

## ITM SOFTWARE POLICIES AND GATEWAY USER AGREEMENT

### Background and General information

The Integrated Tokamak Modelling Task Force (ITM-TF) is a Task Force defined under the European Fusion Development Agreement (EFDA). It has the long term aim of developing a validated suite of simulation codes for ITER exploitation and the remit extends to the benchmarking on existing devices.

The working format for the ITM-TF is collaborative activities between individual and Associations aimed towards the creation of a common simulation framework for fusion plasmas. Software within the ITM-TF is either original software developed fully within the ITM-TF or software contributed by the EFDA Associates and adapted to the ITM-TF framework, through ITM-TF. We take the ITM-TF framework to collectively mean the contributed and developed software together with compiled databases of experimental and simulation data.

ITM-TF undertakes to provide a record of the software being contributed to the ITM-TF in a registry and it will track the contributions made to the software within the ITM-TF activities. The initial data entry for the contributed software is provided by the Contributing Associate through information detailed in a separate Grant of Software Access agreement which also should appoint a Responsible Officer for the Software.

The ITM Gateway is a joint resource for contributors to the ITM-TF work programme and users of software developed within the framework of ITM-TF. The purpose of the Gateway is to provide a common development environment and access to contributed software. In addition, the Gateway should act as a user access point to relevant simulation and experimental data as well as the entry point to a wider range of computing resources. Only activities which are consistent with the ITM-TF Terms of reference can be supported on the ITM Gateway. The Gateway hosts the ITM-TF software repositories. Access to the repositories is structured according to the status of the software and the role of the users as described in the section on Quality Assurance.

All activities on the ITM Gateway need to be performed within one of the Integrated Modelling Projects (IMPs) or the Infrastructure and Software Integration Project (ISIP) or in collaboration with other EFDA entities.

The ITM GATEWAY USER BOARD (GUB) supports the development and maintenance of the contributed software and monitors the activities on the ITM Gateway. It consists of at least one representative from the TF leadership and one representative appointed by each of the Projects (IMPs and ISIP) and represents the unique management body and the main point of contact to users of the ITM Gateway. It grants access to the Gateway, to software releases and repositories, and the relevant data and data access tools based on the status of the user.

Two levels of Gateway user status are possible:

**Active developers** are individuals or groups of individuals contributing to an ITM Task formalized under a Task Agreement (TA) between their HRU and the EFDA Leader. These Tasks form the core of ITM work programme and are organized within the ITM project structure and coordinated by the



Project Leaders. Active developers are formal project members or collaborators agreed by the ITM task force leader and have access to the **project software development repositories** and the **ITM public release repository**. The appointment of active developers in a given task for development on a specific code should be agreed by the code responsible officer and the corresponding project leader.

**Active users** are individuals or groups of individuals that are not directly involved in the development of the ITM software suite but are actively using the ITM-TF tools for physics studies. This category of users will in general be supported through collaboration with the different Topical Groups, European Experiments or on an individual basis through work proposals supported by the GUB. This category of users has access to the ITM public release repository only. In general only binary versions of contributed software are available to this category of users. Exception to this rule can be granted by the ITM Gateway User Board in agreement with the Responsible Officer for the respective software.

Access rights to the ITM gateway may be revoked if a user is found to be in breach of the terms of the user agreement as set out in this document.

## EFDA ITM-TF Software License Agreement

This ITM-TF Software License Agreement for ITM-TF Software (“License”) is an agreement between the undersigning party (“Licensee”) and the ITM-TF for the use of the ITM-TF Software (the “Software”), as defined below. If the undersigning party is obtaining access to the software for personal use, this agreement applies to and binds the undersigning party personally. If the undersigning party is obtaining access to the software as part of its work for an organization, this agreement applies to and binds such organization. In such a case the undersigning person must expressly declare that he/she acts on behalf and in the interest of the organisation.

The Software in this respect is any software contributed to the ITM-TF by an EFDA Associate through issuing of a Grant of Access form or any software developed solely within the ITM-TF in support of its work programme. The ITM-TF Software is thus constituted by the ITM-TF software repositories.

### License

This software has been contributed by an EFDA Associate within the framework of the EFDA Taskforce on Integrated Tokamak Modelling (ITM-TF). The software has either been developed directly within the ITM-TF work programme or the EFDA Associates have granted the ITM-TF right of managing and distributing the Software on their behalf under this ITM Software Licence Agreement

1. ITM-TF allows the undersigning party to use the ITM-TF computer software residing in ITM-TF managed software repositories provided that this software will be used exclusively for non-commercial research purposes.
2. The undersigning party agrees not to transfer the software to third parties and not to grant sublicenses. If the undersigning party receives a request for such transfer it should be referred to the ITM Gateway User Board that will decide on appropriate action in consultation with the involved Associates and EFDA.
3. The undersigning party agrees, to use the software only for peaceful purposes and to avoid using the software for military purposes or any other purpose falling under the provisions for non-proliferation.
4. Except as specified in this license, all express or implied conditions, representations, and warranties including, without limitation, any implied warranty of fitness for a particular purpose, correctness of the mathematical and physical model, or error freeness of the numerical scheme, as well as non-infringement of copyrights, or arising from a course of dealing, usage, or trade practice, are hereby excluded to the extent allowed by applicable law. The undersigning party will notify ITM-TF if it discovers that the software contains any error or infringes any copyright.
5. Within the limits of the license granted to him, the undersigning party is required to make any modifications and improvements of the contributed software available to the ITM-TF under the same conditions.



