

Trends in European Standards Development and Diffusion to Industry

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Chairman CENELEC TC215
Project Leader ISO/IEC JTC1 SC25 WG3

Michael Charles Gilmore - Standards Activity



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**Member: JTC1 SC25 WG3 “Cabling Design”
ISO/IEC 11801-x series etc.**



**Leader: JTC1 SC25 WG3 “Cabling Implementation”
ISO/IEC 14763-2, ISO/IEC 30129, ISO/IEC Physical Network Security**

**Member: JTC1 SC39 “Data centres – Facilities and Key Performance Indicators”
ISO/IEC 22237-x series, 30134-x series**



Chairman: TC215 “Electrotechnical Aspects of Telecommunication Equipment”



**Convenor: TC215 WG1: Cabling design
EN 50173-x series**

**Meeting Secretary: TC215 WG2: Cabling installation - QA and installation practices
EN 50174-x series, EN 50310**

**Member: TC215 WG3: Facilities and infrastructures (data centres)
EN 50600-x series**

Member: CEN/CLC/ETSI CG Green Data Centres



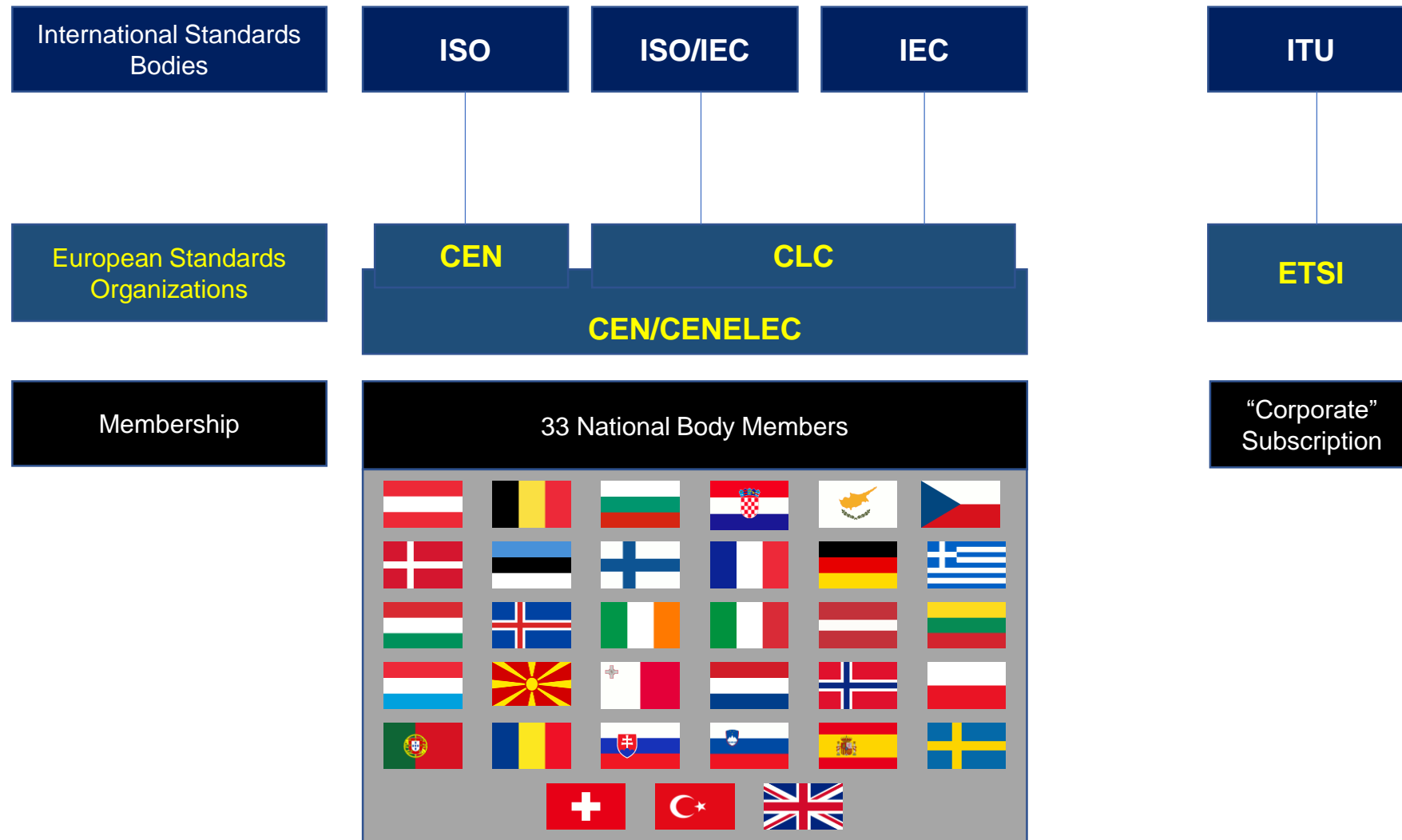
**Past-Chairman: TCT/7: Telecommunications - Installation Requirements
Chairman: TCT/7/1: Cabling: Infrastructure design, planning and commissioning
Meeting Secretary: TCT/7/2: Cabling; Installation and UK implementation
Meeting Secretary: TCT/7/3: Facilities and infrastructures (data centres)**



