



Master Tech Standardization with ETSI

Module 3 - Who does what and how
can I find them?

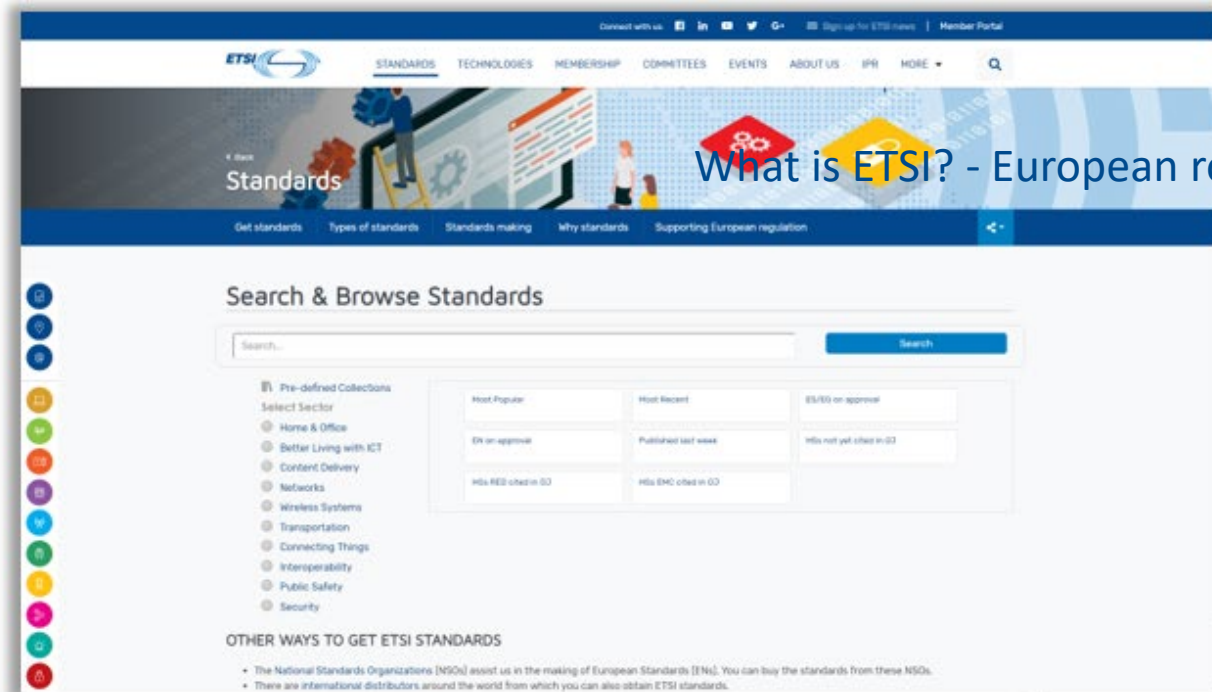
Who does what?

- Don't know where to start?
- Try a search engine
- Ask a friend
- Find an expert (hsbooster.eu)
- Ask an SDO
- Be aware some standards are behind paywalls (check with your University library)



Identifying and accessing SDO documents

- All SDOs make their documents available online
- Access may be restricted to authorized users
- Many require payment (exception is ETSI/3GPP/oneM2M) to download full spec

