



# Master Tech Standardization with ETSI

## Module 4 – How are standards written?

# Why do Standards Development Organizations have rules?

- Different SDO have different ways to create and approve standards
- All have common themes:
  - transparency
  - openness
  - consensus
  - stakeholder engagement
  - relevance to market needs
  - impartiality
  - effectiveness
  - balance
  - coherence





- Domain experts from industry, SMEs, academia, governmental bodies, users...
- Standards is not really a career, but a path to making your work count
- You get to work with world-leading experts
- Potential to make a real difference to society
- Increasing online meeting attendance, but in-person still works best
- Technical experts who can contribute to writing standards tend to be paid better than those who do not

- ETSI Work Item - description of a standardization task approved by a Technical Group according to the relevant procedures and adopted by the ETSI members
  - intended deliverable type (EN, ES, TS, EG, TR, SR)
  - technical scope
  - schedule of tasks for its production
  - supporting members (minimum 4)
  - TBs/ISGs/OSGs define and approve new Work Items.
  - ETSI Deliverable - A document produced as the result of an ETSI work item



## Normative Documents

- TS - ETSI Technical Specification
  - Short time to market, may be converted later to ES or EN – approved by the Technical group
- ES - ETSI Standard
  - Entire ETSI membership approves
- EN - European Standard
  - Formal output for Standardization at European level
  - Specific to Europe & needs transposition into national standards or required by an EC/EFTA mandate
  - Harmonised Standards are a subset of ENs





## Informative Documents

- TR - ETSI Technical Report
  - Default deliverable when containing only informative elements - approved by the Technical group
- 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 a software application on the ETSI web site on the basis of database content.



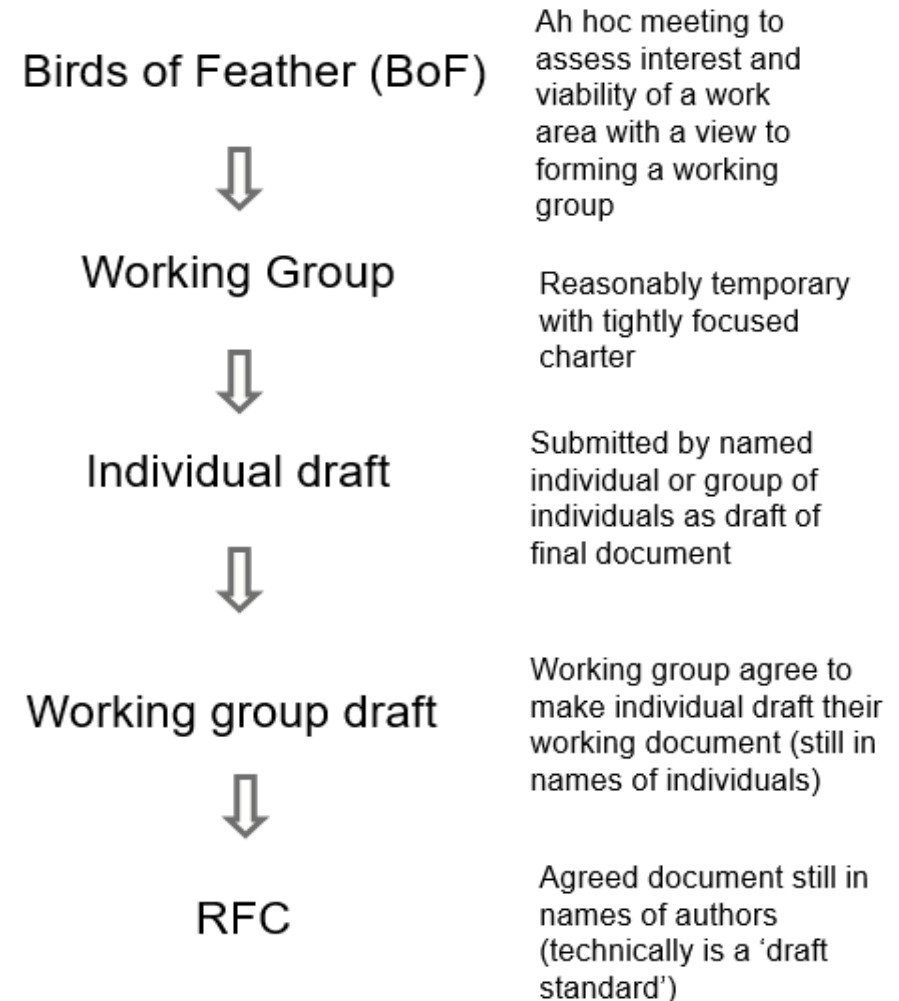
All SDOs try to approve the content of standards by consensus

- *Definition:* A general agreement, characterised 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.
- This can be the hardest part for the delegates involved in the drafting and approval of a document.
- Voting can be used as a last resort – extremely rare.