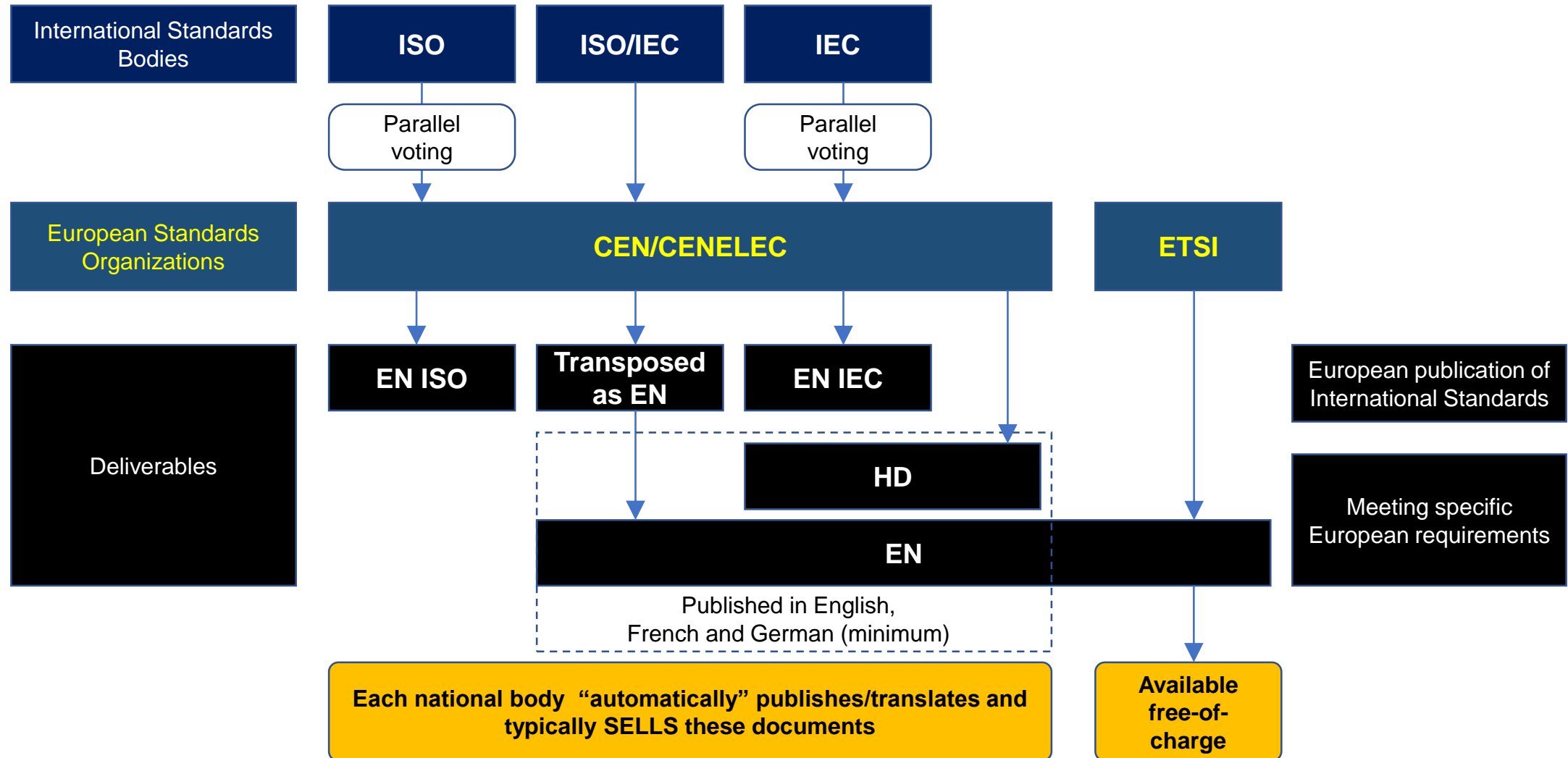
Director standards@fia FIBROPTIC INDUSTRY ASSOCIATION



