

CGNS Steering Committee
Telecon Minutes
13 March 2002
2:00pm Eastern Time

Telecon Number: (334) 262-0740, participant code: 491863

The meeting was called to order at 2:00pm. The attendees are listed in [Attachment 1](#).

Charter Business — Bob Bush introduced three people who have requested to attend Steering Committee meetings. These were:

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| Prof. Habashi | McGill U. |
| Dr. Sebastin Peron | Newmerical |
| Dr. Francois Morency | McGill U. |

They were unable to attend the telecon. In addition, Ed Hall the RR–Allison voting member of the Steering Committee has moved to GE Corporate R&D center. We hope he will remain active on the CGNS committee. Kurt Weber has replaced Ed as the voting member for RR–Allison.

ISO Status — Ray Cosner provided a brief overview of the status of the ISO certification effort. There was a 1 week meeting in February where all parts of the new standard were reviewed. There were minor changes to Parts 52 and 53, it is felt that with these changes they are ready for the Committee Draft stage. Part 110 — the CFD specific portions were reviewed and much of the contents moved to AP 237. It was decided to eliminate part 110 and just include all its contents into AP 237. Completion of the ISO certification process for the fluid dynamics standard is now expected to occur in the fall of 2004.

Ray also noted that Peter Wilson (the guiding force behind formatting the standard for ISO acceptance) will be retiring at the end of 2003.

After some discussion it was decided to move a proposed CGNS committee review of the ISO drafts to the fall of 2002. This is to accommodate attendance and hosting by the US lead ISO representative, having the drafts further, and more information about a potential combination of the fluids and finite element standards.

Documentation — Charlie Towne gave an overview of the documentation status. A beta version of the documentation, that is consistent with the beta version of the software, is available on the web. He is working on updating the ADF manual with un-documented extensions by Mark Fisher, and re-writing the Overview document. The AIAA standard document (SIDS re-formatted) is being worked by the AIAA. We anticipate receiving the draft soon for voting and acceptance.

We had an invitation to participate in a panel session at the Grid Generation Conference in Hawaii in June 2002. John Chawner indicated that he was planning to attend and offered to represent the

committee on the panel.

Marc Poinot will be presenting a paper on pyCGNS at the Aerospace PDE conference in Amsterdam. We offered to provide any CGNS material that might help him in his presentation.

Extensions — The Links, User Defined Data and Chemistry extensions have been implemented and are available in the beta version (2.1 beta 2) on the web.

There were some issues checking in new code to CVS from a PC system. These involved the different handling of <CR> between PC and Unix. The CVS system flagged these as differences, resulting in 100% changes for code being checked in. This defeats the purpose of the history tracking, so all routines were checked in through a Unix system. David Edwards and Diane Poirier will draft an update procedure to guide future efforts.

Diane sent out a message to all registered users. Of 599 sent, 118 were not found. She is 'cleaning out' the registered user list.

Bob Bush briefly summarized recent activity for turbomachinery extensions including Rotating Coordinates, Periodic Boundary Conditions, and Interface Type. Dave Schowalter expressed interest in these extensions. He will look at the latest updates on the web, and Bob Bush will try to tie him into future discussions.

Marc Poinot briefly described his extensions of the ADF library to include the ability to maintain an in-memory representation of the tree. This should facilitate MPI implementations. The extensions were implemented as a small number of new calls that can be used in place of existing calls. The new calls provide the ability to specify if the data is in memory or on disk. Shawn Fuller indicated that he has used the extensions, but that the level of parallelism is too coarse for his immediate needs. Marc has provided the libraries and documentation on the web, and we have provided links to the site from the CGNS site. We will extend the ADF library to include these capabilities depending on usage and user experience.

There was brief discussion on extending the units to include a number unit (moles) and charge unit (electron). Thus far, we do not have an immediate need to make these extensions, so we will wait. In addition, the ISO standards should have a definition of various units. Ray Cosner will track down how and what units are tracked by the ISO community. This can be incorporated into CGNS, or we can wait until the ISO capabilities are available.

Related Software — There is a link to the PyCGNS software from the CGNS web site, along with his presentation from Reno.

Manuel Kessler has loaded the C++ interface on the web via sourceforge. We will add a link to the CGNS web site to this library and its documentation. Manuel would be very interested in any feedback that anyone can provide.

Bruce Wedan introduced himself and briefly described his Tcl/Tk ADF viewer. Chris Rumsey and

Diane Poirier have used the viewer and like it's functionality. The viewer is based strictly on ADF, but knows about some CGNS structures. The viewer has been posted on the web under the Utilities page. Bruce will look at packaging a self extracting NT version also.

Christian Lundh has also contributed a viewer via CGNSTalk. He was not available at the telecon, and no one present has experience with his viewer.

There was some discussion of if we could use this or a similar capability to make money to support committee activities (development, support, etc.). Since we are a sub-committee of the AIAA, and they have many commercial products, perhaps there is an avenue to pursue. It was also noted that we must respect the wishes of the developers who may have intended software to remain Open Source. This will require further discussion, and a champion.

Next Meeting — It was suggested that we convene a meeting at the summer fluids conference in St. Louis the week of 24 June. Chris Rumsey offered to help set up the meeting. Bob Bush will see if he can attend the meeting.

There being no additional issues, the meeting was adjourned.

Attachment 1 — Attendees

Bob Bush

Dave Schowalter

Shawn Fuller

Manuel Kessler

Chris Rumsey

Diane Poirier

Ray Cosner

John Chawner

Francis Enomoto

Bruce Wedan

Charlie Towne

David Edwards

Marc Poinot