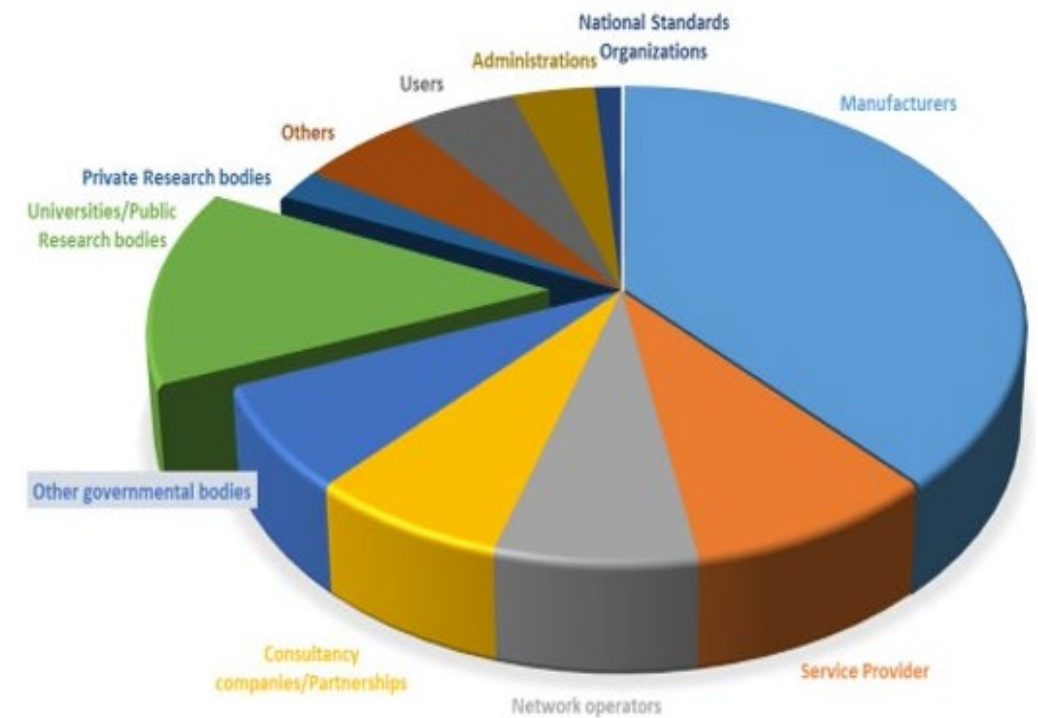


What is ETSI? - European roots, global outreach

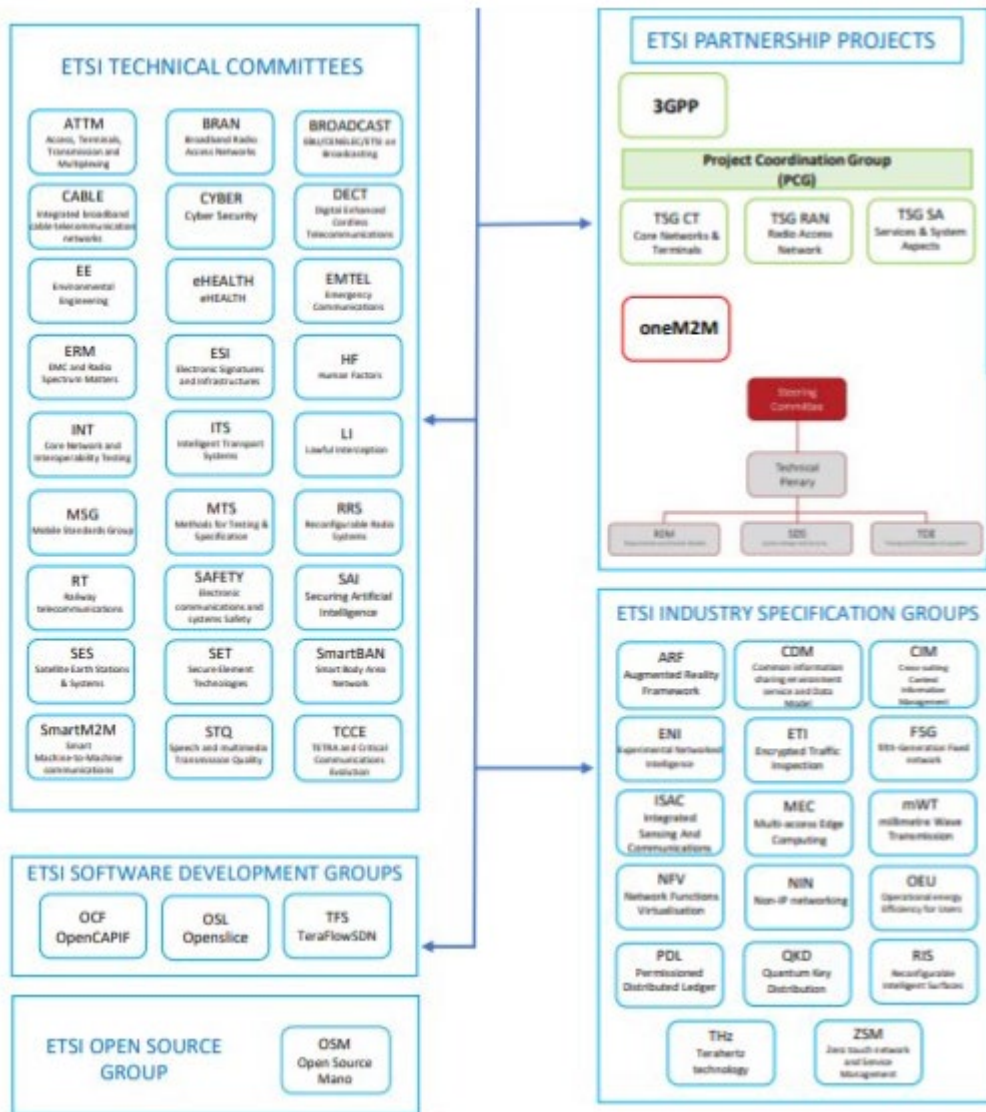


What is ETSI? - European roots, global outreach

- ETSI is a world-leading standards developing organization for Technology.
- One of the 3 recognised European Standardization Organizations (ESO).
- Technical standards and specifications for worldwide use.
- ETSI is a direct membership-based association with currently more than 900 member organizations.
- Independent of all other organizations and structures and is a not-for-profit association.
- The membership comprises manufacturers, network operators, service and content providers, national administrations, ministries, universities, research bodies, consultancies, user organizations, Annex III organizations.



ETSI's Technical Groups – *ignore the acronyms for a moment*



- 1 Technical Coordination Group
 - OCG
- 26 Technical Committees
 - ATTM, BRAN, CABLE, CYBER, DECT, EE, eHealth, EMTEL, ERM, ESI, HF, INT, ITS, LI, MSG, MTS, RRS, RT, SAFETY, SAI, 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, ISAC, MEC, mWT, NFV, NIN, OEU, PDL, QKD, RIS, THz, ZSM
- 3 SDGs
 - OCF, OSL, TFS (OSM will be converted to SDG soon)

- Participation is governed by ETSI Technical Working Procedures (Directives)
 - All SDO have a set of rules – always worth reading if you ever get sent to a meeting
- Minimum 4 founding ETSI members
- All ETSI members can access all documents of all the Technical Groups
- Non-members can even see who has submitted what
- Contributions (oddly called Tdocs in some groups) are created by the delegates, discussed at the meetings and sometimes agreed. Most results in further discussion and ideas are combined to get the best-performing solution
- Coffee breaks are an integral part of the process to gain consensus; some delegates do not get to drink their coffee instead, someone gets to “hold the pen”

- 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)
- Cyber Security (Cyber)
- Digital Enhanced Cordless Telecommunication (DECT)
- Environmental Engineering (EE)
- eHealth
- Emergency Communications (EMTEL)
- Electromagnetic Compatibility & Radio Spectrum Matters (ERM)
- Electronic Signatures & Trust Infrastructures (ESI)
- Human Factors (HF)
- Core Network and Interoperability Testing (INT)
- Intelligent Transport Systems (ITS)
- Lawful Interception (LI)

Continues...

