

E-TASC General Meeting: Towards EUROfusion Standard Software

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On behalf of the E-TASC SB



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EUROfusion Standard Software



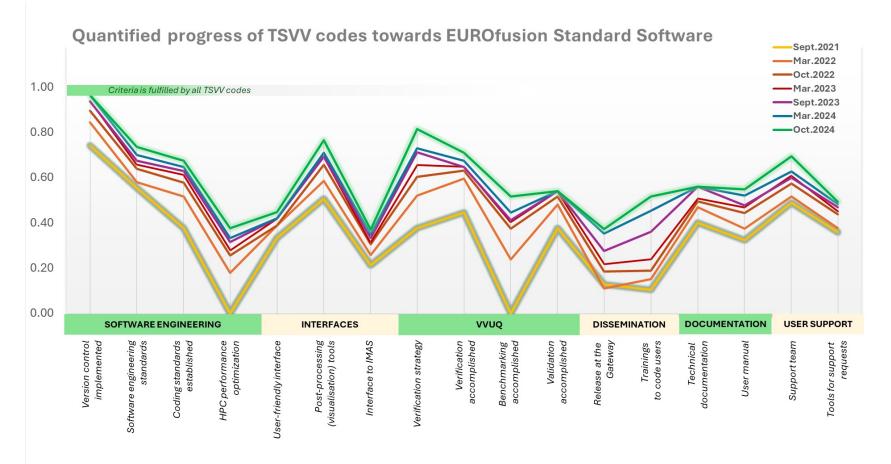
May 12, 2020

EUROfusion standard software will be developed with a very rigorous, consistent quality assurance process that is common across the E-TASC initiative; it is designed to benefit a wide range of users across EUROfusion, well beyond the team of code developers, and will adhere to the following guidelines and criteria:

- Free availability (within EUROfusion) of an up-to-date release version of the source code used for production runs
- Good software engineering practices (version control, regression/unit testing, shared development rules etc.)
- High-quality code documentation via user manuals and reference publications (including, in particular, a detailed description of the underlying model)
- Excellent support of users, co-developers, and support staff within EUROfusion (via contact person, mailing list, issue tracker, and the like)
- Specific plans for code verification and validation (involving a third party), in particular within EUROfusion, including aspects of uncertainty quantification
- User-friendly, intuitive interfaces and visualisation/post-processing tools, including interfaces to the IMAS Data Dictionary (where applicable)
- Specific plans for code dissemination and user training within EUROfusion

Quantified progress of TSVV codes





Upcoming developments in 2026-27



Main tasks:

- Code development & HPC performance optimization (with ACHs)
- Code validation & applications (with WPs)
- Code deployment (including user training and support)

Prerequisites for code support:

- Appropriate data environment (including IMAS integration)
- Open access for the EUROfusion community