

ISO/IEC SC25/WG3 Meeting

Beijing: 15-18 Sep 2014

- Customer Premises Cabling -

Key Items:

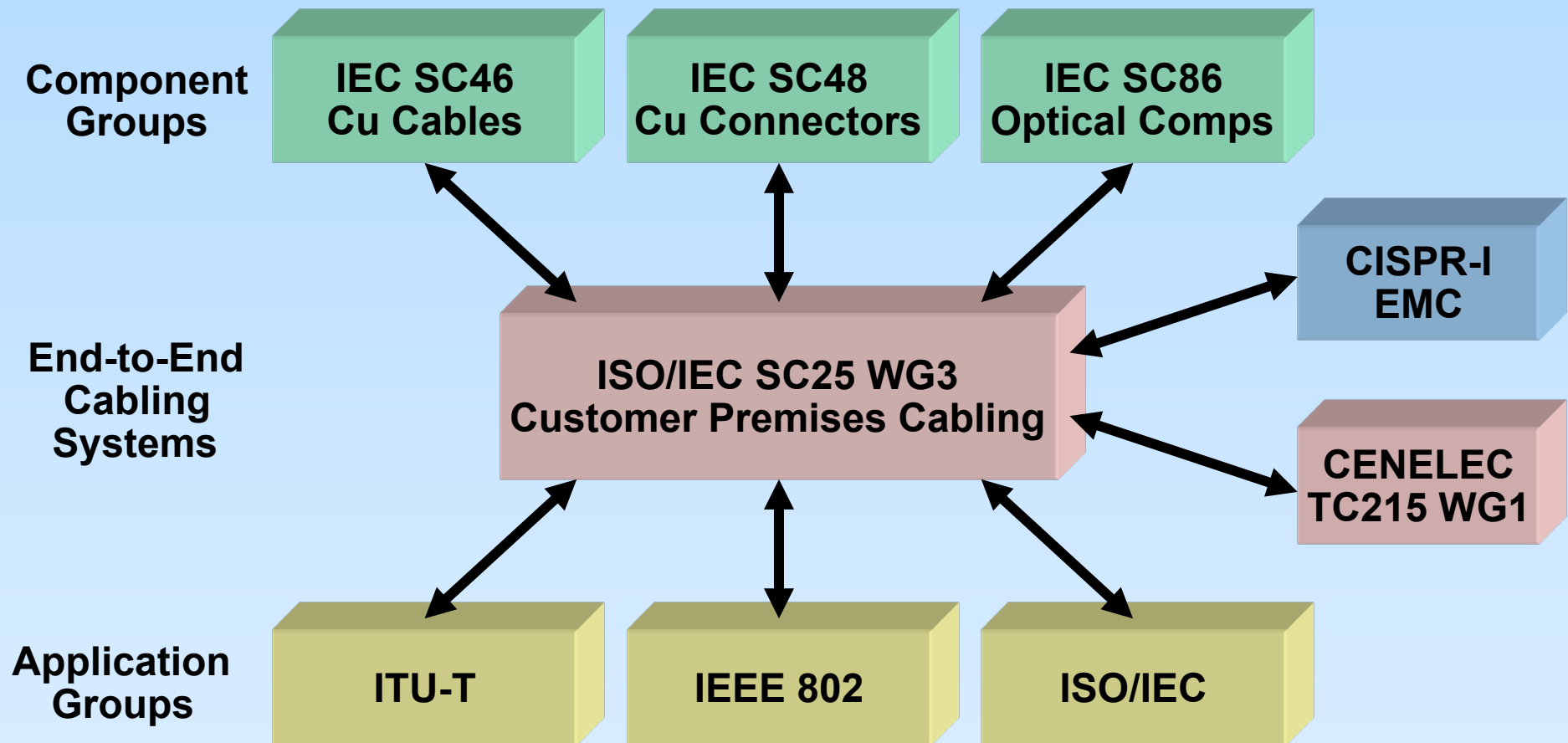
1. ISO/IEC 11801 Ed.3 **major revision** - initial WD has had a thorough review and 2nd WD being prepared
2. Class I/II, Cat 8.1/8.2 “ffs” 1.6-2.0GHz is withdrawn
3. ISO/IEC 11801-99-1 40GBASE-T Cabling published
4. ISO/IEC 11801-99-2 E2E Link Model 2nd WD prepared
5. ISO/IEC 11801-99-3 Matrix Model 2nd PDTR prepared
6. ISO/IEC 30129 Bonding Networks DIS approved
7. ISO/IEC 29125 WD prepared to support 802.3bt



55 Participants

17 Nations

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)**
- **524 comments received from an initial 508-page WD review**
 - **430 technical + 96 editorial**
- **all comments resolved at meeting & 2nd WD being prepared**
- **CD then planned as output from next meeting in Mar 2015**
- **DIS planned as output from following meeting in Sep 2015**