The International and European Arena



European Standards



Types of Standards in Europe

Voluntary ENs

Used in contracts between supplier and customer

Harmonized Standard ENs

Used to support EU Directives or EU Regulations
(listed in the Official Journal of the European Union)

EU Directives: transposed into national legislation e.g. EMC or LVD Directives

EU Regulations: automatically national legislation e.g. Construction Product Regulations

Harmonization Documents HDs

Used to create national standards in traditional sectors

Example

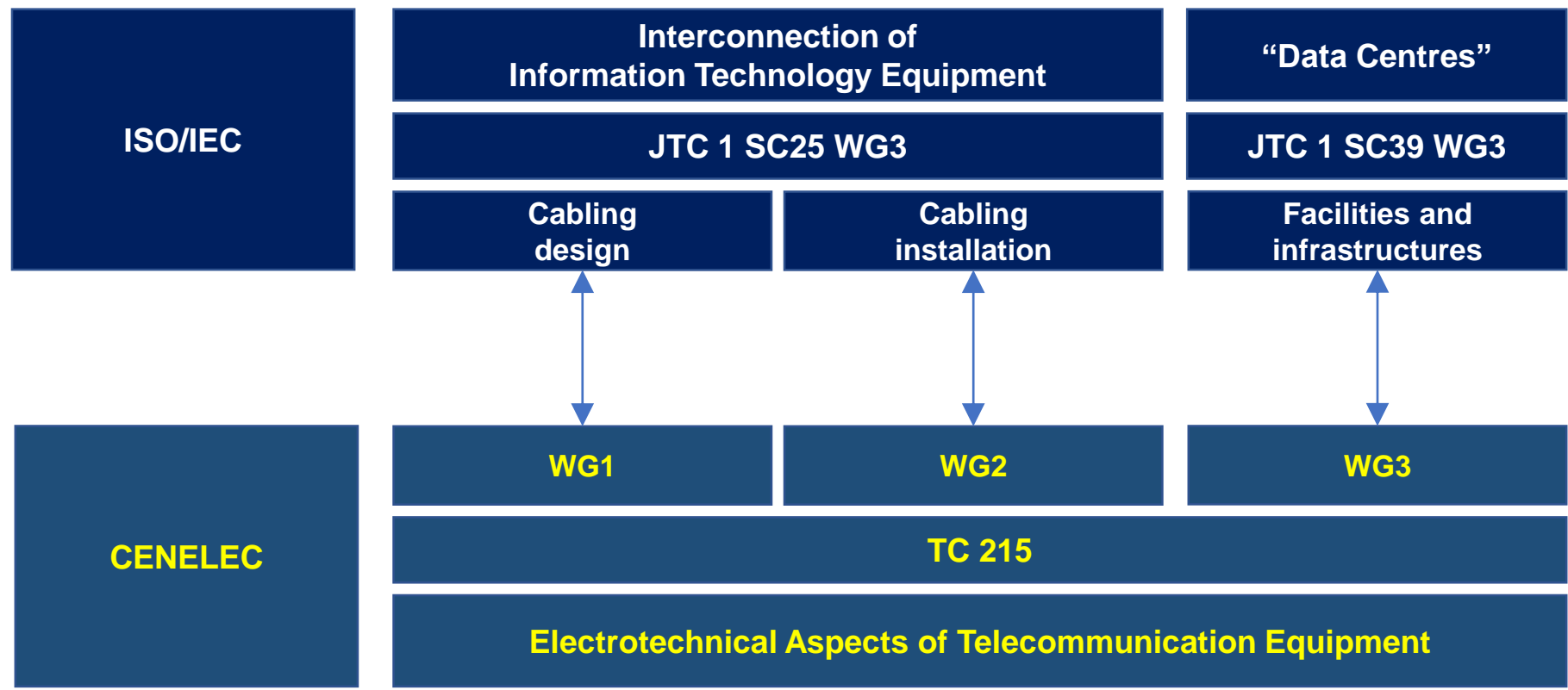
IEC 60364-x series: Low-voltage electrical installations

