

Summary of the ESMF Change Review Board Meeting on Sept 1, 2005 in Boulder, CO.

Attendance:

Robert Ferraro/JPL, Cecelia Deluce/NCAR, Tom Clune/NASA GSFC, Atanas Trayanov/NASA GSFC

Agenda

A synopsis of the discussion and decisions from the meeting is presented below. It is organized by agenda item, but is not presented in the order items were covered at the meeting. During the course of the meeting agenda items were dealt with out of order, and occasionally revisited in subsequent discussions. These notes attempt to capture the high points of the discussions, and any decisions that resulted. *[Chairman's note: Although we decided that the Chair should produce minutes of the meeting, I find that I am not able to do that. The best I think I can do is synopsize the discussions and decisions, since I can't talk and type at the same time. If we really want minutes, we need a recording secretary.]*

Since hurricane Katrina prevented the attendance of 2 out of 4 CRB community representative members, the decisions made will need to be reviewed by the full board at its next meeting.

Review of the CRB charter

No issues were identified. No changes to the charter were requested. CRB members are expected to articulate and defend the priorities of the entity(ies) they represent, but ultimately to act in the best interest of the community at large. They must be willing to defend the CRB actions to their employers and sponsors.

Participation in CRB meetings

A proposal for web-casting or providing open telecon access to CRB meetings was discussed. It was generally agreed that board members would be less candid in their discussions if the meetings were open. How will board meeting results get published/distributed to the community? The board agreed:

Meeting will be closed with the agenda published in advance and minutes published afterwards.

Is the board representative as constituted? . There was a discussion of the communities that the current members represent. It was noted that CCSM and NOAA communities were not adequately represented on the board as constituted. The board agreed:

Need members from NCAR (CCSM) and NOAA. New members proposed:

Mark Iredell or Mike Young - NOAA

Mariana Vertenstein – NCAR

Action – find out if Mark and Mariana are willing, then forward nominations to Executive Committee – Cecelia Deluca

Reporting CRB decisions

The board agreed:

The CRB will have a webpage on the main ESMF website

A meeting agenda will be published on the CRB page 10 days in advance of meetings.

The CRB chair will record and circulate a summary of the meeting for board approval prior to publication.

The CRB will publish the approved summary of meetings on the CRB webpage.

Making decisions

How will CRB decisions be made? Consensus is the preferred method, but what should be done in the absence of consensus? Do the interests of agencies funding the ESMF core development team have higher weight than other interests? There is a real need to keep the sponsors who provide funding happy (since their recourse is to withdraw or fail to renew funding), but can consensus be reached in every situation? With consensus, one board member may withhold agreement and block action. Majority voting leaves the losing members without an interest in defending CRB decisions. Giving DOD and NASA veto power is counter to the notion that the CRB acts in the best interest of the entire community. Consensus also promotes horse trading. The members agreed that:

CRB decisions will be made by consensus

The CRB chair has discretion to mediate outcomes

CRB Processes

The main responsibilities of the CRB are:

Updating and prioritizing requirements

Revising the development schedule

Approving the public release

There was discussion about what should and should not be within the CRB purview. The CRB cannot deal with items that require immediate action, since the board meets quarterly. The CRB charter only covers ESMF priorities, development task schedule, and the public software release. The granularity of tasks on the schedule needs further discussion. Support, training, and bug fixes are ongoing activities that levy liens against the Core Team workforce, but are not part of the development schedule. Consideration of the overhead resulting from these tasks needs to be considered when setting the development schedule. Bugs that take longer than 1 week to fix will be classified “rework” to be prioritized and scheduled by the CRB. Rework also includes recoding of existing functionality. The members decided that:

CRB will schedule	CRB will not deal with:
Feature additions	Bug fixes
Rework	Support
Major Documentation Tasks	Training
Addition of 3 rd party contributions	

Updating Requirements

Additions and changes to ESMF requirements come primarily from the Joint Specification Team (JST), but may be put forward by any CRB member. There was a discussion about how the CRB receives requirements from the JST, and how the user community at large is allowed to provide inputs to the requirements process. The CRB will only accept requirements that have been vetted by the JST for completeness and consistency. The following process was defined for receiving input from the JST, and input from constituencies for the purpose of prioritizing requirements additions and changes:

The JST will hold an open, advertised telecon 2 weeks in advance of a CRB meeting. CRB members will participate in the telecon for the purpose of receiving JST input to the CRB discussions.

The CRB chair will then publish a meeting agenda 10 days in advance of the meeting.

CRB members will then consult with their constituents about the inputs from the JST prior to the CRB meeting, for the purpose of determining priority. CRB members may uncover other issues during these consultations.

CRB Scheduling Process

The CRB will develop and maintain an ESMF development Schedule. The Schedule is a list of “features” to be added to the ESMF public release in expected completion order. There was discussion about the schedule horizon (suggested to be 9 month in advance), but no specific horizon was decided.

Features are typically work chunks at a level of 1 work month. The CRB needs experience with the process to determine if a threshold should be set.