6. The undersigning party agrees to acknowledge the name of the software, the author(s), the Associate(s), the ITM-TF, and cite the relevant technical reference(s) for the software package in any publication reporting results obtained with the aid of it. Any extensive support from an ITM-TF member to the undersigning party implies that the published work will include that ITM-TF member(s) as co-author.

7. Transfer of the software will involve no costs for EFDA ITM-TF.

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## Access to Source Code Repositories and basic Quality Assurance

ITM-TF is creating a collaborative research and software development environment for integrated modelling of ITER, DEMO and the current experimental devices. This requires joint adaptation and development of a range of software tools of different origins. It is foreseen that different levels of maturity will be exhibited during the lifetime of a code within the ITM-TF and a **layered set of access rights**, has been defined to reflect this:

Access to software is based on the ITM-TF project structure where

- Read access is granted for all active developers within a Task to all **source code development repositories** needed within the Task. Write access should be granted to the appointed Responsible Officer (RO) for each software code. Or, if so has been agreed between the ROs for the different software codes involved in the Task to a single person taking the coordinating responsibility for the software integrity in the Task. All active developers have write access to some parts of the relevant tree structure (development thread) so they can easily exchange files amongst themselves, make modifications and merge the versions
- Read access is granted for all active developers within a Project for all **Release Candidates** of the different software packages within a Project. A Release Candidate is a software or software component that is considered stable and fully adapted to the ITM-TF data structures and is currently being tested under the ITM-TF V&V procedures. Release Candidates are proposed by the Responsible Officers to the corresponding Project leader. Write access for Release Candidates is granted to Responsible officers OR the person taking the coordinating responsibility for the software integrity in the originating task. For each new version of the Release Candidate a renewed endorsement by the Project leader is needed.
- All ITM users have access to the public repositories. Public releases are proposed jointly by the Responsible Officer for each software and the corresponding Project leader to the ITM Gateway User Board. Only software that is deemed appropriate under ITM-TF V&V procedures can be proposed for Public Release. Write access for Public Releases is granted to Responsible officers OR the person taking the coordinating responsibility for the software integrity in the originating Task. For each new release of the software a renewed endorsement of the Gateway User Board is needed.

Any request falling outside of the above presented access hierarchy should be forwarded the ITM Gateway User Board. A permanent transfer of responsibility to the ITM-TF for software is possible through a separate written agreement between the involved HRU and the ITM-TF.

If a conflict arises in relation to software access or releases the first route for resolution is the ITM Gateway User Board. If that route fails to resolve the issue the TF Leader will move the complaint to the attention of the involved HRUs and the EFDA leader for further consideration.

## ITM Publication Review Procedure

All activities in the ITM-TF are based on collaborative work involving, in most cases, several Associates providing resources and staffing to the ITM-TF through EFDA. The EFDA Publication Rules approved by the EFDA Steering Committee therefore apply to these activities.

Any manuscript intended for circulation outside the Task Force which is based on ITM related work has to be cleared by the Task Force Leader.

In line with the EFDA Publication Rules, the following procedure applies:

1. All proposed publications, conference contributions and abstracts need to be endorsed by the Project Leader(s) under whose project(s) the main part of the work to be reported was carried out. The manuscripts, abstracts, presentations and posters must then be submitted to the TF leadership at least 14 days prior to submission deadline for review.
2. The submitting author needs to have cleared any internal review and publication authorization required by his Association by the date of seeking review by the TF leadership. In the case of a manuscript or contribution deemed important to the ITM-TF where the author fails to clear an internal review or obtain travel authorization, the ITM-TF reserves the right to take appropriate measures to secure the publication or presentation of the material through other means.
3. No manuscript should be submitted without TF leadership approval. The submitting author should be prepared to iterate the manuscript until consensus has been reached. The TF leader communicates the final approval and submits the manuscript to EFDA for archiving.
4. EFDA leader can act as adjudicator on TF leader final decision if so requested by submitting Associate.



As a user (**active developer or user**) of the ITM Gateway I declare that

- I will abide by any software licenses covering contributed ITM gateway software tools. I have reviewed the general ITM software license as given here and agree to its contents. I am aware that for some software tools additional requirements may apply if so explicitly stated.
- In case I contribute software to the repository, I will take necessary measures in order to inform –other active developers or users as well as end users on any limitation of use due in particular to existing third parties' rights on the contributed software. I will also inform of the parts of software falling under Open Source Licenses.
- I agree to the ITM publications procedures for any work intended for dissemination outside of the ITM which depend in whole or in part on the use of the ITM gateway or any ITM software tool.
- I will not install or run any software on the ITM Gateway which cannot be directly attributed to my role as an **active developer or user**.
- I understand that User access to the Gateway is granted through individual accounts that cannot be transferred or shared.

Date and Place:

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Project (s)[ISIP or IMP#]

Associate

Name:

Signature:

.....

Full address:

e-mail:

phone:

fax:

For Non-EFDA collaborators only:

duly representative person of sponsoring Associate or organisation<sup>1</sup>

Name:

Organisation:

Signature:

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<sup>1</sup>Members not directly employed by an Associate can be formal collaborators ITM and/or users of the Gateway. A co-signature is then required by a recognized official of the sponsoring party, usually an Associate, or as per collaborative agreement of the organization with ITM-TF and EFDA