HD 60364-x series: Low-voltage electrical installations

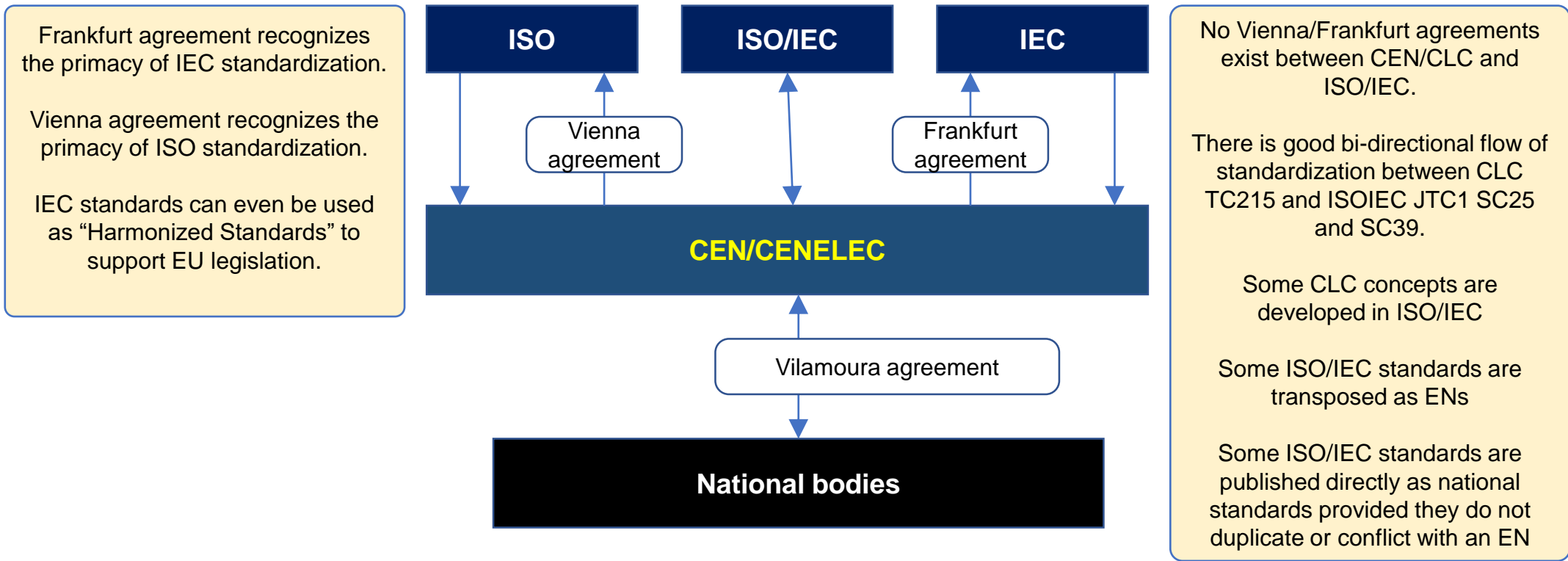
BS 7671: Requirements for Electrical Installations



