

Shawn Paulsen IEC Vice-President and CAB Chair IECEx MC Meeting September 8th, 2022 Virtual



International Electrotechnical Commission

Vision: IEC everywhere for a safer, more efficient world.



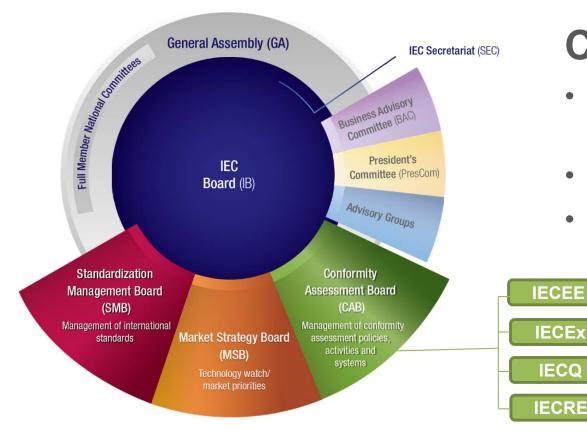
Strategic objectives

- Market and societal relevance
- Sustainable business model
- Flexible
 organization
- Agile operations





Organization chart



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Core principles:

- Transparency & Accountability
- Performance management
- Diversity



IEC Initiatives

- New Statutes and RoP
- IEC Strategic Plan
- IB TF 3 SDGs
- IB TF 5 SMART Standards and CA
- Global Impact Fund



Foster a sustainable world



- As part of our vision to build a safer and more efficient world, the IEC has launched the IEC Global Impact Fund.
- Environmental, social and corporate governance (ESG) initiative
- Use IEC work to bring technologies to developing counties to help address
 - e-waste,
 - electricity access
 - climate change
- Donor funded
- Provides grants to small & medium enterprises (SMEs) to develop projects



IEC Strategic Plan

Three Strategic Themes

- Enabling a digital and all electric society
- Fostering a sustainable world
- Leading on trust, inclusion and collaboration

Operational Plans from the CAB, MSB, SMB



IEC Strategic Plan

Nine Strategic Goals

- Producing standards and conformity assessment solutions for a safe and secure digital society.
- Developing and deploying SMART Standards and Conformity Assessment that meet evolving market and member needs.
- Strengthening the role of IEC standards and conformity assessment to deliver an all-electric and connected society.
- Building an efficient, safe, and sustainable world through IEC standards and conformity assessment.
- Providing solutions and services for net zero, circul economy, and sustainable development to meet UN SDGs.

IEC Strategic Plan

- Championing energy efficiency, the renewable energy transition and next generation power systems.
- Collaborating with partners and stakeholders to enhance sustainable global trade in electrotechnology and increase the use and influence of IEC standards and conformity assessment services.
- Embedding good governance and best practices to strengthen organizational excellence and meet stakeholder needs.
- Building an inclusive, diverse, innovative, and agile organisation.



Role of CAB

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- Policy and strategy
- Oversight of operational aspects and budgets
- Approve basic rules and rules of procedure
- Oversight of the IEC CA Systems: IECEE, IECEx, IECQ, IECRE
- High Value Cooperation with
 International Bodies





Seven Strategic Actions

- Increase existing IEC CA services.
- Investigate opportunities for new IEC CA services and introduce quickly where appropriate.
- Increase use of digital services and methods.
- Electrification programmes and Reduction of e-waste (and testing energy).
- Develop programmes to educate and attract.
- Develop strategies for fostering closer relations with relevant organisations.
- Implement actions and work practices to ensure agile and flexible development, management and implementation of IEC CA activities.



- Harmonized Basic Rules (HBR) for CA
 Systems HBR ed. 2.5
- CA Directives, Standards Guidelines
- IEC CA Strategic Operation Plan
- New CA Services Radar
- Guideline Market Impact Analysis /Business Case – IEC CAB-G01



- CAB ahG CA Requirements
- CAB Taskforce SDG's
- New WG Digital Transformation
- ACOS Collaborative Safety



- Peer Assessment/National Accreditation
- Ethically Questionable Products
- Strategic Mindset
- IEC CA Decisions by Correspondence
- Electronic Labels



IEC Board Collaboration

- Standards & Conformity Assessment Cooperation
- Guidance to TCs/SCs for CA when writing standards
- IEC CA Systems feedback loop from CA to SD
- Liaisons
 - SMB SG 11 Hot Topics & CAB New CA Services Radar
 - SMB SG 12 Digital Transformation
 - ACOS, ACEE, ACSEC, and others
 - CAB, SMB, MSB collaboration on Market Evaluation
 - CAB, SMB, MSB collaboration on White Papers
 - CAB, MSB TF CO2 Emissions Certificate Program



IEC CA Systems Principals



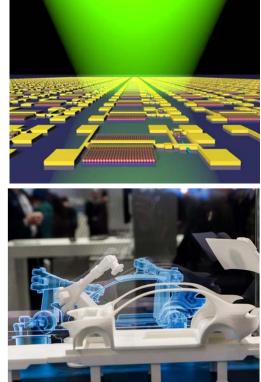
- IEC CA Systems are non-profit
- IEC CA Systems are neutral and transparent
- IEC CA Systems are market driven
- IEC CA Systems does not do any conformity assessment (CA) itself (not testing, not certification, etc)
- IEC CA Systems creates an international framework in which commercial CA organizations operate



Unprecedented integration

- Digital twins
- IoT/IIoT
- Sensor networks
- Control and algorithms
- Big data and the cloud
- Bridge between the physical and digital world
- Robotics
- Wearables
- Bio-digital Convergence
- Interoperability, and more
- Efficient data exchange across multiple technical systems, domains, departments, factories

Greater efficiencies, new opportunities

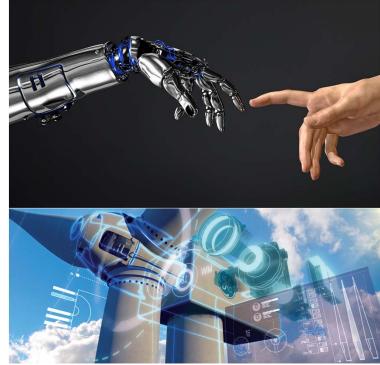




Future CA Challenges

- Remote technologies for monitoring and inspection;
- Test methods through machine learning and artificial intelligence;
- Digital testing;
- 3D printing;
- Big Data;
- Virtual measuring;
- Digital twins;

These are all possibilities which may define the future of conformity assessment.







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