

# **ISO/IEC SC25/WG3 Liaison Report** **- Customer Premises Cabling –**

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# ISO/IEC SC25/WG3 Meeting

## Vienna, Austria: 4-8 March 2019

### - Customer Premises Cabling -

## Key Items:

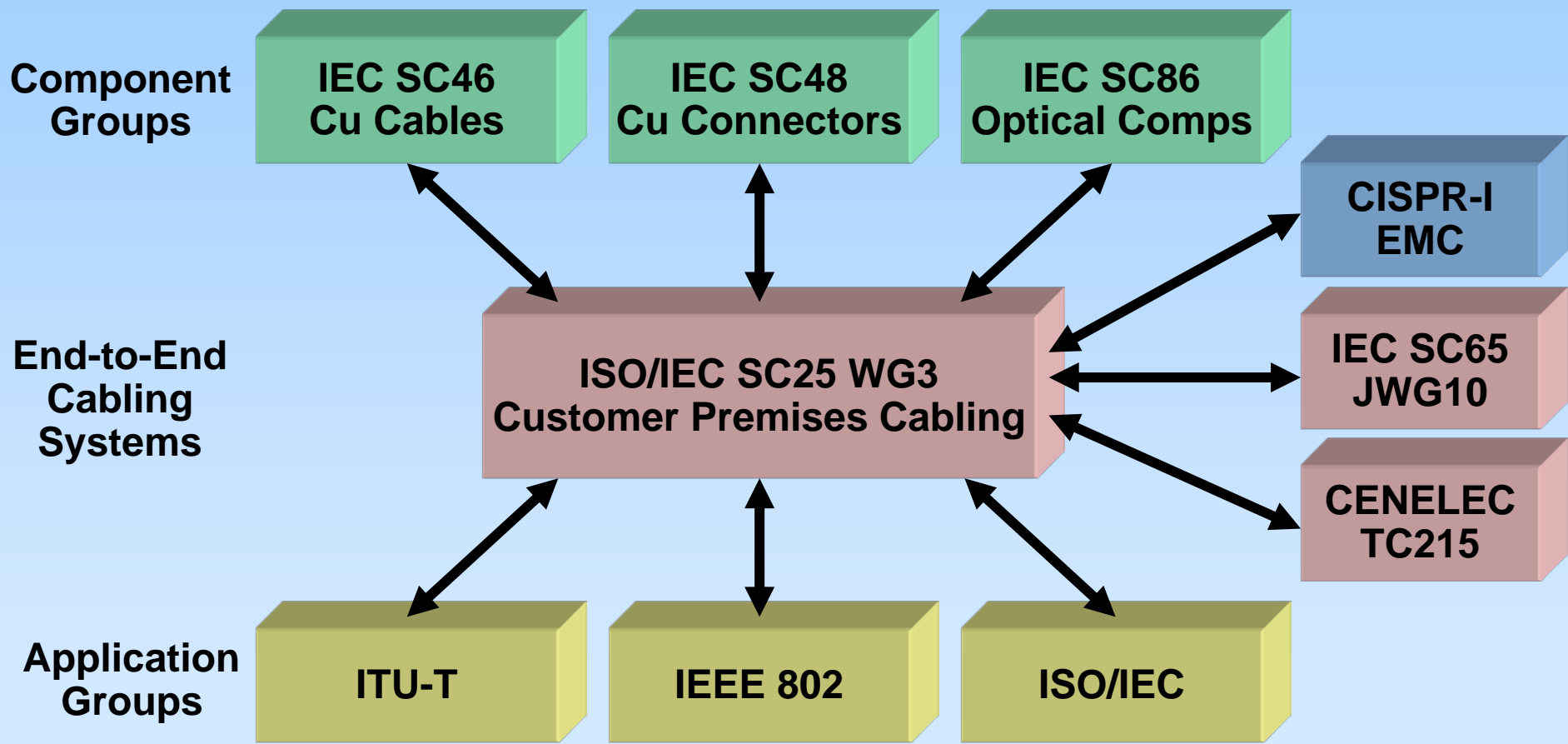
1. ISO/IEC TR 11801-9906 Application specific 1-pair Cabling
2. Generic cabling to support 1-pair applications will develop 3 new classes of single pair cabling
3. SC25 Liaison to SC48B regarding optional MDI connectors in 'cg
4. ISO/IEC 29125 amendment; Adding cable heating for 1-pair cabling is being developed and 28awg cords
5. ISO/IEC 14763-2 Ed.2 Planning/Installation; Adding remote powering moves to a FDIS
6. ISO/IEC 18598 AIM is being extended for PoE considerations
7. ISO/IEC TR 11801-9908 High Speed Apps for MMF
8. Physical Network Security
9. Technical Report for cabling to support 25Gb/s over 30m
10. Direct attach and MPLT cabling technical reports



54 Participants

16 Nations

# Process Model



# ISO/IEC TR 11801-9906: Application specific Single-pair Cabling

- **This is a Technical Report to define application specific single-pair cabling to 600MHz to support only:**
  - 802.3bp (1000BASE-T1)
  - 802.3bw (100BASE-T1)
  - 802.3cg (10BASE-T1)
- **Comments were resolved on a third working draft.**
- **A DTR will be prepared & circulated for comment by the national committees.**
- **Following Bangkok's 802.3 liaison letter, a reply was drafted providing further details, and attaching the draft DTR (pending completion of the comment editing)**