Premises Cabling Standards – ISO/IEC and EN



Trends in European Standards Development



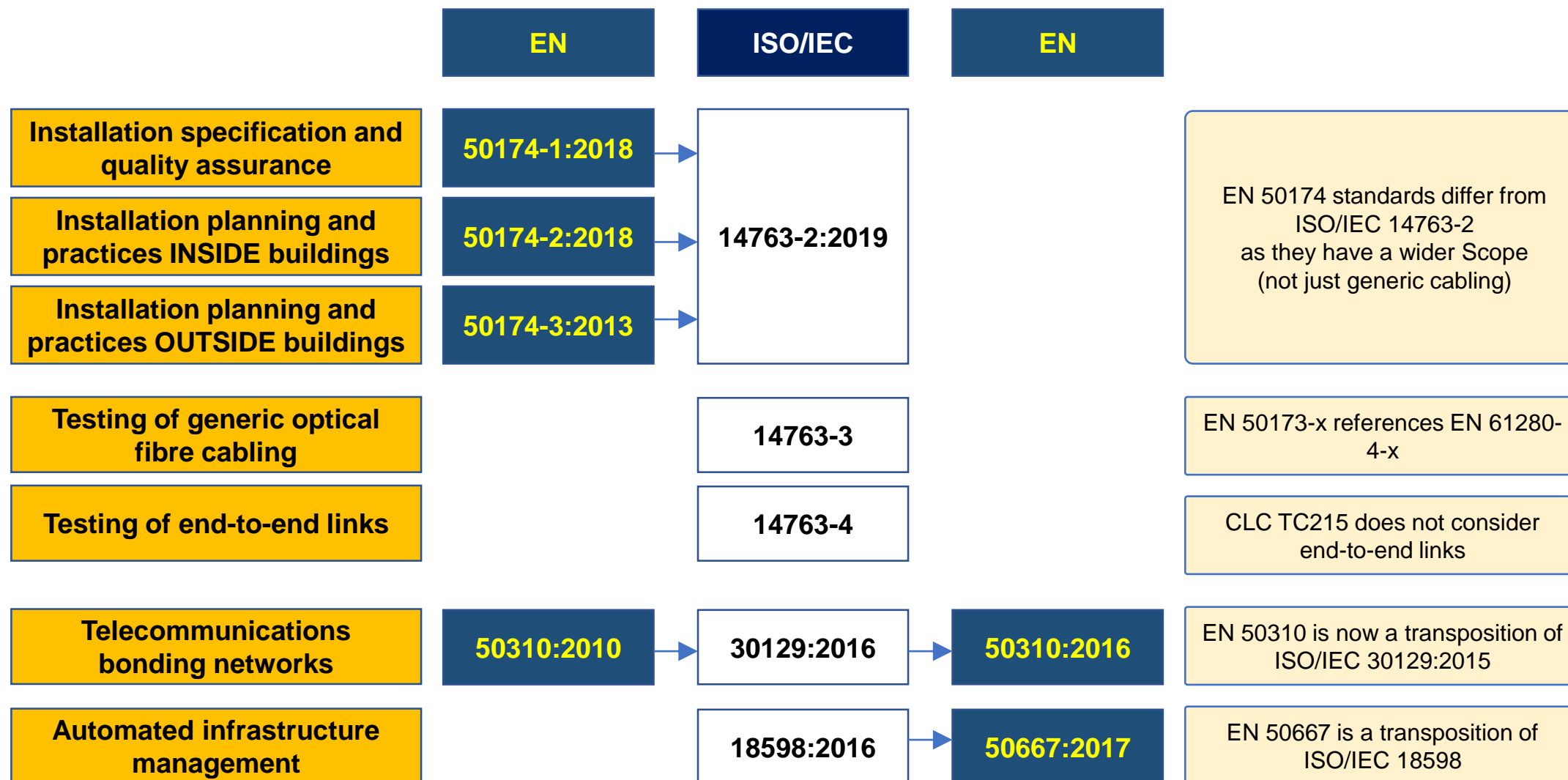
Generic Cabling Standards Detail

	EN	ISO/IEC	EN
General requirements	50173-1:2011	11801-1:2017	50173-1:2018
Office spaces	50173-2:2007	11801-2:2017	50173-2:2018
Industrial spaces	50173-3:2007	11801-3:2017	50173-3:2018
Homes	50173-4:2007	11801-4:2017	50173-4:2018
Computer rooms	50173-5:2007	11801-5:2017	50173-5:2018
Distributed building services	50173-6:2007	11801-6:2017	50173-6:2018
		Cabling in data centres references 11801-2 11801-5 11801-6 ISO/IEC TS 22237-5	Cabling in data centres references 50173-2 50173-5 50173-6 EN 50600-2-4

