



The Standards People

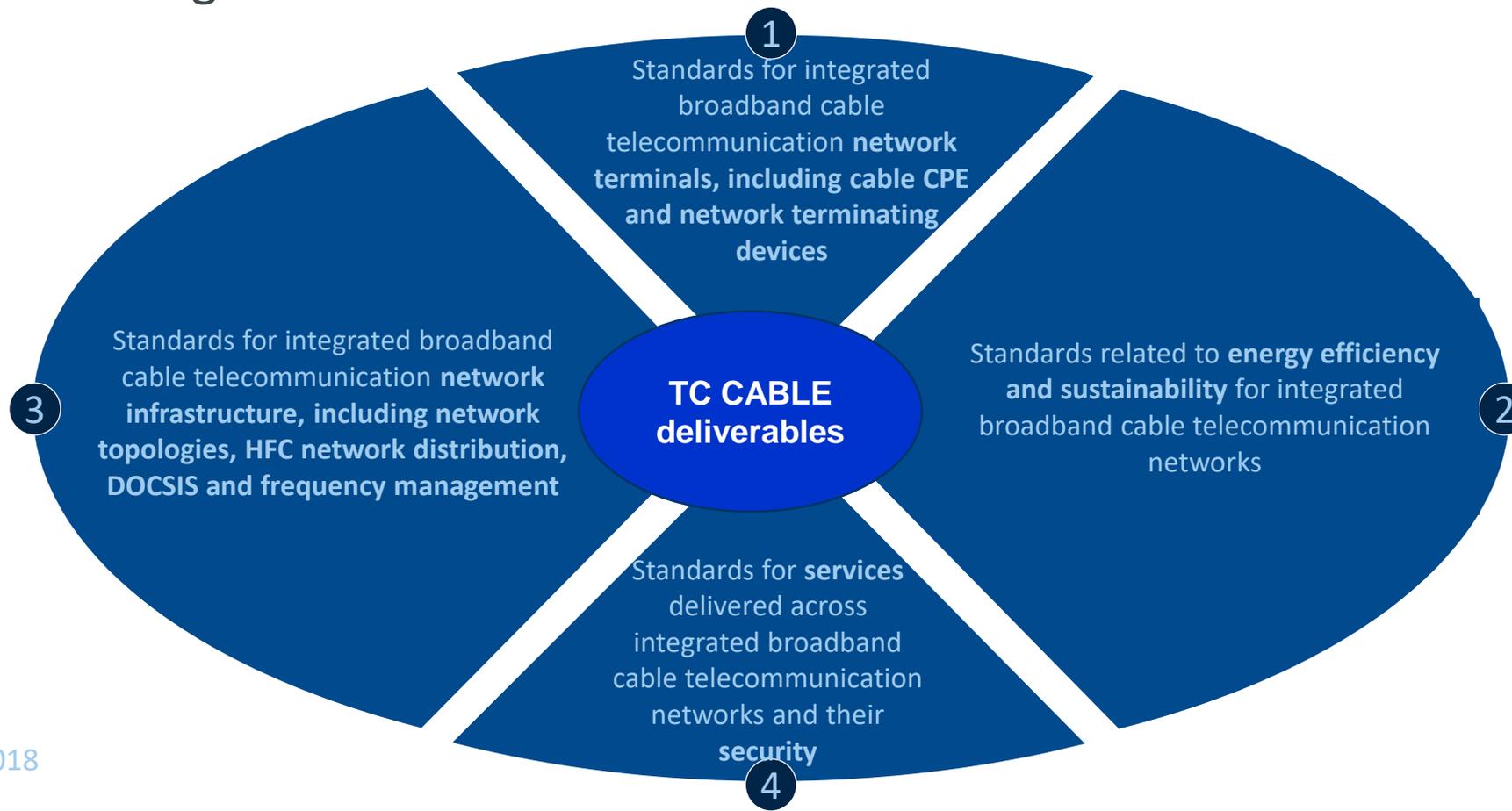
# ETSI TC CABLE in a nutshell

Presented by:

For:

# ETSI TC CABLE – Main Objectives

TC CABLE (integrated broadband cable telecommunication networks) is responsible for the creation, development and maintenance of standards and other ETSI deliverables related to integrated broadband cable telecommunication network technologies.