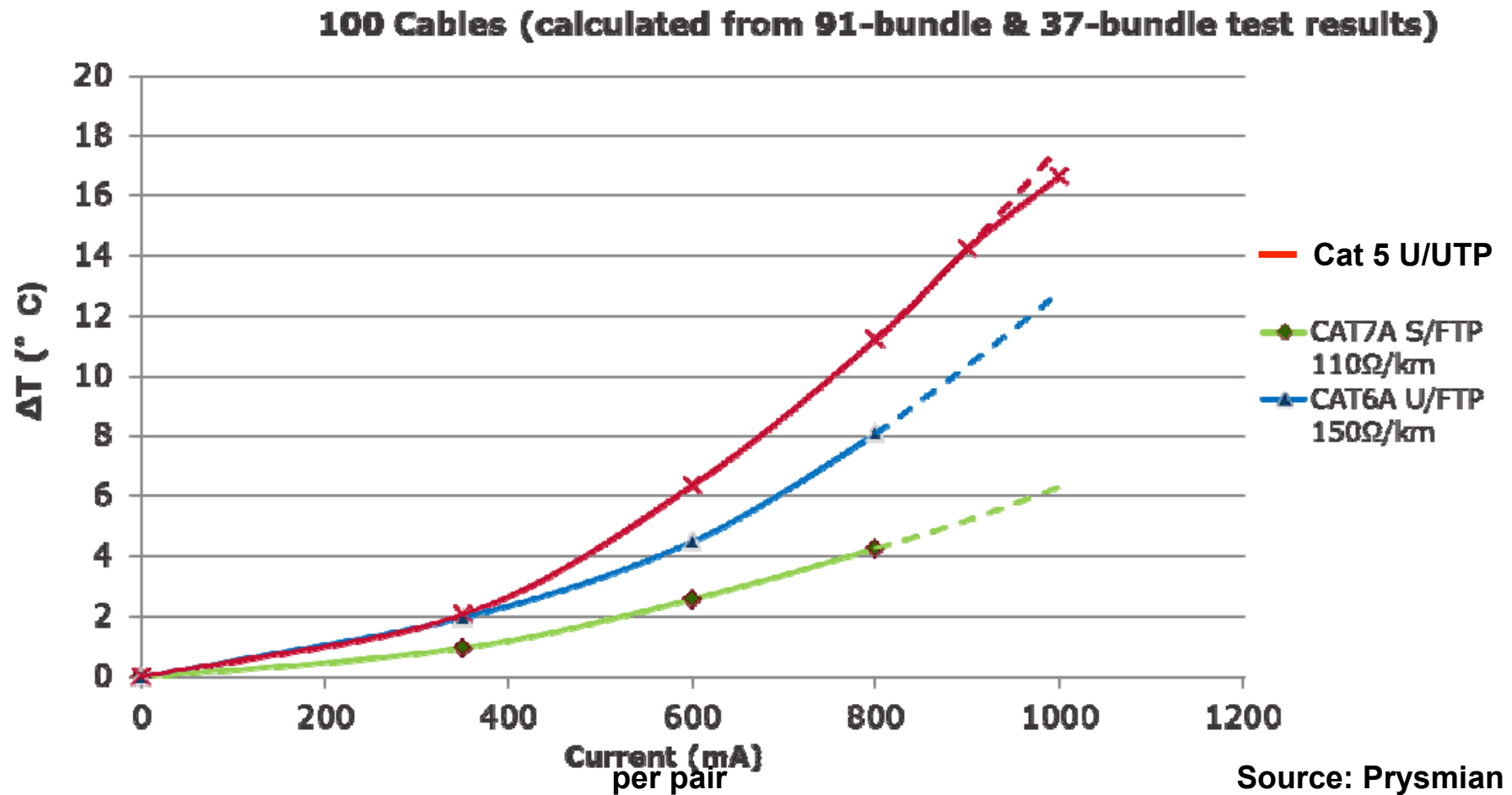
ISO/IEC 11801 Edition 3: Resolutions of Note

1. “ffs” for Class I/II & Cat 8.1/8.2 specs 1.6-2.0GHz removed
2. proposal to adopt TIA Cat 8 IL requirement accommodated:
 $0.0856/\sqrt{f} + 0.6371\sqrt{f} + 0.0023*f + 1.0285*10^{-7}*f^2$
3. dc resistance *per metre* introduced for all cabling Classes
4. channel DCRU between pairs of 7%, 100mΩ for all Classes
5. Class I, II to be included in current capacity requirements
6. OM1, OM2 & OS1 to *be grandfathered* (moved to an Annex)
7. connector backwards-compatibility table to be extended, although it will be restricted to RJ-45 & GG-45 connectors
8. 802.3bq 40GBASE-T & 802.3bt 4-pair PoE to be introduced to the table of supported applications

Power over Ethernet

- **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**
 5. **existing model used to estimate temp rise, with values based on the implicit DCR derived from IL of each cable Category**
- **1st draft forwarded as WD for expert review**

Cable Bundle Heating Analysis



Future Meetings

ISO/IEC SC25 WG3	02 - 06 Mar 2015	San Juan, Puerto Rico
ISO/IEC SC25 WG3	07 - 10 Sep 2015	Milan, Italy
ISO/IEC SC25	11 Sep 2015	Milan, Italy