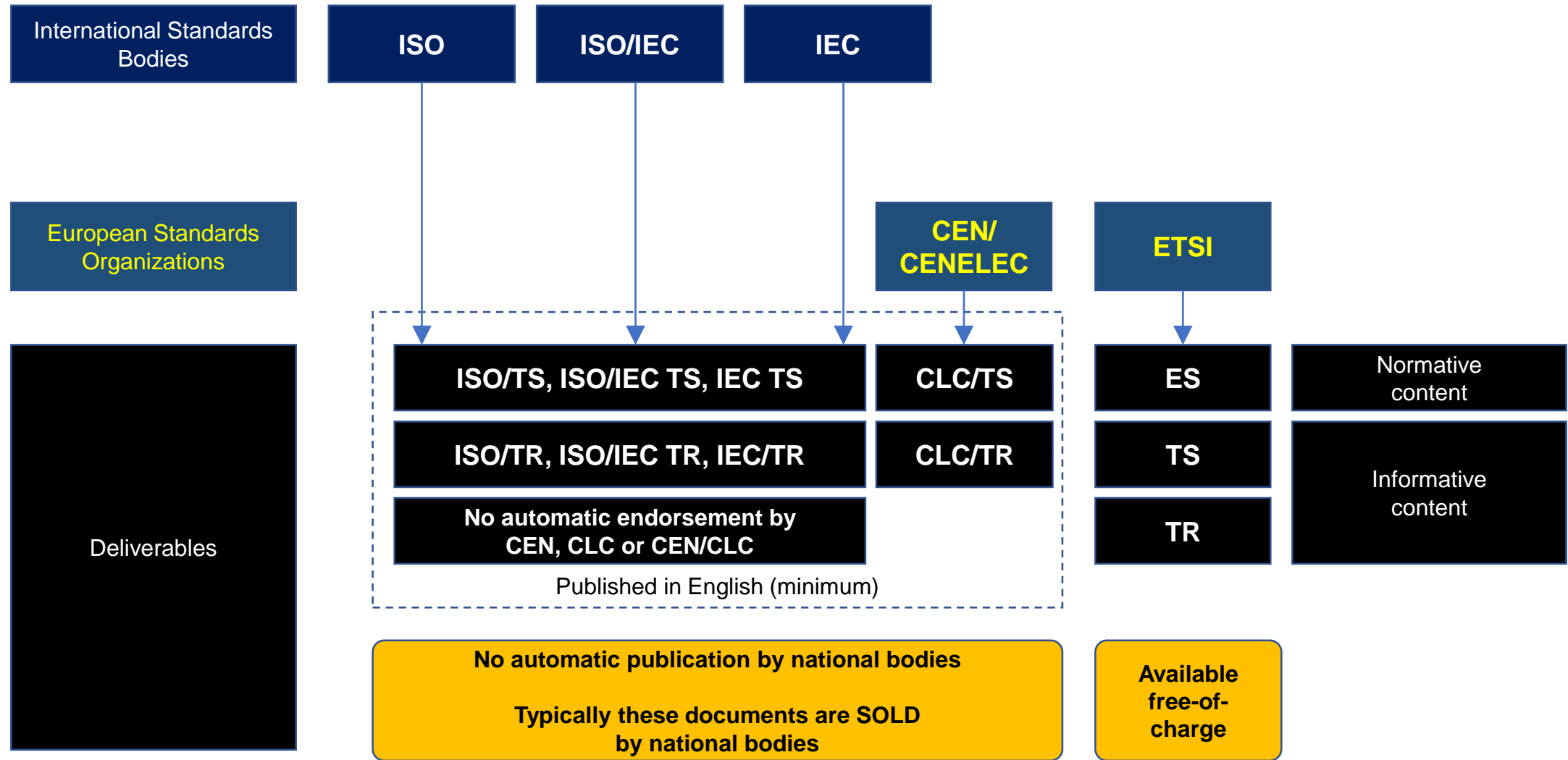
EN 50173-x differs from ISO/IEC 11801-x by referencing Harmonized Standards for cables under the Low Voltage Directive and Construction Products Regulation. This leads to other minor technical differences.



