ISO/IEC SC25/WG3 Meeting

Mexico: 29 Feb - 04 Mar 2016

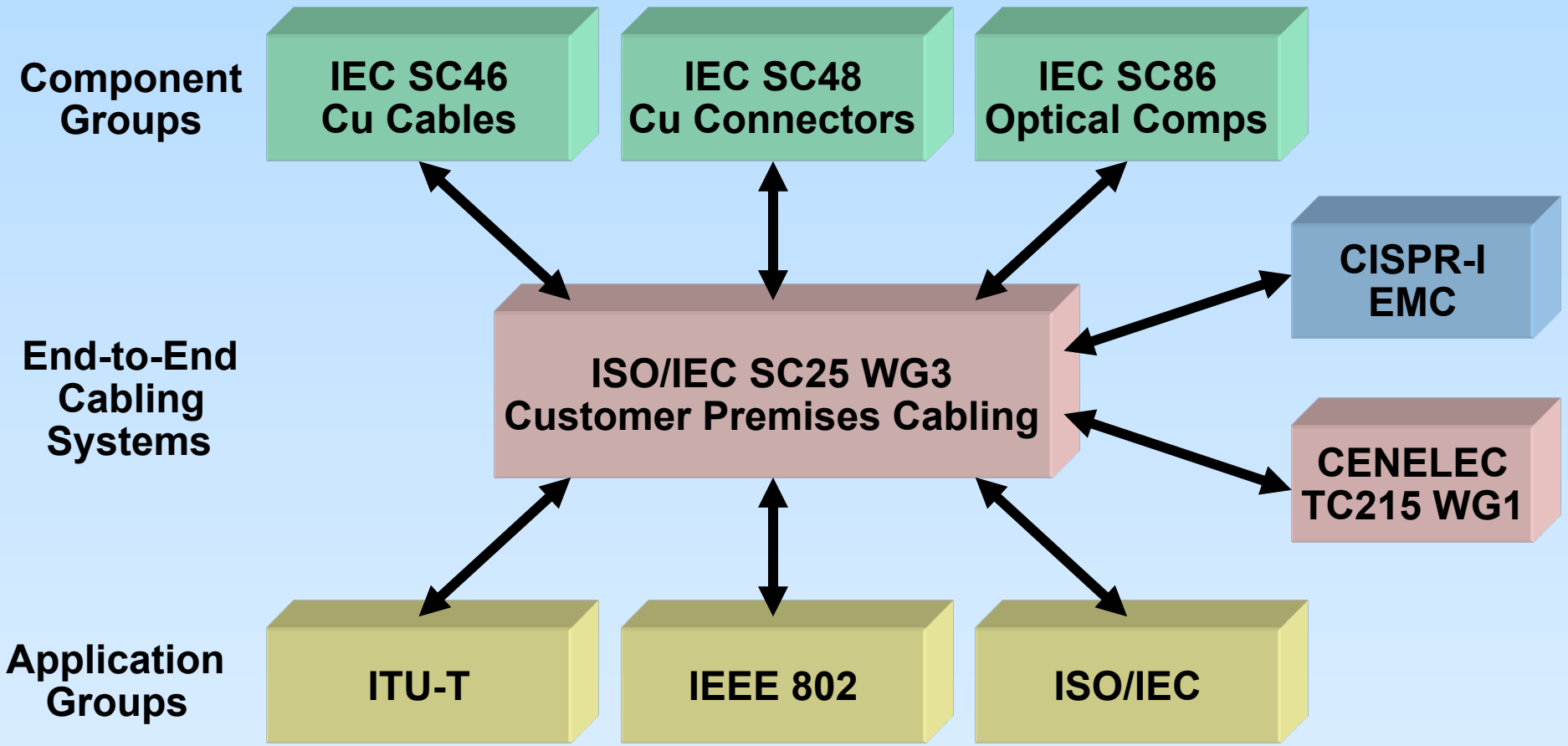
- Customer Premises Cabling -

44 Participants **14 Nations**

Key Items:

1. ISO/IEC 11801 Ed.3 major revision - 2nd CD had a thorough review and is being elevated to a DIS (contains Class I/II cabling to support 802.3bq)
2. ISO/IEC 11801-9904 Installed Cabling to Support 802.3bz elevated to PDTR
3. ISO/IEC 11801-9905 Installed Cabling to Support 802.3bq 25GBASE-T WD prepared
4. ISO/IEC 29125 to support 802.3bt elevated to PDTR
5. liaisons sent to 802.3bq, 802.3bt, 802.3bv, 802.3bz and also 802.11 (on WAP cabling)