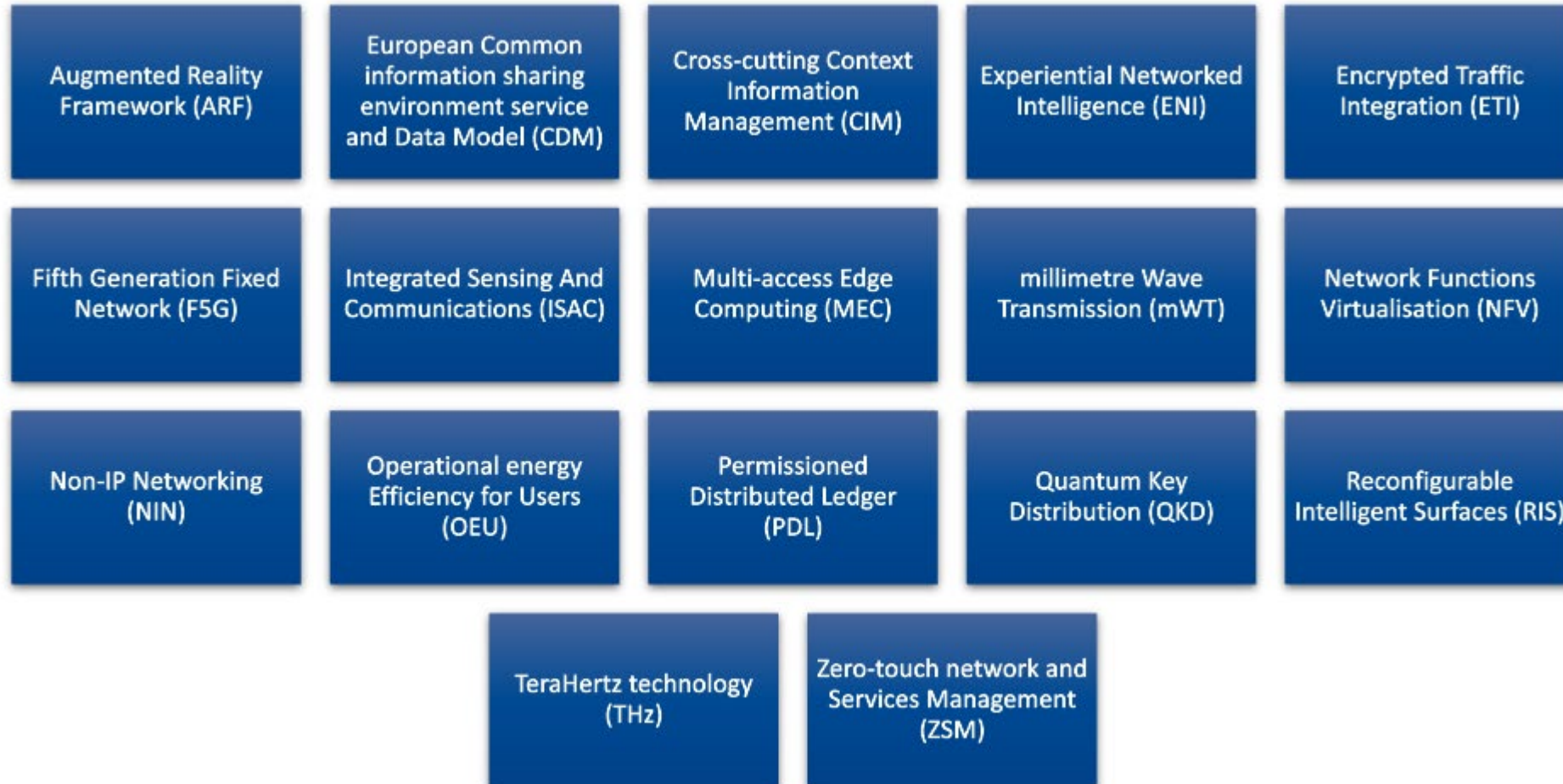


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- Methods for Testing & Specification (MTS)
- Mobile Standards Group (MSG)
- Railway Telecommunications (RT)
- Reconfigurable Radio Systems (RRS)
- Safety
- Securing Artificial Intelligence (SAI)
- Satellite Earth Stations & Systems (SES)
- Secure Element Technologies (SET)
- Smart Body Area Network (Smart BAN)
- Smart Machine to Machine Communications (Smart M2M)
- Speech and multimedia Transmission Quality (STQ)
- TETRA and Critical Communications Evolution (TCCE)