Cabling Implementation Standards



Other Deliverables



Other Deliverables - Examples

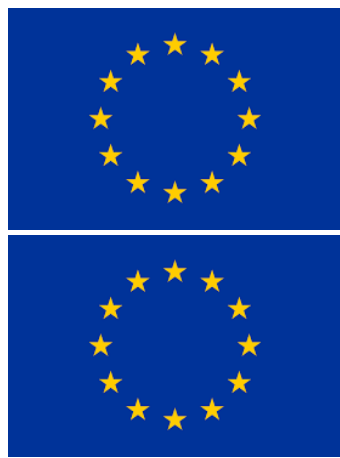
	CLC/TR	ISO/IEC TR	
Cabling guidelines in support of 10GBASE-T	50173-99-1	11801-9901	Guidance for balanced cabling ..40 GB/s
Implementation of BCT applications.....	50173-99-2	11801-9902	End-to-end link configurations
Home cabling infrastructures up to 50 m	50173-99-3	11801-9903	Matrix modelling of channels and links
		11801-9904	... balanced cabling2.5/5 GBASE-T
		11801-9905	Guidance for balanced cabling ..25 GB/s
		11801-9906	1-pr cabling channels
		11801-9907	Direct attach cabling
		11801-9908	Very high data rate MMF applications
		11801-9909	... balanced cabling ..25 GB/s 50 m
Remote powering	50174-99-1	29125	Remote powering
		29106	MICE
		14763-2-1	Administration



Diffusion in CLC Countries



- EN, HD, EN ISO, EN ISO/IEC or EN IEC
- National implementations of European HDs
- National standards
- Endorsed ISO, ISO/IEC or IEC standards (where no duplication or conflict with an EN exists)



- EU Directives and Regulations are founded on “Harmonized Standards”
Directives are applicable by legislation in each country
Regulations replace legislation in all countries
- Public and large project procurement requires the application of standards
- Contracts are required to be listed in the Official Journal of the European Union

National Application of Standards

Voluntary ENs

Used in contracts between supplier and customer

Harmonization Documents HDs

Used to create national standards in traditional sectors

APPLICATION DIFFERS IN EACH COUNTRY

Some standards are mandatory by law

Some standards are “tools of legislation”

Standards are legally enforceable if specified in contracts

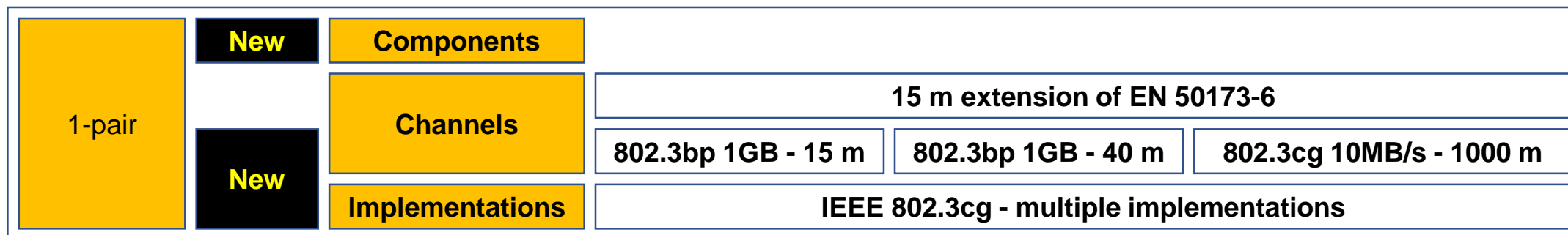
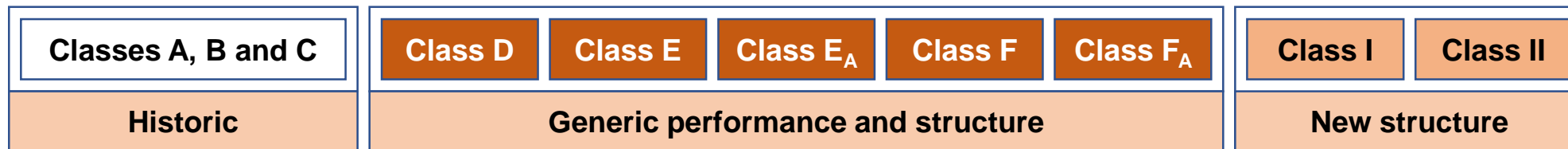
Standards may be a legal foundation even if not specified in contracts