## Generic Cabling to Support Single-pair Applications

- **Generic cabling amendments to support single pair applications were reviewed for :**
  - ISO/IEC 11801- General
  - ISO/IEC 11801-3 Industrial
  - ISO/IEC 11801-6 Distributed building services
- **These will be circulated as drafts for the next meeting.**
- **3 New classes of single pair are being developed.**
  - 20 MHz, 1000m (Generic cabling including support of 802.3cg)
  - 600MHz 100m (Generic cabling including support of 802.3bp/bw)
  - Additionally (ffs)MHz, 50m(ffs) to present additional generic opportunities
- **Following Bangkok's 802.3 liaison letter, a reply was drafted providing further details. These drafts are still at early stages.**

## Single Pair Connectors

- **ISO/IEC SC25 WG3 discussed recent changes to IEEE 802.3cg drafts, including the 2A and 18AWG remarks for the optional MDI interfaces.**
- **A liaison letter was drafted to SC48 (the IEC connecting hardware committee) informing of these changes in the case that any action may be needed regarding the IEC 63171-1 and IEC 61706-3-125 connector standards.**
- **IEC SC48B has updated the standard number for the IEC 61706-3-125 connector to include this in a series of other single pair connectors. The new designation will be IEC 63171-6.**

## ISO/IEC 29125: Remote Powering

- **This document covers issues related to powering on SC25 WG3 cabling**
- **Am.1 is now being developed and will expand the scope to include 1 pair cabling of 1-pair cabling and 28awg cords**
- **Thermal evaluation of single-pair cables & cable bundles has confirmed that the existing models used by ISO/IEC are suitable for single pair cabling**
- **Constants have been developed to allow calculation of temperature rise of single pair cabling due to remote powering**
- **The technical specification will be circulated as a DTS for comment by the national committees**

## **ISO/IEC 14763-2 Planning/Installation & ISO/IEC 18598 AIM**

- **The ISO/IEC 14763-2 Ed.2 Planning and Installation standard will mandate cabling that supports PoE in new buildings and refurbishments and will be circulated as an FDIS (editorial comments only).**
- **Comments were reviewed to a working draft of the ISO/IEC 18598 AIM standard which is being amended to include bundle, resistance, and other considerations relevant to POE. The amendment will be circulated as a PDAM for national committee comment.**



## **ISO/IEC TR 11801-9908: High-speed MMF Applications**

- **Comments were resolved to a the second working draft of this technical report which will provide guidance for MMF cabling to support a wide range of applications from 10G to 400G, as well as migration/upgrade considerations.**
- **Supported channel lengths are listed for OM3, OM4 and OM5 fibre types**
- **A third working draft will be circulated for the next meeting.**

## **ISO/IEC TR 11801-9909: 25 Gbit/s balanced cabling extended reach over greater than 30 m.**

- **This technical report provides an evaluation of the ability of standardised cabling systems to support at least 25Gbps use cases at reaches over 30m.**
- **The TR also provides an evaluation of improvements to cabling and components that would be required for further extend the reach.**
- **Comments were resolved to a working draft and the document will progress to a DTR for national committee comment.**
- **Following Bangkok's 802.3 liaison letter, a reply was drafted providing further details, and attaching the draft DTR (pending completion of the comment editing)**

## NWIP Physical Network Security

- **Work continues with development of a standard for develop physical network security requirements and guidelines for customer premises including:**
  - **Security planning**
  - **Security systems**
  - **Intelligent building systems**
  - **Administration systems**
- **Work was conducted to review the equivalent TIA document (TIA 5017) and IEC data centre security standards.**
- **The working draft will be continue to be prepared at a face-to-face interim ad-hoc meeting.**

# Cabling Topologies

- **The technical report, ISO/IEC TR 11801-9907 has been approved to provide guidance for the use of Direct Attach cabling.**
  - **Cable assemblies with free connectors at each end, and with no intermediate connecting hardware, that connect two pieces of equipment.**
- **Comments have been resolved on a first working draft of a technical report for MPTL (Modular plug terminated links), and a second working draft will be circulated.**
  - **A type of ISO/IEC link terminated with a modular plug on one end**

# Liaison Letters

- **SC25 WG3 prepared two liaison letters (as noted above), however they will not arrive in time for the IEEE March 2019 meeting.**
  - **A reply to the 802.3 Liaison letter requesting information on and drafts on SC25 WG3 Single pair cabling projects.**
    - » **This reply will include drafts of key documents.**
  - **A reply to the 802.3 Liaison letter requesting information on and drafts on the SC25 25Gbps extended reach TR.**
    - » **This reply will include drafts of the TR.**

# Upcoming Meetings

- **23<sup>rd</sup> to 27<sup>th</sup> September 2019 – Nagasaki, Japan**
- **24<sup>th</sup> to 28<sup>th</sup> February 2020 – Australia TBD**
- **21<sup>st</sup> to 25<sup>th</sup> September 2020 – Location TBD**

# Questions?

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