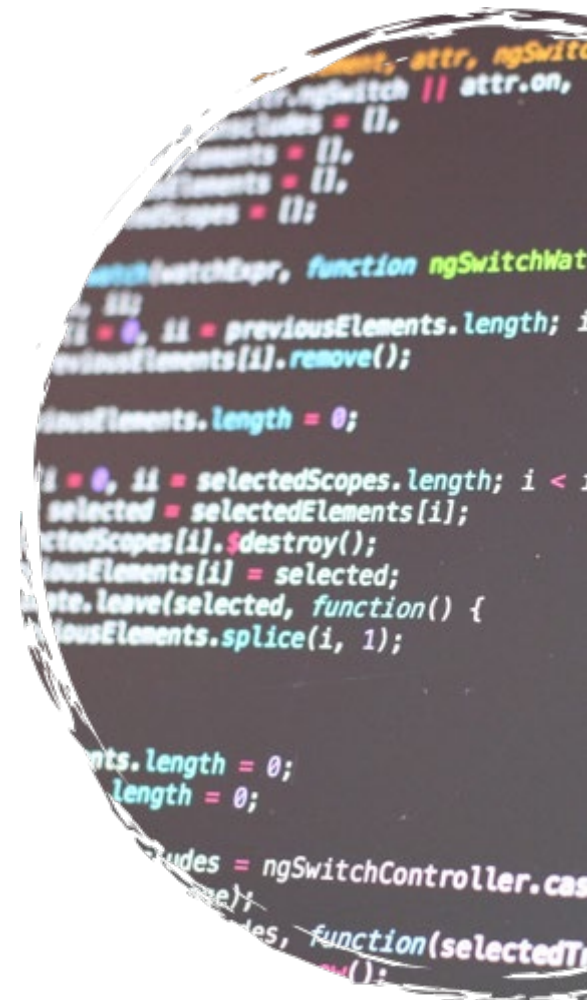
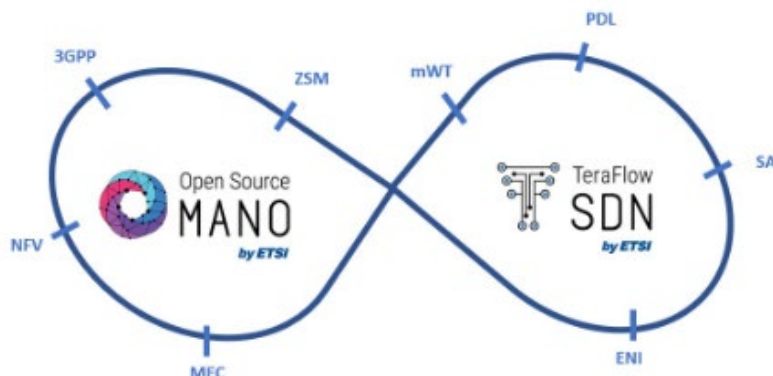


- A special type of ETSI technical group, very focused activity, designed for quick establishment
- Fast to set up (minimum 4 founding ETSI members)
- Can modify some rules vs. TC, e.g. voting: some ISGs use 1 member = 1 vote
- Participation is governed by an Industry Specification Group Agreement
 - 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



- Creating a new instrument for collaborative software development
 - Alongside standardization work
 - Preserving the successful ETSI IPR policy for standards
- Easing the path to network softwarization

- New type of group in ETSI
- Designed for collaborative software development
- Leveraging well known software development tools and processes
- Allowing for various licence types, including Open Source
- Open to ETSI members, non-members and individuals
- Building on previous experiences with open source at ETSI





- ETSI experts create a wide range of technology standards
- When published, all are available to download for free
- Take a look at ETSI.org and portal.etsi.org
- Find out which universities are working on the ISGs – hint – portal.etsi.org
- Find out if your university is an ETSI member by looking at the member list:

<https://www.etsi.org/membership/members>