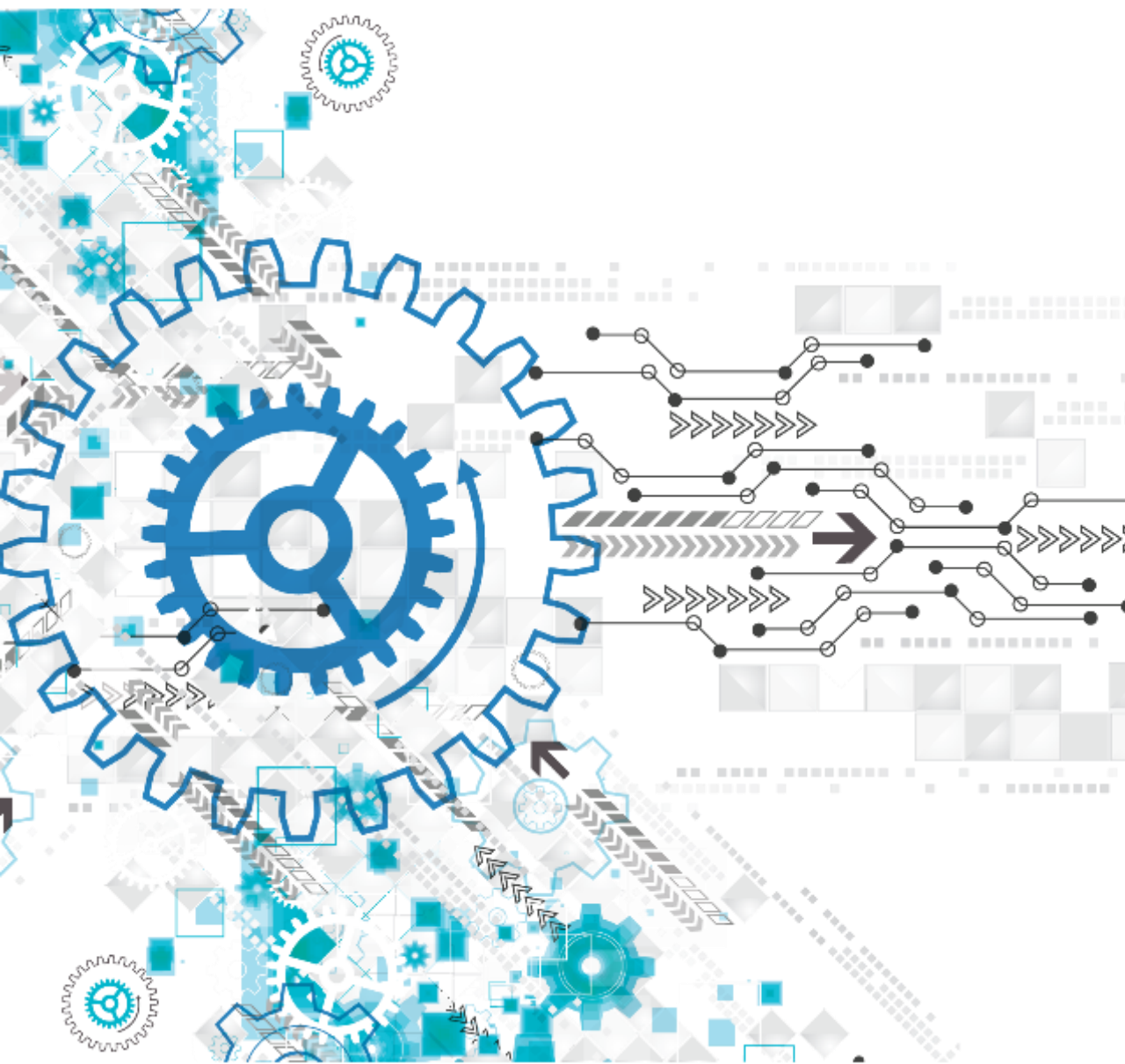
TRADE ASSOCIATIONS USED TO DIFFUSE INFORMATION TO THE INDUSTRY AND ITS CUSTOMERS





Personal Observations - The Future of Cabling





Questions please!