

ETSI Software Development Groups

A new type of ETSI group for collaborative software development, alongside existing standardization processes



We live in a software-defined world. Almost all aspects of our ICT systems and services are defined in software. Most ETSI specifications are finally implemented in software. While we have always enabled elements of software to be included in our standards, this approach treats software as a document. It also imposes a consensus or democratic approach. However, developing good software requires specific expertise, discipline, tools, and support not normally found in a traditional standards committee. Therefore, we have defined a new structure and approach to meet the need for collaboratively developed software to accompany traditional standards.

Developing software alongside standards can provide the following benefits:

- Earlier validation of standards
- Accelerated standardization process through faster and regular feedback
- Improved quality of standards
- Increased adoption of standards through availability of software and tools

How do Software Development Groups work?

ETSI's Software Development Groups (SDGs) combine the best of ETSI's standardization support with the tools and processes required for successful collaborative software development.

All ETSI SDGs feature a basic governance model derived from ETSI's experience in open, transparent standards development. This is made sufficiently flexible to cater for SDGs of all sizes, at all stages of their development. The model allows for participation by non-members of ETSI, including contributions from individual developers, in addition to ETSI's own member organizations. Each group maintains its own detailed working procedures and release management processes.

What support does ETSI provide?

On an operational level, ETSI provides the required IT support and industry-standard tools. An ETSI-hosted Gitlab environment is available, together with a website, wiki, e-mail lists, conf-call and discussion channels for each group. In addition, ETSI can provide technical advice and support to each group, accompanying them as they evolve their working procedures or CI/CD pipelines to deliver high-quality software. SDGs can also maintain their own budget to cater for complex or expensive support needs.

What about licences and Open Source?

ETSI SDGs are designed for collaborative software development. Each ETSI SDG can choose a software licence which is best suited to their needs. Some groups may prefer to use a well-known Open Source licence. Others, aiming for close collaboration with ETSI's standardization committees, may prefer to use a licence which is aligned with ETSI's world-renowned IPR Policy.

Who can participate?

A minimum of four (4) ETSI member organizations is required to start a Software Development Group at ETSI (although more are recommended to have a greater pool of contributors). Non-members of ETSI can also participate by signing a Participant Agreement. An SDG may also authorize contributions by individual developers, if required.

How to set up a Software Development Group at ETSI

Working with templates and support from the ETSI Secretariat, the founders (minimum four ETSI member organizations) develop the Terms of Reference of their SDG, outlining the purpose of the group, its expected impact, its relationship with standardization activities in ETSI or elsewhere, and of course the software licence to be used. An initial set of detailed Working Procedures are also required – again ETSI can advise on this. ETSI will develop the required Agreements, including the Contributor Licence Agreement.

This package will be reviewed by the ETSI Board before a decision taken by the ETSI Director General. Upon a decision to create the SDG, ETSI then quickly will put all the IT tools in place and accompany the group in their first steps.

For more information, see: <https://www.etsi.org/about/our-operations> or contact SDGsupport@etsi.org.

