IEC Energy Efficiency in IEC SG1 and IEC ACEE

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ACEE Chairman

EE Workshop
13.03.14
Paris

INTERNATIONAL ELECTROTECHNICAL COMMISSION

IEC SG 1: Strategic Group on Energy Efficiency

- SG 1 was established in 2007-02 with the task to analyze the status quo in the field of energy efficiency and renewable and formulate recommendations for further actions.
- SG 1 examined the whole energy supply chain
  (Industry, Buildings, Home, Transport, Generation, Transmission, Distribution)

Application fields \ Consumption	Industrial	Commercial buildings (tertiary)	Domestic	Transport
Lighting	Box 13 ✓	Box 14 Recommendation 6 ✓	Box 15 Recommendation 6 ✓	Box 16 (✓)
Rotation	Box 17 Recommendation 7 ✓	Box 18	Box 19	Box 20 Recommendations 8, 9, 10 ✓
Heating Cooling	Box 21 Recommendation 11 ✓	Box 22 (✓)	Box 23 Recommendations 14, 15, 16 ✓	Box 24
Data processing	Box 25 Recommendation 21 ✓	Box 26 (✓)	Box 27 Recommendations 17, 18, 19, 20 ✓	Box 28

- high significance
- medium significance
- low significance
- no significance

✓ done

(✓) implicitly covered

IEC SG 1: issued 34 Recommendations

Area	Priority	Recommendation	Who, Lead	Remarks	Status
Terminology, calculation methods	1	**SG1 Recommendation 1:** To develop a common general terminology, metrics, general calculation methods and criteria in the field of energy efficiency in order to provide a generic framework as the basis for further detailed domain specific requirements. This should be a joint activity of IEC, ISO and possibly ITU incl. the cooperation with the International Energy Agency (IEA).	IEC, ISO, ITU	Attention is drawn to IEC/TC 111's project 62542 "Standardization of environmental aspects - Glossary of terms" as well as existing definitions of IEC product committees. Furthermore, the work of ISO/TC 203 "Technical energy systems" and possibly other TCs should be checked for relevance. *NOTE 1– It is recommended that within the new Project Committee a well balanced engagement of experts delegated by ISO, IEC, IEA and ITU is achieved.* *NOTE 2– The IEC/TC 111 results on harmonizing the concepts of equipment modes in respect to power demand should be given as an input for the ISO/IEC JWG on terminology.*	**Approved** 2008-09-01 (SMB/3718B/R SMB/3718C/CC)
Follow-up	ISO/IEC JPC 2 during 2009 established under ISO lead, 1st meeting held 2010-01				2010-08

- **Rec. #1:** Foundation of ISO/IEC JPC 2 on Terminology in 2009: JPC2/CDV/38:2013-05 (EE) and JPC2/CDV/39:2013-05 (RE)
- **Rec. #7/#21:** Foundation of IEC/TC 65/JWG 14 on Energy Efficiency in Industrial Automation (rec. #7 and #21): IEC/TR 62837 "Industrial-process measurement, control and automation - Energy Efficiency through Automation Systems"
- …

IEC ACEE: Advisory Committee on Energy Efficiency

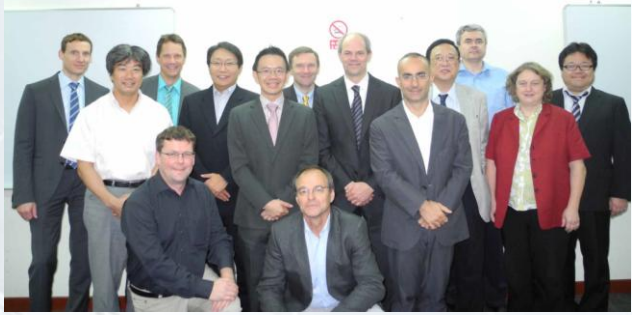
Terms of Reference AC/11/2013

ACEE deals with energy efficiency matters which are **not specific to one single** technical committee of the IEC. It coordinates activities related to energy efficiency.

ACEE is responsible for the **assignment of horizontal energy efficiency** aspects and requirements. **ACEE provides guidance** for implementation in a general perspective and for specific sectors.

It encourages a **systems perspective** for the development of standards for energy efficiency and provides support for system considerations.

IEC ACEE: Member



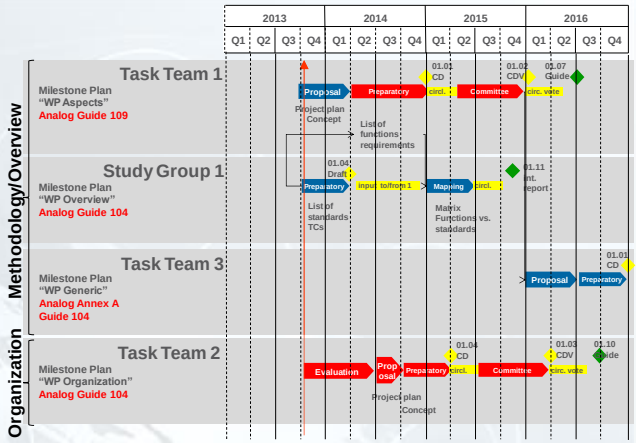
Experts from National Committees

Australia, Canada, China, France, Germany, Italy, Japan, Korea, Switzerland, United States of America

