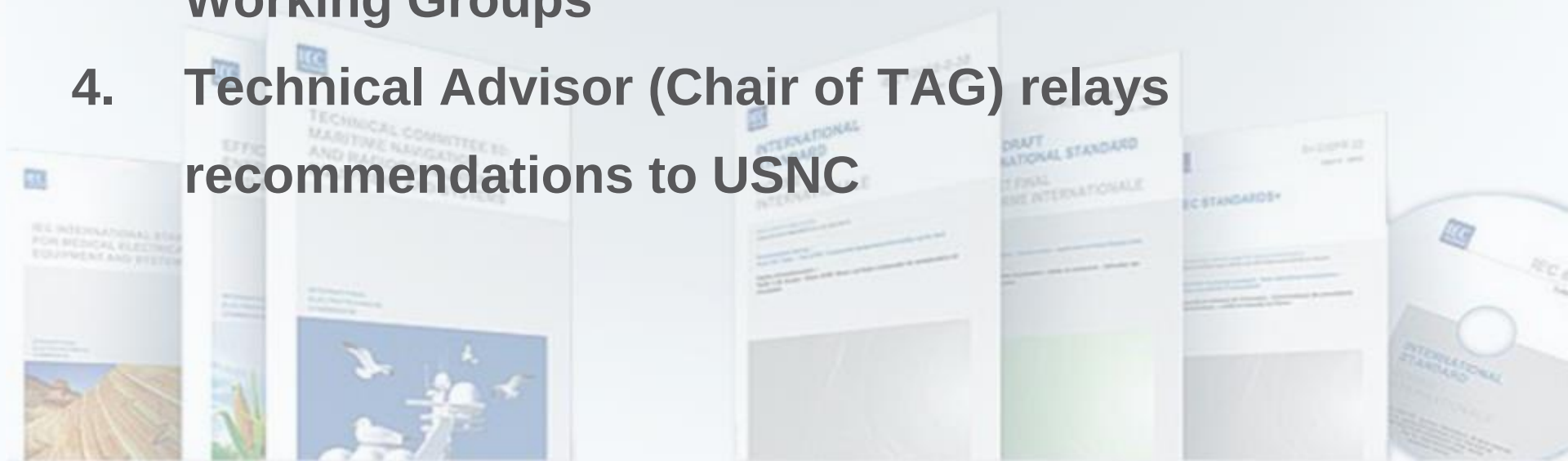
- New Proposal
- Committee Draft
- Committee Draft for vote
- Final Draft International Standard
- International Standard

United States National Committee of International Electrotechnical Commission (USNC/IEC)

- Coordination of U.S. involvement in the IEC and other electrotechnical bodies associated with the IEC
- Develops annual plans to achieve the USNC strategic objectives, implements these plans, measures successes, and reports progress to the USNC constituency.

Role of US Technical Advisory Group

1. Review and recommend vote on New Work Item Proposals
2. Review, comment and recommend vote on Draft Standards
3. Recommend technical experts to serve on Working Groups
4. Technical Advisor (Chair of TAG) relays recommendations to USNC



The role of the Technical Advisory Group (TAG) is which of the following?

15% **a. Publish new International Standards**

9% **b. Pass regulations regarding new equipment**

6% **c. Attend Subcommittee meetings and cast votes**

41% **d. Submit comments and votes to the Working Group**

30% **e. Advise the National Committee how to vote**

The role of the Technical Advisory Group (TAG) is which of the following?

e) Advise the National Committee how to vote

Ref:http://www.ansi.org/standards_activities/iec_programs/governance_committees/gen_info.aspx?menuid=3#tag


Thank You!
Electrotechnology. A natural passion.
IEC
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