ETSI Seminar 2023

Technical Organization:

Explanation of the structure and characteristics of ETSI's Technical Groups

Presented by: Anthony (Ton) Brand
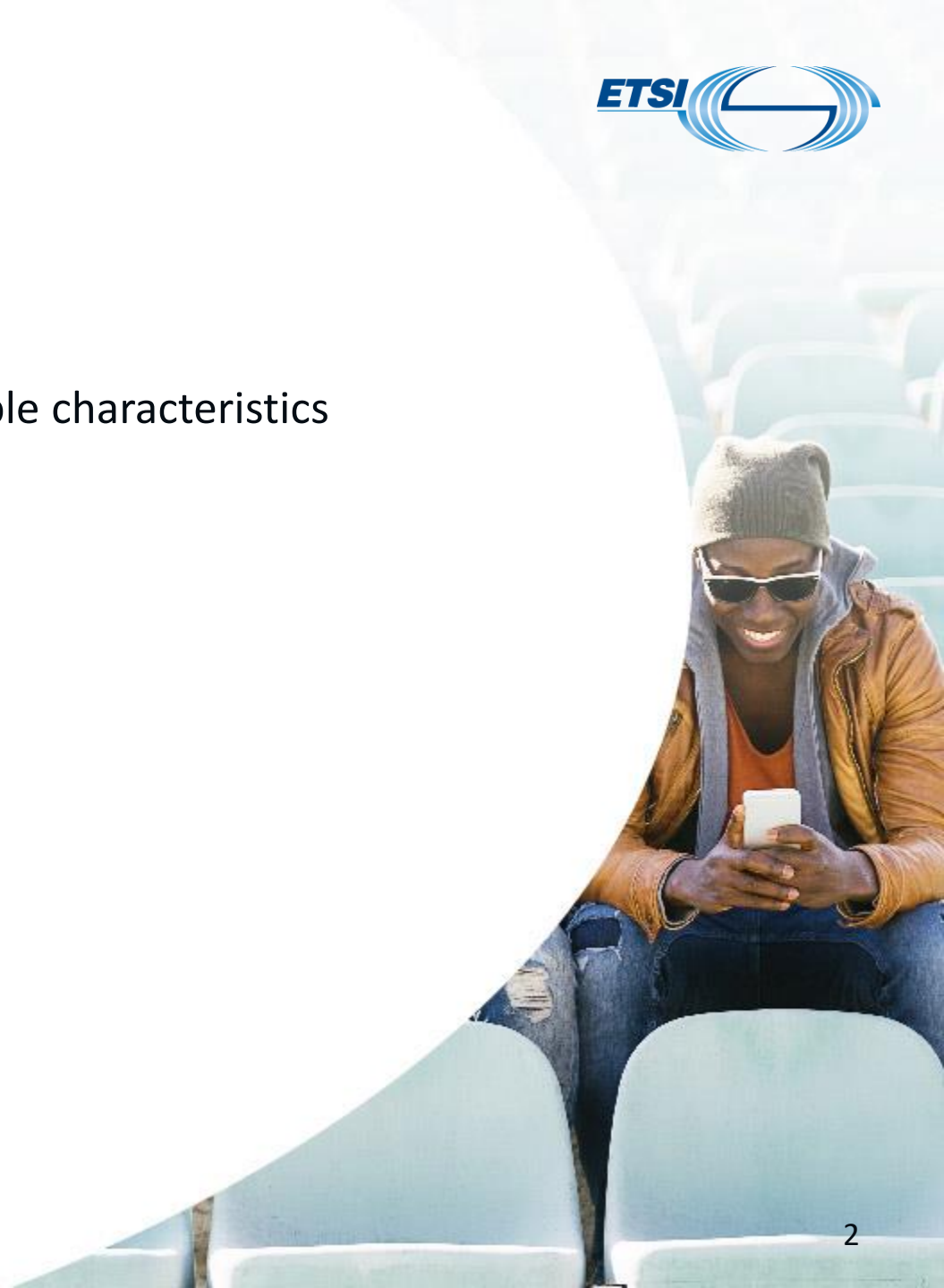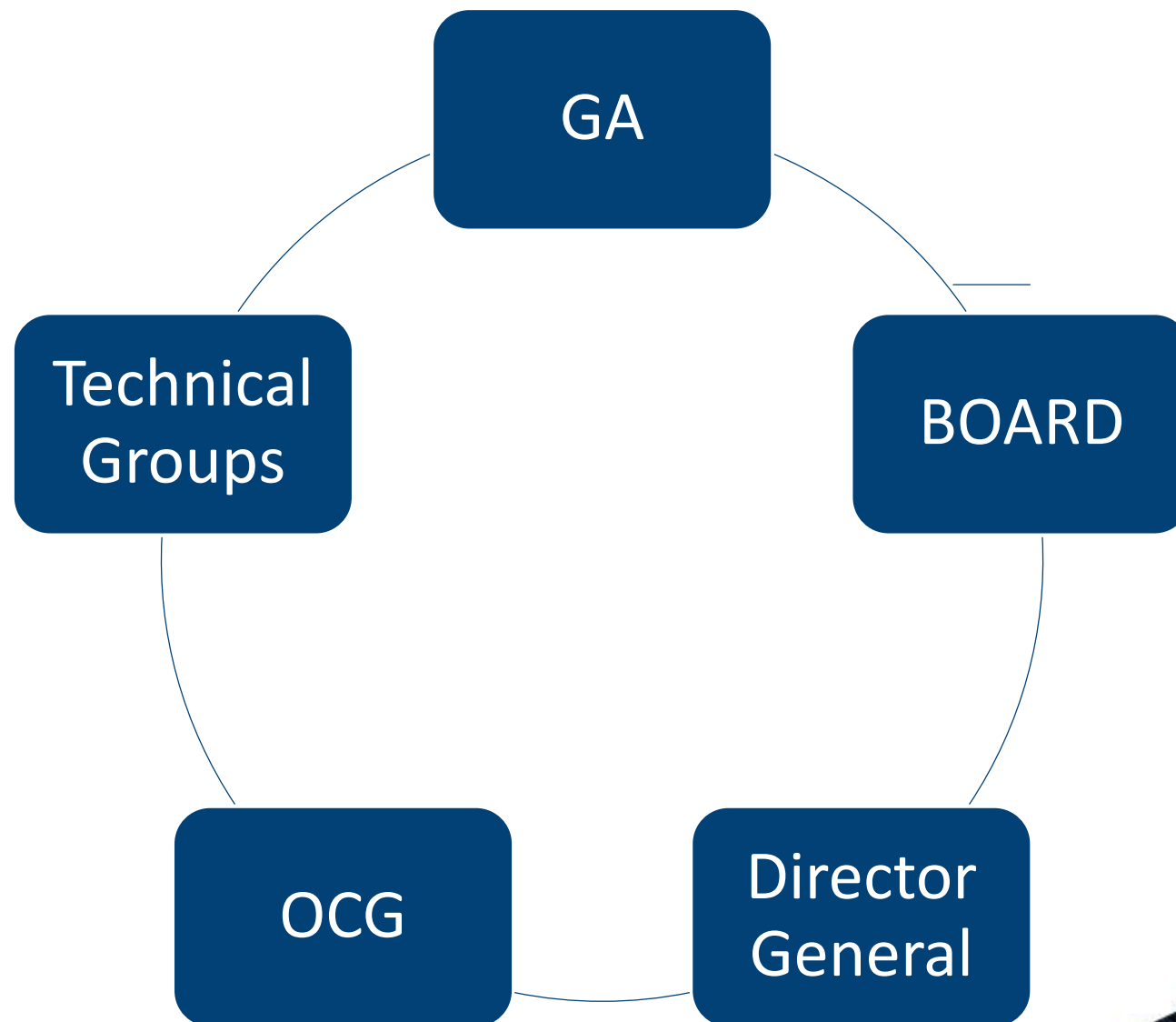
ETSI
The Standards People