# ETSI TC CABLE – Organisation

<b>TC CABLE</b>
Chairman Volker Leisse

<b>TC CABLE</b>
Vice-Chairman

<b>TC CABLE</b>
ETSI Technical Officer Sylwia Korycinska

<b>WG 1</b>
Architecture, Interfaces, Protocols

<b>WG 2</b>
HFC Distribution, Installation, Operational Best Practices

<b>WG 3</b>
Engineering, Efficiency and Sustainability

<b>WG 4</b>
Network, Fault, Monitoring and Performance Management and Test & Measurement Best Practices

# ETSI TC CABLE – Working Groups

## Activities

### WG1 Architecture, Interfaces, Protocols

Creation, development and maintenance of Standards and other ETSI deliverables related to:

- ✓ Cable system architectures and architectural elements
- ✓ Network and system interfaces
- ✓ Data over cable systems
- ✓ Advanced head-end architectures
- ✓ Customer Premises Equipment and Home Networks
- ✓ Cable-Mobile systems including their architecture elements for: (1) RLAN; (2) Mobile; (3) Core network; (4) Convergence

Review and contribution to activities of other ETSI Technical Bodies and external organizations requiring expertise in architectures, interfaces and protocols of HFC networks

### WG2 HFC Distribution, Installation, Operational Best Practices

Creation, development and maintenance of Standards and other ETSI deliverables related to:

- ✓ HFC network infrastructure and distribution
- ✓ Physical HFC plant technologies and characteristics
- ✓ Frequency and spectrum management within HFC networks

Establishment of operational guidelines to share experiences and promote best practices

Review and contribution to activities of other ETSI Technical Bodies and external organizations requiring expertise in HFC networks

# ETSI TC CABLE – Working Groups

## Activities

### WG3 Engineering, Efficiency and Sustainability

Creation, development and maintenance of Standards and other ETSI deliverables related to:

- ✓ Energy Efficiency Requirements
- ✓ Energy Efficiency Metrics
- ✓ Sustainability Requirements
- ✓ Headend Equipment
- ✓ Outside Plant Equipment
- ✓ Customer Premises Equipment

Establishment of operational and engineering guidelines to share experiences and promote best practices

Review and contribution to activities of other ETSI Technical Bodies and external organizations requiring expertise in energy efficiency and sustainability of HFC networks

### WG4 Network, Fault, Monitoring and Performance Management and Test & Measurement Best Practices

Creation, development and maintenance of Standards and other ETSI deliverables related to:

- ✓ In-home network
- ✓ Access and distribution network
- ✓ Core network
- ✓ Systems
- ✓ Services

Establishment of technical guidelines/reports, implementation guidelines, specifications and promote best practises.

Review and contribution to activities of other ETSI Technical Bodies and external organizations requiring expertise related to the area of responsibility

## ETSI TC CABLE – Market Relevance

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With its work, ETSI TC CABLE reaches 65.8 million customers in the European Union, that are consuming Digital TV, Broadband Internet, and Telephony services delivered by integrated broadband cable telecommunication networks.

## ETSI TC CABLE – History

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In 2009 major players in cable technology development came together to form a cable standardization project within ETSI to ascertain whether the industry's ideas, already tested as sound business objectives via the research and development programs already in place, could be formally standardized by ETSI.

Cable industry executives were keen to evaluate the value of standardization through ETSI, given the resources required to do so compared to other standardization models.

The project was established under ETSI TC ATTM and very quickly encouraged other cable stakeholders to become members of ETSI in order to support the work. The project evolved into a working group, ATTM-AT3, which successfully produced several ENs, TSs, and TRs to address the market needs for standardized technology. Already as a WG ATTM-AT3, collaboration with other ETSI TCs and external fora including ITU-T SG9 and the Society of Cable Telecommunications Engineers (SCTE) was established.

With the formation of WG ATTM-AT3, the European cable industry became actively involved in the ETSI standardization process, especially in core standardization activity addressing cable matters. Soon it turned out that the limited scope and responsibility of a WG did not fully address the expectations and level of engagement of the cable stakeholders. Consequently, the creation of TC CABLE was proposed and approved at Board #89 (September 2012).

In the tradition of the cable standardization project, TC CABLE is the home of standards for the core technologies of cable communications systems such as DOCSIS as well as the source of cable expertise and contributions to important topics in the telecommunications area such as efficient use of energy.

# ETSI TC CABLE – Main Deliverables

## Core cable technologies

- **ES 203 311** series “Fourth generation transmission systems for interactive cable television services – IP cable modems (DOCSIS® 3.1)”
- **ES 203 386** “Embedded Router”

## Cable related technologies

- **TS 101 569** series “Cable Network Transition to IPv6”
- **TS 103 443** series “IPv6 Transition Technology Engineering and Operational Aspects”

## Security

- **TS 102 836** series “Lawful interception (LI); Interception of IP Telephony/Data Service on Cable Operator’s Broadband IP Network: Internal Network Interfaces”
- **TS 103 162** “K-LAD Functional Specification”

## Energy efficiency

- **EN 305 200-4-4** “Energy management; Operational infrastructures; Global KPIs; Part 4 Design assessments; Sub-part 4: Cable Access Networks”

## Requirements for technology optimization

- **TS 102 866** “Cable Equipment Operations within its Frequency Band”
- **TS 103 429** “Cable Customer Premises Equipment (CPE) with Integrated Radio and Non-Radio Interfaces; Technical Specification covering the cable equipment technical requirements in support of Harmonised Standards for the essential requirements of article 3.1b of the Directive 2014/53/EU”

# ETSI TC CABLE – Get Involved

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For further information please contact:

- TC CABLE Chairman
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