



INTERNATIONAL EARTH ROTATION SERVICE (IERS)
SERVICE INTERNATIONAL DE LA ROTATION TERRESTRE
WWW: <http://hpiers.obspm.fr>

REPORT ON THE IERS DIRECTING BOARD MEETING No 25

in GeoForschungsZentrum (GFZ), Potsdam (Germany)

I - Monday 28 September 1998, 9:30 - 12:30

II - Saturday 3 October 1998, 12:00 - 13:30

Attendance: Extended IERS Directing Board:

C. Reigber (Chairman), D. Gambis, B. Kolaczek, B. Chao, C. Ma, B. Melbourne, B. Schutz,
P. Shelus, B. Chao, D.D. McCarthy, F. Arias (only on 3 Oct), C. Boucher

Invitee: P. Sillard (IGN) (3 Oct)

In order to consider the actions to be developed after the "IERS retreat" meeting held on Friday 2 and October 3, a second DB meeting was organized after the "retreat".

I - Monday 28 September 1998, 9:30 - 12:30

Report of actions and facts since the last Directing Board meeting

The representative of FAGS since 1-10-1998 is Prof Dr Ing. Hans Georg Wenzel in replacement to O. Andersen. His e-mail is fags@gik.bau-verm.uni-karlsruhe.de

Start of the Geoid Commission 12, Section 3.

Activity will develop along with the "Grace" project (Gravity recovery and Climate Experiment). Grace will provide determination of the time-varying gravity field with an unprecedented accuracy for a lot of applications in particular in solid Earth Science (Atmospheric and oceanic mass variations, global climate changes..). Briefly, the project consists of 2 satellites co-orbiting in a polar orbit. Observations are based on micro-wave measurements of differential perturbations. Several DB members stressed the necessity for this program of having accurate reference frames and vertical heights.

Preparation of a set of overheads for IERS activities presentation.

The DB agrees on preparing about 10/15 overheads for presentation of the IERS activities in the various international conferences held over the year.

Distribution of the IERS flyer

The flyer has been largely distributed via different ways (personnal, via the DB members and sent with the Annual report for 1997). A lot of flyers are still available at the CB.

Preparation of the "IERS retreat"

It was unanimously accepted that the "retreat" should be followed by a short DB meeting on Saturday 3 October to discuss about the future actions.

Status of current work

Annual report

The Annual Report was distributed to the Community at the end of August. The section dealing with the reference frames consistency could not be performed due to the time lag between EOP analysis made at the CB and ITRF section analyses giving the rotation parameters between the individual solutions to the ITRF realisation. ITRF is not exactly an annual submission. It is agreed that a better schedule should develop between CB and TRF Bureau. A more general discussion on the appropriate form of the AR should be developed on in particular what is to be found in this report.

Technical Notes

TN 24: ITRF96 was published in Spring of 1998.

TN 25: (Geocenter) and TN 25 (El Nino) are to be published in November/December

A possible TN on tide gauges could be envisaged.

EOP/TRF consistency project(Chopo Ma).

The proposal to participate to this project received only a few answers (4). This is however an important step towards a better understanding in the direction of the global combination. What was expected from this study was maybe not sufficiently explained. The AC have mostly seen an extra work. The DB stresses the fundamental aspect of this project. It is agreed that it should be re-initialised maybe for the AR for which 2 solutions could be asked to the Acs; one as usual with the best re-analysis, the second following the specification of the project. Another suggestion was to organize a research project on the subject.

IERS Conventions (D. McCarthy)

Dennis presented the current developments of the "Conventions 2000". Conventions publications which were first predicted for mid 1999 will be postpone after IUGG meeting, in August 1999. The DB agrees on the application of the NRO for all analyses as suggested. The possible input of the MGGF are not yet mature. The agreement with IAG SC3, IAG WG on solid Earth tides and IAU WG on relativity has to be done.

The new precession/nutation models will be included. A discussion, continued on the 2nd DB meeting concerned the purpose of these conventions. Best models or conventional one?

The IERS understanding of the "Conventions" is to give a set of consistent models and constants and not conventional one. This set does not systematically follow the IAU/IUGG recommendations. IERS is leading the Unions. The DB discussed the pertinence of the title "Conventions" which should be changed.

ITRF 97 (Claude Boucher)

The IERS Terrestrial Frame Section collected solutions for June 1998. Specifications for for the IERS network are under investigation. ITRF sites will be classified in 3 categories:

- a) primary: fondamentale realisation with a maximum of reliability
- b) secondary: appearing in different solutions with a smaller accuracy
- c) tertiary: not yet appearing in any solution

The complete classifications will be circulated within the DB members for comments and approvals in Fall. It was said that the presentation ITRF on the Web/site is not convenient and "users friendly" and should be improved

ITRF time series pilot project (Patrick Sillard)

A call for participation to the IERS time series pilot experiment (stations coordinates+EOP) has been distributed in July 1998 by the TRF Bureau.

The specifications are:

- preferably weekly or monthly solutions
- preferred period 1997-1999
- preferred position and EOP SINEX files
- should contain Earth Orientation parameters (UT1,X, Y) which should be computed in the same run.
- must contain the full variance-covariance matrix of coordinates and EOP's, when available
- must contain constraint matrix
see ITRF97 specifications
- must contain a priori solution

For more details please contact P. Sillard (sillard@ensg.ign.fr)

The description of the format may be found at the following address:
<http://lareg.ensg.ign.fr/ITRF/ITRF-SINEX.html>

The problem concerning the results to be expected was raised and discussed. It could be also useful to issue a Technical note with the list of primary stations, this to make more visible their activities.