20/06/2023

Purpose of the Presentation

- Provide an overview of the ETSI Technical organization
- Explain the various types of ETSI groups and their principle characteristics

Technical Organization

ETSI's Technical Organization

The ETSI Technical Organization comprises four types of Technical Groups (TG):

- Technical Committee (TC)
  - E.g. ERM, ITS, ATTM
  - A Technical Body may establish Working Groups (WGs), if required
- ETSI Project (EP)
  - A specific project within a specific time frame with well defined results
- ETSI Partnership Project (EPP)
  - E.g. 3GPP, oneM2M
  - In co-operation with other standards bodies
- Industry Specification Groups
  - A special type of ETSI committee, very focused activity, designed for quick establishment

ETSI's Technical Groups

1 Technical Coordination group
- ◉ OCG

25 Technical Committees
- ◉ ATTM, BRAN, CABLE, CYBER, DECT, EE, eHealth, EMTEL, ERM, ESI, HF, INT, ITS, LI, MSG, MTS, RRS, RT, SAFETY, SES, SET, SmartBAN, SmartM2M, STQ, TCCE

1 Joint Technical Committee
- ◉ BROADCAST (Joint EBU/CENELEC/ETSI Technical Committee)

3 Special Committees / groups
- ◉ SC SAGE, SC USER, SC TSA

2 ETSI Partnership projects
- ◉ 3GPP, oneM2M.

17 ISGs
- ◉ ARF, CDM, CIM, ENI, ETI, F5G, MEC, mWT, NFV, NIN, OEU, PDL, QKD, RIS, SAI, THz, ZSM.

ETSI's Technical Committees

Access, Terminals, Transmission & Multiplexing (ATTM)

Broadband Radio Access Networks (BRAN)

Broadcast (Joint committee with European Broadcasting Union and CENELEC)

Integrated broadband cable telecommunication networks (Cable)

Digital Enhanced Cordless Telecommunication (DECT)

eHealth

Emergency Communications (EMTEL)

Electromagnetic Compatibility & Radio Spectrum (ERM)

Electronic Signatures & Infrastructures (ESI)

Environmental Engineering (EE)

Human Factors (HF)

Core Network and Interoperability Testing (INT)

Intelligent Transport Systems (ITS)

Lawful Interception (LI)

Continues…

ETSI's Technical Committees

Continued…

Methods for Testing & Specification (MTS)

Mobile Standards Group (MSG)

Railway Telecommunications (RT)

Reconfigurable Radio Systems (RRS)

Safety

Satellite Earth Stations & Systems (SES)

Secure Element Technologies (SET)

Smart Body Area Networks (Smart BAN)

Smart Machine to Machine Communications (Smart M2M)

Speech and multimedia Transmission Quality (STQ)

TETRA and Critical Communications Evolution (TCCE)

Technical Committee (TC)

A "classical" type of ETSI committee

- ● set up by BOARD decision

Participation is governed by ETSI Technical Working Procedures (Directives)

All ETSI members can access all documents of TCs

ETSI Projects (EPs) follow the same rules as a Technical Committee

8

Industry Specification Group (ISG)

A special type of ETSI committee, very focused activity, designed for quick establishment

➢ Fast to set up (4 founding ETSI members)

➢ Can modify some rules vs. TC, e.g. voting: some ISGs use 1 member = 1 vote

➢ Participation is governed by an Industry Specification Group Agreement(s)
  ➢ Sets out the operation rules, budget mechanism, voting rules etc.

➢ Non-members of ETSI can become Participants, attend meetings, make technical contributions
      ➢ Participant Agreement imposes the ETSI IPR Policy

➢ ISG Participants can access ONLY the relevant ISG documents

TBs and ISG

	TB	ISG
Set up	ETSI BOARD approval	Minimum 4 ETSI members necessary, approved by Director General
Membership	ETSI	ETSI members can participate Non-Members of ETSI can participate, under conditions in ISG agreement
Decides its own work programme, approves its own deliverables	✔	✔
Use ETSI IPR policy	✔	✔
Deliverables produced	EN, ES, EG, TS, TR,	Group Specifications (GS) and Group Report (GR) only
Technical Working Procedures	ETSI	Deviations are allowed, which are based on ETSI Technical Working Procedures
Voting system	ETSI	Each ISG can have its own system (Recommended to use ETSI weighted voting, or 1 member 1 vote)
Support	Standard ETSI TB support	Standards ETSI ISG support
Participation is governed by	ETSI Directives	Industry Specification Group Terms of Reference (Sets out the operation rules, budget mechanism, voting rules)
Budget	Global ETSI	Own (Decided and paid for by its members, invoiced to them by ETSI, usually not required)