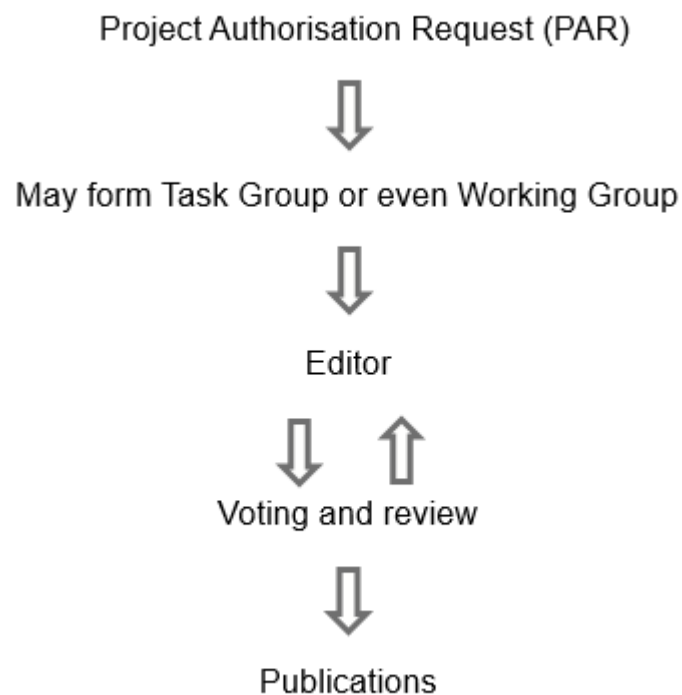
- Origins are academic funded by US defence
- Now fully independent body
- Global body with US based administration
- Membership is by individual expert
- Agreement is by consensus and 'mood of the room'
- 'Rough consensus and running code'





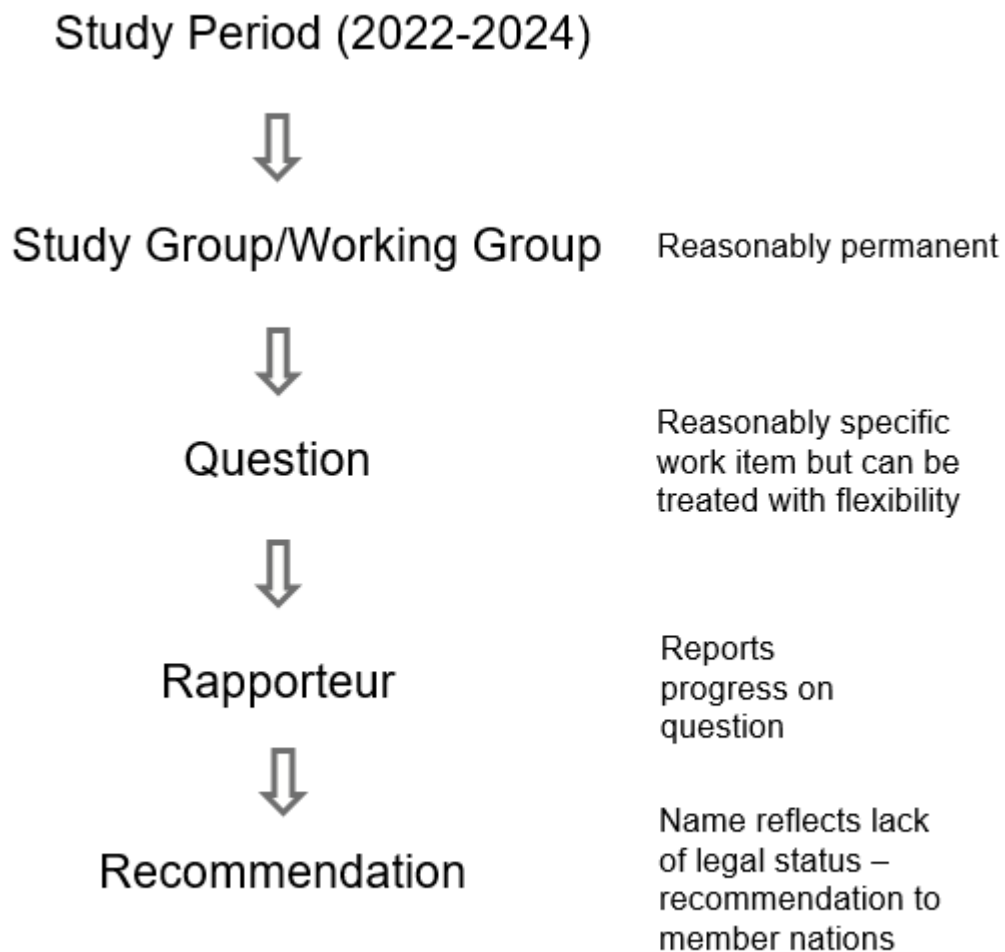


802.1	<b>Bridging and Management</b>
802.3	<b>Ethernet</b>
802.11	<b>Wireless LAN</b>
802.15	<b>Wireless Speciality Network (WSN)</b>
802.16	<b>Broadband Wireless Access</b>
802.18	<b>Radio Regulatory Technical Advisory Group</b>
802.19	<b>Wireless Coexistence</b>
802.24	<b>Vertical Application Technical Advisory Group</b>



PAR is tightly focused and strongly reviewed before agreement

ITU-R SG1	Spectrum Management
ITU-R SG3	Radiowave Propagation
ITU-R SG4	Satellite services
ITU-R SG5	Terrestrial services
ITU-R SG6	Broadcasting service
ITU-R SG7	Science services
ITU-T SG2	Operational aspects
ITU-T SG3	Economic and policy issues
ITU-T SG5	Environment and circular economy
ITU-T SG9	Broadband cable and TV
ITU-T SG11	Protocols and test specifications
ITU-T SG12	Performance, QoS and QoE
ITU-T SG13	Future networks (and cloud)
ITU-T SG15	Transport, access and home
ITU-T SG16	Multimedia
ITU-T SG17	Security
ITU-T SG20	IoT, smart cities & communities





- Standards organizations have rules and processes
- All organizations will help you if you ever end up in a meeting, and your competitors become your friends (well maybe after the meeting ends)
- Of all the skills you will need “consensus” is the hardest – think going out with your friends and choosing a restaurant
- Go find one of the standards games to practice consensus building, they work well with pizza and beer

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**Thank you for your  
attention**

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