CGNS Steering Committee
Telecon Minutes
4 December 2002
2:00pm Eastern Time

Telecon Number: (805) 240-9853, participant code: 557184

The meeting was called to order at 2:00. There were 12 attendees, listed in Attachment 1. The
minutes of the last meeting were approved as posted on the Web.

It was announced that CGNS will have a meeting at the AIAA Aerospace Sciences Meeting in
Reno. The meeting will be on Monday night, January 6 at 7:00pm. The room will be posted at the
meeting. Potential items for the agenda were suggested, including:

- Announcing the release of V2.2 of the libraries
- Discuss the interest in a new demo of inter-operability using CGNS and the new utilities
- Discuss what the next thrust should be
- Discuss funding strategies
- XML mapping of SIDS

Charter Business — Bob Bush introduced Greg Stuckert who will replace Dave Schowalter as the
Steering Committee representative. Thanks to Dave to helped introduce CGNS to Fluent, and
welcome to Greg.

We also welcome Bruce Wedan, who will be taking over from Diane Poirier as the new ICEM
representative on the Committee. Diane has been the principal author of the CGNS software for
many years, and we thank her for contributions and enthusiasm. Bruce has also been active, being
the principal author of ADF Viewer, and we look forward to his participation.

Chris Rumsey has agreed to put his name forward as Chairperson, replacing Bob Bush. We will
vote on this change in leadership at the January meeting in Reno.

ISO Status — Ray Cosner was not available for the telecon, but sent word that there was a
Workshop in Fort Worth dedicated to the Fluid Dynamics Standard on Oct 28–31, and they made a
lot of progress.

Documentation — Charlie Towne reported that the AIAA Standard is ready to be posted, we are
only waiting for AIAA to finish final preparations to make the printed version available. Once that
is in place, the documentation will be modified to reflect that it is an AIAA Recommended
Practice.

There was discussion of if/how documentation for the utilities should be posted on the Web site.
Charlie indicated that the documentation provided by Bruce Wedan with the ADFViewer is quite

extensive, and can easily be posted. Currently the CGNS web-site points directly to individual CGNS documents (hosted at NASA). However, Charlie indicated that there is also a summary document at NASA. Bruce will add a link to the CGNS Documentation Home Page at NASA Glenn and Charlie will maintain the utility documentation from the NASA site. Bruce also indicated that documentation for the additional utilities added under the Langley contract will be completed soon, and can also be posted by Charlie.

Extensions — Diane reported (via e-mail) that Version 2.2 beta of the libraries have been updated to Version 2.2 Beta 2 to eliminate all reported bugs. The libraries seem stable at this point. We will maintain the beta status up to the Reno meeting, and remove the beta status at that time (provided testing in the interim does not turn up any anomalies). At this time we will notify the vendors and users that they should up date their software.

Chris Rumsey updated the attendees on the recently completed Langley contract. His notes are included below in Attachment 2.

There was some discussion on if and how we could maintain utilities developed by various organizations. It was suggested to provide an upload site for source and makefiles, and a mechanism to access code from a common utility. Charlie Towne will look into if NASA can provide a site with upload capability, and Bruce Wedan will check if the current ICEM host can be used.

Related Software Status — Marc Poinot discussed some options for using a Data Type Definition (DTD) and XML to develop a more portable SIDS grammar checker and CGNS templates. Marc will write and send a summary of his proposal to Bob Bush, who will forward to interested parties, including Chris Rumsey, Charlie Towne and Bruce Wedan.

David Edwards could not attend the telecon, but indicated via e-mail that he is still interested in and planning to benchmark a comparison between HDF and ADF implementations of CGNS files.

The meeting was adjourned at about 3:00.

Attachment 1 — Attendees

Bob Bush	Pratt & Whitney
Dan Dominik	Boeing
Chris Rumsey	NASA Langley
Greg Stuckert	Fluent
Bruce Wedan	ICEM
Curt Weber	Allison
Marc Poinot	Onera
Nick Wyman	Pointwise
Charlie Towne	NASA Glenn
Greg Power	AEDC
Kevin Mack	ADAPCO
Armen Darian	Boeing - Rocketdyne

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To:   CGNS users
From: Chris Rumsey
Re:   latest news from CGNS

Although many of you are already aware of these, I
thought it would be worthwhile to summarize several
important tasks that were recently accomplished for
CGNS.  In summary:

1.  A new mid-level library (API) function was written
    allow deletion of any node in CGNS database (V2.2)
       - this expands the usability of the API

2.  Several new additions have been made to the CGNS
    standard, and corresponding API calls have been
    written to handle them (V2.2):
       a. axisymmetry specification
       b. rotating coordinates specification
       c. gravity specification
       d. wall function specification
       e. periodic BC specification
       f. rotor-stator interface BC specification
       - these expand the range of applications that
         can make use of CGNS

3.  A CGNS Tools Utility has been written.  It can be used
    alone or in conjunction with the "adfviewer" utility.
    The new tools include:
       a. translate between CGNS and PLOT3D formats
       b. translate between CGNS, TECPLOT, and PATRAN
          unstructured formats
       c. translate between cell-centered & cell-vertex
          CGNS files
       d. translate between dimensional & nondimensional
          CGNS files
       e. translate between primitive & conserved
          CGNS files
       f. interpolate solutions from one CGNS grid
          to another
       g. extract subsets of data from structured
          CGNS solutions (e.g., every other gridpoint)
       - this new utility greatly enhances the
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ability to use, translate, share, and work
        with CGNS files

As always, all software is freely available from the
CGNS website:

    www.cgns.org

Chris