

3.5.3 Convention Centre

The Conventions Center is provided jointly by the Bureau International des Poids et Mesures (BIPM) and the U.S. Naval Observatory (USNO). Beginning in September, 2003, for one year, the BIPM provided for a visiting scientist position, occupied by Jim Ray, from the U.S. National Geodetic Survey. In 2004, the work accomplished or in progress is the following.

1. Final edition of the IERS Conventions (2003)

The electronic edition of the IERS Conventions (2003) was released in November 2003 (see <ftp://maia.usno.navy.mil/conv2003/> and <ftp://tai.bipm.org/iers/conv2003/>), and the corresponding paper edition was released in 2004 as IERS Technical Note 32.

The electronic release was accompanied by a questionnaire to the general IERS community. Although less than ten filled questionnaires were returned, several replies contained detailed answers and suggestions, as summarized below: (i) On the value of the IERS Conventions (2003), the structure and overall quality were generally considered fine but the delay of publication was generally considered to be a problem. Some inconsistencies / deficiencies were pointed out (see next section). (ii) On the future IERS Conventions, there was unanimous agreement that any update should be by discrete increments (e.g. yearly) even though some continuously updated version may be available unofficially in the mean time. It was also recommended to continue with a paper version. To gather new and updated information, several techniques were proposed including a call to the general community, assembling groups of experts, and using the existing technique services. (iii) Finally on the interactions between the Conventions Center and the rest of the IERS, it was recommended to create an Advisory Board. The importance of a formal approval of any update of the Conventions was stressed, although the body for approval was sometimes discussed (Advisory Board or IERS Directing Board). It was recommended that the routine interactions with other groups should be enhanced, although no precise method was stated for this purpose.

2. Preparation for future versions of the Conventions

The IERS Conventions Center intends to provide updated versions of the Conventions in electronic form, after proper approval of the IERS Directing Board. These editions will be clearly marked regarding the date of their electronic publication. In the mean time, work on interim versions will also be available by electronic means. In addition to the electronic releases, printed versions of the Conventions will be provided at less frequent intervals or when major changes are introduced.

2.1 Electronic tools

New tools have been developed to help in the process of updating the IERS Conventions. A new web site (<http://tai.bipm.org/iers/>) including a discussion forum (<http://tai.bipm.org/iers/forum>) has been installed at the BIPM. The web site includes new pages for the Conventions updates (<http://tai.bipm.org/iers/convupdt/convupdt.html>), which are continuously modified, as required by changes in the texts, routines or data files. However, the site is expected to retain the complete history of updates thus ensuring the archiving and the traceability of the changes. It should also contain new products such as numerical examples or explanatory material, as they become available. The discussion forum is for users to offer their comments, criticism, and suggestions regarding the update of the IERS Conventions. It is organized in themes following the present structure of the IERS Conventions (2003). Reading the contributions is open and anonymous but, to post a contribution, it is necessary to be registered. Registration is mandatory so that the forum administration can identify participants, but it is a very simple procedure and the only requirement is to accept the terms of the forum, which is designed only for “discussions on the IERS Conventions”.

2.2 Technical topics

Corrections to the IERS Conventions (2003) are already under way, starting with typos that were discovered after the official release and with some limited text changes that improve the readability of the document (<http://tai.bipm.org/iers/convupdt/convupdt.html>). More technical or complex issues are first debated, e.g. on the discussion forum (<http://tai.bipm.org/iers/forum>), numerical examples and test cases are proposed, and topics are being identified as needing investigation and possible new developments for future versions of the Conventions. Several such topics concern contributions to the difference between the instantaneous position of a site and its adopted position, such as the effects of geocenter motion or atmospheric loading. It is expected that all effects (such as station displacement) that are periodic and have a consistent and accurate a-priori model, expressed in closed form, should be included in the IERS Conventions. To be considered in updating IERS Conventions (2003) are, for example, models for sub-daily effects concerning geocenter motion due to ocean tides and atmosphere pressure loading, revision of models for tidal effects on Earth orientation parameters, etc. Models for long-term or non-periodic effects, which have an impact on the definition of reference frames, are also to be studied, although their inclusion as conventional effects will need to be discussed.

2.3. Advisory Board for the IERS Conventions update

Following the request of the IERS Directing Board at its 39th meeting, the Conventions Center has set-up an “Advisory Board for the

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IERS Conventions update". The board will advise the Conventions Center in its work of updating the Conventions, review and propose directions to the Conventions Editorial Panel, and recommend new official updates for approval. It should represent the approach of users based on their needs and experience. The Board's chairman is named by the IERS Directing Board and its membership includes one representative from each Technique Center and each Product Center, the IERS Analysis Coordinator, and additional members proposed by Technique Centers or Product Centers. As of February 1, 2005, the board has been established by the IERS DB under the chairmanship of Jim Ray.

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