Campaign IGEX-98 (Pascal Willis) <http://lareg.ensg.ign.fr/IGEX/>

This campaign is co-sponsored by the IERS. It started on September 20, 1998 and will finish on December 20, 1998. In the beginning of 1999 will be held an IGEX-98 Evaluation Workshop.

Among the 32 answers of various institutes there are :
- 98 Observing stations, (as usual mostly in Europe, Australia)
- 7 Data Centers
- 14 Analysis Centers or Associate Analysis Centers

Monitoring Global Geophysical Fluids, progress (Ben Chao)

Ben Chao presented the current situation of the development of MGGF. The Web site is under development, is linked to the IERS/CB Website. The necessity to develop an official Web site is discussed. This should be the responsibility of the CB in relation to the other IERS components. The MGGF data archiving process should be discussed at the Business meeting to be held on Wednesday afternoon. In the future the Special Bureau should meet for dedicated sessions.

A proposition of maintaining a mirror site has been recently made by Pascal Gegout (IPG strasbourg).

IERS external cooperations

Status and progress of the IVS (Chopo Ma)

Chopo presented the current situation of the IVS.

Proposals for contributing to the various IVS Components were received; At IAG, on October 6, these proposals of the various institutions will be evaluated. VLBA was reluctant to participate. Joint Institute for VLBI in Europe (JIVE) will participate.

In fact, all proposals have been accepted. Minutes of this meeting done by Nancy Vandenberg are available on:
<http://lupus.gsfc.nasa.gov/ivs/cstg1008.html>

The future IVS events are:

1998 Nov 1 Release Call for Proposals for Analysis, Technology, and Network Coordinators. Request nominations for elected positions on Directing Board.

1998 Dec 8 Presentation at CSTG VLBI Subcommittee open meeting at AGU, San Francisco.

1999 Jan 6 Proposals due for Coordinators. Nominations due.

Status and progress of the ILRS (P. Shelus)

The ILRS Governing Board had its first meeting in Deggendorf. Minutes can be found in
http://ilrs.gsfc.nasa.gov/9809_gb_minutes.html

ILRS Governing Board Organization. John Degnan was unanimously elected as Governing Board Chairperson for one 2-year term to oversee a transition period.

Central Bureau. Eurolas has named Georg Kirchner as the Eurolas Coordinator for the Central Bureau. The WPLTN and the NASA Network still need to name their coordinator.

Working Groups

Coordinators and deputies for the Working Groups were selected.

Analysis

Ron Noomen, Coordinator
Peter Shelus, Deputy Coordinator
Richard Eanes

Data Formats and Procedures

John Luck, Coordinator
Wolfgang Seemueller, Deputy Coordinator
Ron Noomen

Missions

Hiroo Kunimori, Coordinator
Francois Barlier, Deputy Coordinator
Peter Shelus

Networks and Engineering

Werner Gurtner, Coordinator
Wolfgang Schlueter, Deputy Coordinator
David Carter
Yang FuMin

By November 1, 1998, all Working Group Coordinators should:

1. form their working group teams;
2. review the Terms of Reference and their Working Group charters;
3. develop their list of priority items; and
4. assign someone the responsibility for web page update.

Maintenance of the ICRF: share of tasks

A discussion has developed between the Celestial System Section in Paris and the VLBI Coordinating Center (VCC) for the share of tasks in the ICRS and ICRF maintenances. Felicitas being absent, it was decided to postpone the presentation of the proposals to the 2nd DB meeting held on Saturday 3 October.

Future IERS DB meeting for retreat discussion

The next DB meeting will take place in San Francisco Saturday December the 5th, in December 1998. reservation room to be made by Bob Schutz.

Plans for IERS Workshop in 1999

Because of the IUGG in Birmingham in August 1999, it was agreed NOT to organize an IERS workshop in 1999. As a general wish is to have a IERS workshop in Spring season maybe in the vicinity of the EGS meeting.

II - Saturday 3 October 1998, 12:00 - 13:30

The agenda concerned 3 topics:

- ICRF proposal (CSS and VCC)
- Main conclusions of the IERS retreat
- Report on the MGGF Business (Ben Chao)
- Some points on the Conventions

- ICRF proposal (CSS and VCC)

The discussion between the Celestial System Section (CSS) in Paris and VLBI Coordinating Center (VCC) in Washington on their respective tasks in the ICRS and ICRF maintenances of lead to an agreement between the 2 teams. The share of the tasks agreement has been since distributed by e-mail to the Board members.

The main aspects are the following:

- a) maintenance of the axes
- b) maintenance of the frame,
- c) maps and images
- d) accessibility of the system,
- e) information for users.

- Report on the MGGF Business (Ben Chao)

Ben Chao reported on the MGGF Business meeting held during the week.

Have a new list of members.

Prepare a TN on models and constants.

Problem of data archiving. NASA has a long-term commitment with CDDIS.

However each special Bureau wants its own visibility by developing and maintaining its own data bank.

(Section to be developed by Ben Chao)

- Conventions

Barbara raised the problem of ensuring the effects of adopting new models like precession/nutation. Tests should be made before to be sure not to introduced any discontinuity in the IERS products.

A new rigid Earth model will be adopted.

A new transfer function (Herring or Matthews) using more VLBI observations.

- Main conclusions of the IERS retreat

Ivan Mueller is in charge of collecting what was presented at the "retreat" and issuing a document for November 10.

This text with New terms of references will be discussed at the Fall AGU in San Francisco.