



ETSI SDGs

Software Development Groups

Collaborative software development, in support of standardisation

Today, we live in a software-defined world, where nearly all aspects of our ICT systems and services are driven by software. At ETSI, most specifications are also ultimately realised through software implementations. Developing good software requires specific expertise, discipline, tools, and support – resources not typically available in conventional standards committees. This gap highlights the need for a more structured approach to software development alongside standardisation efforts.

To address this, we defined **Software Development Groups (SDGs)**; a framework for collaboratively developed software in support of standardisation. Creating software in tandem with standardisation provides several significant benefits:

- accelerated standardisation process through early and regular feedback,
- higher quality standards thanks to earlier validation, and
- broader adoption through the availability of software and tools.



Four SDGs have now been established with **TeraFlowSDN**, **OpenSlice**, **OpenCAPIF** and **OpenOP**. In addition, **Open Source MANO** will transition into a formal SDG during 2026.

How do Software Development Groups work?

ETSI SDGs bring together ETSI's strengths in standardisation with the tools and processes necessary for successful collaborative software development. Every SDG operates on a basic governance model derived from ETSI's long-standing experience in open and transparent standards development. The model is adapted to cater to SDGs of all sizes, at all stages of development, and it enables participation by non-members of ETSI, including contributions from individual developers. Each group maintains its own detailed working procedures and release management processes, providing feedback to relevant standardisation activities.

What about licences and Open Source?

ETSI Software Development Groups are designed for *collaborative* software development, therefore each group selects a software licence that best suits their needs. Some groups may prefer to use a well-known **open-source licence such as Apache 2.0** while others may prefer to use a licence which is aligned with ETSI's IPR Policy.

What support does ETSI provide?

ETSI offers comprehensive operational support, including a full-featured development platform (GitLab), discussion channels, conference call and webinar planning, a dedicated website, social media presence, and mailing lists setup. More importantly, ETSI offers **technical guidance and support**, accompanying each group as they evolve their working procedures or CI/CD pipelines to deliver high-quality software. ETSI SDGs can also maintain their own budget to cover more complex or expensive support needs.

Who can participate?

Initially, a minimum of four (4) ETSI member organisations is required to establish an SDG (though more are recommended). Depending on the setup, non-member organisations and individual developers may also participate by signing a Participant Agreement and a Contributor License Agreement. Participation is free of charge for all ETSI members, together with non-members who are SMEs, universities, public research bodies, user and trade associations, and individuals.

How to set up a Software Development Group at ETSI

It all starts with (at least) four ETSI members and a common idea for collaborative software development. The SDG founding members and the ETSI Secretariat will work together to prepare a proposal including Terms of Reference, outlining the purpose of the group, its expected impact, its relationship with standardisation activities in ETSI or elsewhere, and of course the software licence to be employed.

This package will then be reviewed by the ETSI Board before a decision is taken by the ETSI Director-General. Upon a decision to create the SDG, ETSI will then quickly put all the IT tools in place and accompany the group in their first steps... in time for their kick-off meeting, where their leadership team and initial detailed working procedures will be agreed.

Contact ETSI SDG Support
SDGsupport@etsi.org



For more information, visit
labs.etsi.org/sdgs
or scan this QR code

About ETSI

ETSI is one of only three bodies officially recognised by the European Union as a European Standards Organisation (ESO). It is an independent, not-for-profit body dedicated to ICT standardisation. With over 900 member organisations from more than 60 countries across five continents, ETSI offers an open and inclusive environment for members representing large and small private companies, research institutions, academia, governments, and public organisations. ETSI supports the timely development, ratification, and testing of globally applicable standards for ICT-enabled systems, applications, and services across all sectors of industry and society.

