

# Earth System Grid Federation Governance

[<http://esgf.org/>]

## Purpose

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The Earth System Grid Federation (ESGF) Review Board (ERB) is a group of individuals whose goal is to advance ESGF technology by providing direction and oversight to its development. While the open-source nature of ESGF allows natural progression via its many contributors and collaborations, the board provides synergy and cohesion among the various development efforts, thus ensuring that changes will benefit the community as a whole. The ERB serves the following functions:

- Maintains a roadmap of ESGF, including long-term plans.
- Makes decisions on high-impact code changes to ESGF.

The ERB is composed of: (1) the steering committee, funding agencies and stakeholders responsible for providing resources; (2) the executive committee, which has overall responsibility for meeting sponsors, stakeholders, and community needs and prioritizing work; and (3) the technical committee, responsible for the development of the system architecture, the management of the development lifecycle and scheduling releases. The executive and technical committees are responsible for setting release contents and reporting what was actually delivered in the releases to the community.

## Scope of ERB Intervention

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Code changes with a high impact on developers and/or users are to be reviewed by the ERB committees. Guiding principles for deciding whether a change requires ERB involvement include:

- Will the change significantly affect backwards compatibility?
- Will the change significantly affect users, managers, or developers?
- Does the change significantly shift the functionality and scope of ESGF?
- Are there any licensing issues?
- Are there any security concerns that need to be addressed?

Bug fixes do not in general require ERB approval. Small feature additions do not require approval provided they are part of an associated development plan (see [Managing the Development Process](#) on the ESGF website). In both cases, changes must be formally documented and published to the mailing list and/or tracking web sites for comment before implementation.

## Roles

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### *Chair and co-Chairs*

The **Chair** or **co-Chairs** organize meeting agendas and maintain the roadmap and the list of outstanding proposals that require ERB intervention. He/she (or group) is also responsible for setting up ERB meeting times/places and ensuring that the goals of the meeting are accomplished. The **Chair** or **co-Chairs** may invite individuals or groups who have submitted proposals to present their plans at ERB meetings.

In the case of a single **Chair**, the **Deputy Chair** keeps records of each meeting, assists in the setup of the meeting location and technology (e.g. projectors, video conferencing, etc.) required, and facilitates communication of proposals to the ERB, as well as decisions from the ERB back to the community. The **Deputy Chair** may act as **Chair** if the **Chair** is unavailable. In the case of **co-Chairs**, overall responsibilities are equally shared.

The **Chair** or **co-Chairs** are responsible for facilitating discussions and consensus building in their perspective committees.

### *Voting members*

For each committee, there can be only one voting member per institution. Voting members candidates, one per institution, must be vetted and approved by the respective committees and **Chairs** or **co-Chairs**. Voting member candidates must be participant members for at least one year before being nominated as a voting member.

#### ***Non-voting members***

Non-voting members on the executive committee must be voting members on the technical committee and non-voting members on the technical committee must be voting members on the executive committee. Non-voting members will be allowed to join meetings and participate, but are not allowed to vote. The respective committees must vote non-voting members in.

#### ***Participant members***

Each committee can invite participants to join meetings. Participants are guests and hold no voting privileges. They may contribute to the code base and participate in meetings on limited bases.

#### **Conflict Resolution**

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Conflicts are to be resolved by discussion and consensus wherever possible. When such an agreement is impossible, the members of the ERB committees vote on the issue, with the **Chair** and **co-Chairs** breaking any tie vote.

#### **Committees**

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***Steering Committee (SC) Responsibility:*** Comprised of program managers whose agencies provide significant sources of identified and dedicated funding and resources for ESGF development and core infrastructure.

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The SC will be initially populated by members named in the [Steering Committee Membership](#) document as an addendum to this document.

The SC provides a forum for ESGF funding agencies to interact on a regular basis regarding the vision, goals, and progress of the ESGF effort as they relate to each agency's mission and plans. Agency representatives work with the ESGF executive and technical committees to articulate ESGF goals and formulate metrics that reflect programmatic requirements. The executive committee reports to the SC on the status of ESGF development, adoption, and collaborations, and offers guidance as warranted.

A program manager designated by the Climate and Environmental Sciences Division within the DOE Office of Science will **Chair** the SC. The **Chair** in consultation with other agency representatives who support ESGF will determine the funding threshold for membership on the Steering Committee.

Role of the steering committee:

- Communicate agency objectives and constraints to the EC to ensure that they are reflected in ESGF goals and vision.
- Review and concur on ESGF programmatic metrics proposed by the EC, and changes to those metrics as may be necessary from time to time.
- Advise on funding issues and opportunities that may be relevant to continued progress.
- Ensure significant sponsoring agencies are represented on the SC.

***Executive Committee (EC) Responsibility:*** General guidance and overall high-level decisions in directing the course of the ESGF project in correspondence with multiple sponsor and stakeholders needs—ultimate responsibility for ensuring that ESGF meets the needs of customers and stakeholders.

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The EC will be initially populated by members named in the [Executive Committee Membership](#) document as an addendum to this document.

Future EC membership shall develop organically from the EC itself. EC members are responsible for nominating new members, who are elected by consensus or majority vote (with the **Chair** breaking any tie). Members may step down from the EC at any point. Members may be expelled from the EC by consensus or vote if they are unable to attend meetings after reasonable effort has been made to contact them, or if their actions are found to be counterproductive to the purposes of the ERB.

The executive committee is responsible for organizing and interacting with the ESGF Steering, Technical and Advisory committees. The steering committee—composing of sponsors, stakeholders, and users—provides input to the EC on the entire ESGF project and path forward from their perspective. This input will be interpreted and used to provide requirements to the technical committee. The executive committee will appoint a steering committee **Chair** and the executive committee **Chair** must attend all steering committee meetings. The **Chair**, when permitted, will attend all technical committee meetings to provide input.

Role of the executive committee:

- Setting the strategic direction of the ESGF project.
- Oversight of technical committee (and other committees as defined by the executive committee).
- Work with Technical Committee to review implantation plan for strategic goals.
- Approval of major architectural changes
- Appoint an Advisory Committee of users and external stakeholders who will provide feedback to the EC and TC on plans and suggestions for new directions.

**Technical Committee (TC) Responsibility:** Guidance and direction on technical issues set by executive committee requirements—focused on technical aspects of ESGF.

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The TC will be initially populated by members named in the [Technical Committee Membership](#) document as an addendum to this document.

Future TC membership shall develop organically from the TC itself. TC members are responsible for nominating new members who are elected by consensus or majority vote (with the **Chair or co-Chairs** breaking any tie). Technical members may step down from the TC at any point. Members may be expelled from the TC by consensus or vote if they are unable to attend meetings after reasonable effort has been made to contact them or if their actions are found to be counterproductive to the purposes of the ERB.

The **Chair** or **co-Chairs** will attend all executive and technical committee meetings to provide input.

Role of the technical committee:

- Requirements analysis (interfaces with customers - users - to understand requirements)
- Technical architecture
- Organizing development
- Testing and releases

## **Meetings**

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The executive and technical committees will meet with their respective constituents regularly, no less than monthly. The ERB committees will hold a joint meeting on a schedule of their choosing and convenience no less than four times a year. Additionally, the committees may meet informally at any time when the need arises. The EC will schedule meetings with the Advisory Committee on an annual basis. These meetings may occur via telecom, e-mail, or face-to-face. At

least one face-to-face meeting will occur each year. (Meeting notes and scheduled meetings are to be posted on the ESGF website.) The **Chairs** of the EC and TC committees will communicate no less than once a month.