ETSI's Industry Specification Groups

Augmented Reality Framework (ARF)

European Common information sharing environment service and Data Model (CDM)

Cross-cutting Context Information Management (CIM)

Experiential Networked Intelligence (ENI)

Encrypted Traffic Integration (ETI)

Fifth Generation Fixed Network (F5G)

Multi-access Edge Computing (MEC)

Millimetre Wave Transmission (mWT)

Network Functions Virtualisation (NFV)

Non-IP Networking (NIN)

Operational energy Efficiency for Users (OEU)

Permissioned Distributed Ledger (PDL)

Quantum Key Distribution (QKD)

Reconfigurable Intelligent Surfaces (RIS)

Securing Artificial Intelligence (SAI)

TeraHertz technology (THz)

Zero-touch network and Services Management (ZSM)

Limitations of an ISG

Typically have a 2 year lifecycle (close / transfer or refresh after 2 years)

Produce ETSI Group Specifications (GS) and Group Report (GR)

- Specifically identified as coming from an ISG
- Smaller approval group (only ISG members)
- GS normative; GR informative

>> ISGs cannot respond to EC mandates <<

ETSI standardisation workflow (1)

- ➢ ETSI Work Item - description of a standardization task approved by a Technical Group according to the procedures [...] and adopted by the ETSI members
  - ➢ intended deliverable type (EN, ES, TS, EG, TR)
  - ➢ technical scope
  - ➢ schedule of tasks for its production
  - ➢ supporting members (minimum 4)
  - ➢ TBs/ISGs define and approve new Work Items.

- ➢ ETSI Deliverable - A document [...] produced as the result of an ETSI work item

13

ETSI standardisation workflow (2)

Normative Deliverable

➢ TS - ETSI Technical Specification

➢ Short time to market, may be converted later to ES or EN

➢ ES - ETSI Standard

➢ Whole ETSI membership approves

➢ EN - European Standard

➢ Formal output for standardization at European level

➢ Specific to Europe & needs transposition into national standards or subject of an EC/EFTA mandate

➢ Harmonised Standards are a subset of ENs

ETSI standardisation workflow (3)

Informative Document

➤ TR - ETSI Technical Report

    ➤ Default deliverable

➤ EG - ETSI Guide

    ➤ Guidance on handling technical standardization activity in whole or major parts of the Technical Organization

➤ ETSI Special Report

    ➤ General ETSI member or public interest

    ➤ Also, deliverable with dynamic content generated by software application on ETSI web site

Building Consensus

Formal standardization is inspired by international directives on standardization, and is based on six principles for the development of international standards:

- transparency,

- openness,

- impartiality and consensus,

- effectiveness and relevance,

- coherence, and

- development dimension

*The definition of consensus shall be applied: A general agreement, characterized by the **absence of sustained opposition** to substantial issues by any **important part of the concerned interest** and by a process that involves seeking to take into account the views of all parties concerned and **to reconcile any conflicting arguments**.*

NOTE: Consensus need not imply unanimity.

ETSI Deliverables - Approvals

European Standards in response to a SR (hEN, EN, ES, EG, SR)

- Approved by National Delegations, through the National Standards Bodies (EU/EEA) (NSB)
- Web-based voting tool

European Standards (EN, telecommunications series)

- Approved by National Delegations, through the National Standards Organizations (NSO)
- Web-based voting tool

ETSI Standards (ES) & ETSI Guides (EG)

- Approved by the full ETSI Membership
- Web-based voting tool

ETSI Technical Specifications (TS), ETSI Technical Reports (TR), ETSI Group Specifications (GS), ETSI Group Reports (GR)

- Approved by the TC, Project or Group concerned
- Traditional or web-based voting

Thank you for your attention

Follow us on:

18

Any further questions?

Contact me: Anthony Brand

Anthony.Brand@etsi.org