Representatives of Technical Committees

TC 17	Switchgear and controlgear
TC 22	Power electronic systems and equipment
TC 23	Electrical accessories
TC 27	Industrial electroheating and electromagnetic processing
TC 59	Performance of household and similar electrical appliances
TC 64	Electrical installations
TC 65	Industrial-process measurement, control and automation
TC 100	Audio, video and multimedia systems and equipment
TC 105	Fuel cell technologies
TC 120	Energy Storage

IEC ACEE: Work Plan



Methodology - operational

- Aspects - Definition of EE aspects
- Overview - Overview of existing EE standards
- Generic - Derive generic approaches per aspect

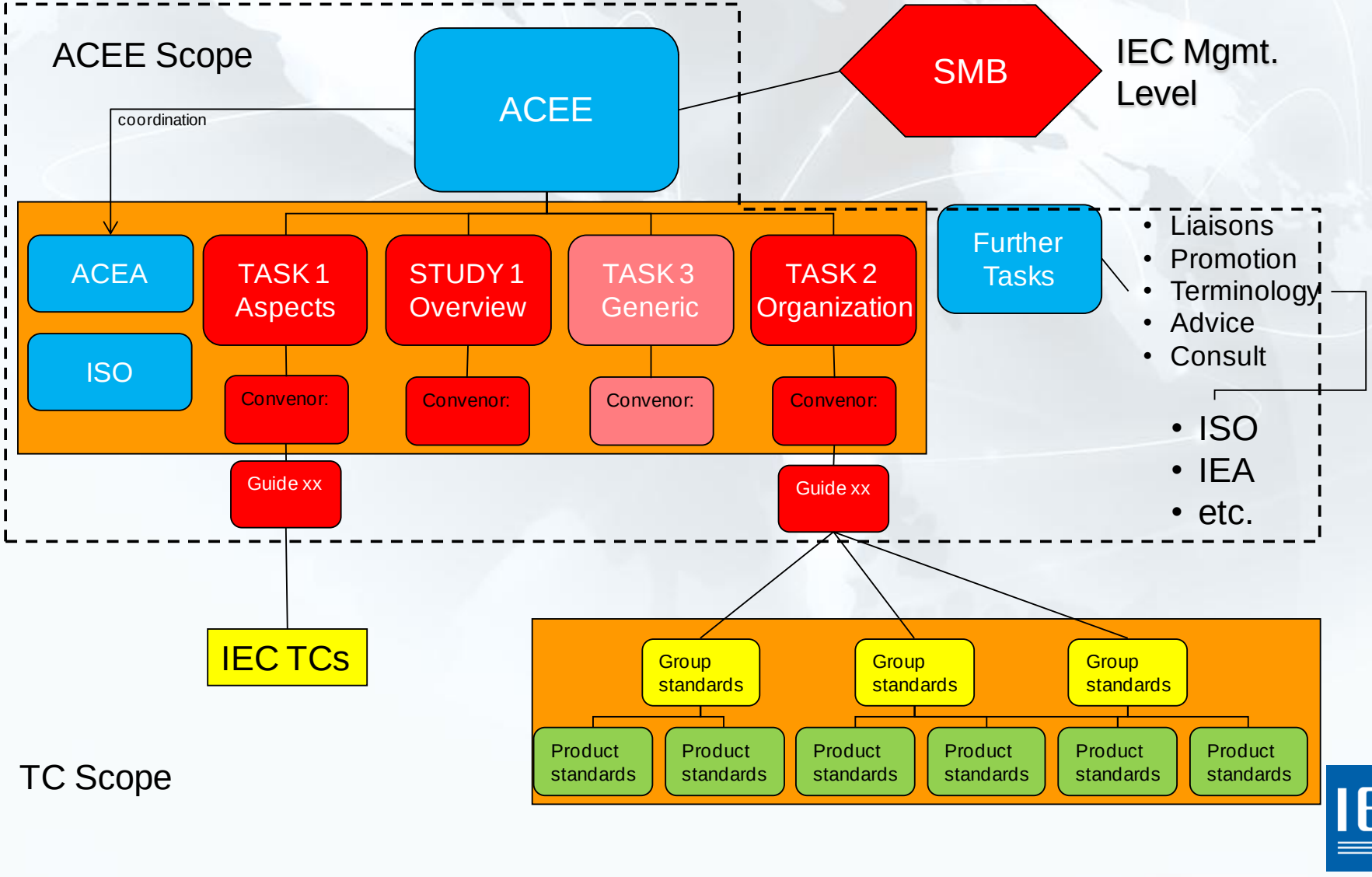
Organization – structural

- Organization - Description of IEC organization

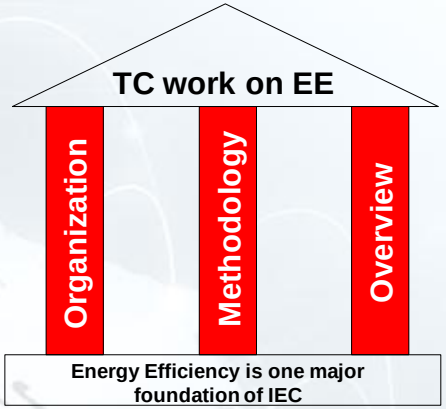
Accompanying actions

- Definitions - Terminology
- Marketing - Dissemination

IEC ACEE - Organization



IEC ACEE - Outlook



Guidance

- Guide(s) for technical committee work
- Harmonized, systematic approach for inclusion of energy efficiency in IEC standards
- Consulting of standardization management board (SMB) of IEC

Information

- Existing standards repository classified towards energy efficiency aspects

Energy Efficiency
is a major foundation of IEC

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