Features include: rework, major documentation, new functionality, addition of 3rd party contributions.

At each meeting, the CRB will review Core Team progress against the schedule. The CRB may then add and remove features from the schedule, and rearrange the expected completion order of features on the schedule.

Features are removed from the schedule when CRB agrees they are completed. Features completed will be included in next public release.

“Completed” is determined by:

The feature has been implemented and released for beta testing

The feature has been beta tested by interested parties

Problems discovered in beta testing should result in support requests

At the CRB meeting, the CRB determines that

No open support request exists on the feature

Or the documentation is updated to reflect limitations

The CRB then approves the feature as completed.

Features are added to the schedule in response to input from the JST and analysis by the Core Team of the work required to implement. The process flow proposed by the CRB chair on the whiteboard was as follows:

**JST Telecon (prior to CRB meeting) –
proposes changes to ESMF requirements**

CRB Meeting –

CRB reviews proposals, prioritizes them within the existing requirements, and updates requirements. The CRB may then define a new feature based on high priority requirements for implementation by the Core Team. The Core Team manager is tasked to develop an estimate of workforce and time required to implement the feature. [workforce and time required are different things. 2 wk mo developer effort may be accomplished in 1 mo if 2 developers can be employed on the task].

Core Team -

Analyzes development effort required for feature (design, implementation, unit testing) and determines workforce, time to availability for beta testing, and any pre-requisites.

Next CRB Meeting -

CRB updates the Schedule based on report from the Core Team Manager. The Schedule may be rearranged as a result.

Note that it takes 2 CRB meetings to go from JST proposed changes to an impact on development schedule.

[Note: In post-meeting email discussions, there was no consensus that this process had been agreed to. Some members thought that the JST would be involved in the commenting on an adjusted schedule, and the new schedule would be approved prior to the next CRB meetings. The Chair considers this unresolved, and will add it to the agenda for the next meeting]

Reviewing and approving public releases

The CRB will review the content of the new release, its testing history, and open support requests. If there is an issue with a feature in the proposed release, that feature will be delayed. Public releases will only include new features that have completed the CRB approval process.

Since anything that goes into the public release will already exist in the ESMF internal releases, features implemented but not fully tested will still be available to “friendly” users. The CRB wants the public release to be as stable as possible at all times.

Report on current development status and schedule (Cecelia Deluca)

Update to the development & public release schedule

These agenda items were deferred due to a lack of a quorum at the meeting. They will be taken up at the next CRB meeting.

Introduction to the requirements tracking database tool

Discussion - How will the board use the database tool? We need to review the state of the current requirements against the current ESMF release. The requirements database doesn't indicate what is done (satisfied by the current public release), partially done, or not done. The board needs that information as a starting point for prioritizing the unmet requirements.

Action – update the database prior to the next CRB telecon (see plan for next meeting below) to reflect which requirements are done - (Core Team)

The members review the new database tool. The discussion centered around the fields that can be entered into the database for each requirement. How are requirements mapped into development tasks (features) on the Schedule? It was agreed that the mapping of requirements to tasks is often many to one. Also, some requirements are general (e.g., portable software) and don't map cleanly into a single task. There was a general agreement, though, that tasks should be traceable to one or more requirement. Specific fields discussed:

Source – the originator(s) of the requirement. Could be multiple people, and needs to reference a code that has the requirement (no blue-sky stuff). Need to change the source field to include a contact person.

Status – stages of development from not scheduled to approved (e.g., delivered software with reference to the module that satisfies the requirement.)

The board decided that it needs some experience with the database to make more intelligent suggestions. This will be a work in progress.

The board needs to develop a plan for initial review and prioritization of the ESMF requirements. The CRB chair will schedule a telecon prior to the next meeting.

Plan for next CRB meeting

The next meeting should be in approximately 3 months. Prior to that meeting the CRB chair will schedule a telecon among the CRB members. This telecon should happen after the new nominees are added to the board, and after the requirements database has been updated to indicate which requirements are considered satisfied (done). The telecon will review the decisions from this meeting. If any decision is at issue with the members not in attendance, it will be revisited at the next meeting. A plan for gathering constituency input on prioritizing the unmet requirements will be developed. Members should come prepared to the next CRB meeting to start prioritizing requirements. The telecon should happen about a month prior to the next CRB meeting.

The CRB chair will consult with members to set the next CRB meeting. It should be in November sometime. Supercomputing was mentioned as a possible location. There are logistics problems with this suggestion (renting space costs money, and dedicated space is needed, potentially with telecon and internet access capabilities). Members may participate in person, or by telecon if necessary. It is suggested that the meeting host rotate among the CRB members.

A volunteer is sought to host the next meeting.

Unresolved Issues

Process for accepting 3rd party contributions and including them in the public release. Topic to be included in the next CRB meeting agenda.

The schedule definition and process, schedule granularity, and role of the JST in modifying the schedule. Topics to be included in the next CRB meeting agenda.