Process Model



ISO/IEC 11801 Edition 3: Generic Cabling

- existing design standards re-structured into single family:
  - ISO/IEC 11801-1 General Requirements (structure, dimensioning, channel)
  - ISO/IEC 11801-2 Commercial Office Environment (unique aspects)
  - ISO/IEC 11801-3 Industrial Environment (unique aspects)
  - ISO/IEC 11801-4 Residential Environment (unique aspects)
  - ISO/IEC 11801-5 Data Centre (unique aspects)
  - ISO/IEC 11801-6 Distributed Building Services (unique aspects)

ISO/IEC 11801 Edition 3: Generic Cabling

- ISO/IEC 11801-3/4/5/6 Ed.3 2nd CD received substantial support
- ISO/IEC 11801-1 Ed.3 2nd CD did not receive substantial support
  - 15 nations approve/9 nations disapprove (BE, DK, FR, IE, NL, SI, SW, CH, US)
- ISO/IEC 11801-2 Ed.3 2nd CD did not receive substantial support
  - 16 nations approve/8 nations disapprove (DK, FR, IE, NL, SI, SW, CH, US)
- 1400 comments received from national review of 384-page draft
  - 780 technical + 620 editorial
- all comments resolved at meeting and a DIS is being prepared
- FDIS is now planned as output from next meeting in Sep 2016

ISO/IEC 11801 Edition 3: Resolutions of Note

1. proposal to re-insert POF to support home and industrial applications was rejected.
2. agreed to introduce WBMMF together with an editor's note stating that it will be withdrawn prior to publication if IEC specifications are not sufficiently mature (i.e. at least CDV).
3. decision to change the 850nm attenuation requirement for cabled OM3 and OM4 fibres from 3.5dB/km to 3.0dB/km was deferred, pending verification by IEC SC86A.
4. proposal to reduce the minimum number of outlets per office work area from two to one was rejected.

ISO/IEC TR 11801-9904: Guidelines for Installed Cabling to Support 2.5GBASE-T & 5GBASE-T

- TR to provide guidelines for use of installed cabling to support 802.3bz 2.5GBASE-T and 5GBASE-T
- working draft based on Class D cabling up to 250MHz
- Salz SNR (signal-to-alien crosstalk noise) assessment
- WD defines use cases and guidance on existing cabling
  - certification, measurement + mitigation procedures
- recommendations also on cabling for new installations
  - Class E_A or better
- SC25 WG3 review generated 40 comments (34 technical)
- PDTR being prepared for national review and 802.3bz

ISO/IEC TR 11801-9905: Guidelines for Installed Cabling to Support 25GBASE-T

- TR to provide guidelines for use of installed cabling to support 802.3bq 25GBASE-T
- WD defines use cases and guidance on existing cabling
  - certification, measurement + mitigation procedures
- recommendations also on cabling for new installations
  - Class I/II or better
- ad hoc review generated 60 comments (43 technical)
- 2nd WD being prepared for SC25 WG3 review and 802.3bq

ISO/IEC 29125: Cable Heating

- ISO/IEC TR 29125 being extended to support higher currents for IEEE 802.3bt 4-pair PoE:
  1. temp rises for Cat 5 to Cat 7_A solid conductor cables plus 0.4mm stranded cords
  2. bundle sizes up to 100 cables
  3. up to 600mA per conductor
  4. range of installation environments
- 96 comments received from national review
  - 47 technical + 49 editorial
- all comments resolved at meeting, PDTR being prepared

Feasibility of Cabling to Support 50GBASE-T

- technical feasibility study conducted by Siemon
- based on scaled 10GBASE-T with Nyquist + 25%
- prototype Cat 8.2 cable extended to 2,500 MHz
- 2 *Tera* connectors in 2m + 26m + 2m channel
- IL, NEXT, ACR-F, TCL, ELTCTL excellent margins
- RL also compliant but with reduced margin
- 50GBASE-T cabling claimed by presenter to be technically feasible

Future Meetings

ISO/IEC SC25 WG3	19-22 Sep 2016	Germany
ISO/IEC SC25	23 Sep 2016	Germany
ISO/IEC SC25 WG3	16-20 Jan 2017	UK/Singapore
ISO/IEC SC25 WG3	11-14 Sep 2017	Belgium
ISO/IEC SC25	13 Sep 2017	Belgium

Try to avoid clashes with 802.3 interims