

3.2 Central Bureau

General activities

The IERS Central Bureau (CB), hosted and funded by Bundesamt für Kartographie und Geodäsie (BKG), organized and documented the IERS Directing Board (DB) Meetings No. 62, April 17, 2016, at Technical University of Vienna, Austria, and No. 63, December 10, 2016, at Hotel Marriott Marquis, San Francisco, California, USA (see Section 3.1. for minutes of these meetings). Between the meetings the CB coordinated the work of the DB.

Members of the CB took also part in the following meetings: 9th IVS General Meeting, European Geosciences Union General Assembly 2016 (including meetings of the GGOS Coordinating Board, the GGOS Bureau of Networks and Observations, the GGOS Standing Committee PLATO, and IAG Commission 1 “Reference Frames”), the conference “The Science of Time: Time in Astronomy & Society, Past, Present and Future”, 20th International Workshop on Laser Ranging, and AGU 2016 Fall Meeting.

IERS components maintain individually about 10 separate web sites. The central IERS site www.iers.org, established by the CB, gives access to all other sites, offers information on the structure of the IERS, its products and publications and provides contact addresses as well as general facts on Earth rotation studies. It contains also electronic versions of IERS publications, as well as link lists for IERS, Earth rotation in general and related fields. Throughout 2016 the web site was continually updated, several new pages and documents were added. New pages include a compilation of tools provided by all IERS components. An extended list of meetings related to the work of the IERS was maintained and updated frequently. The CB maintains also the web pages of the IERS working groups and added some new documents to these pages. In an internal area, accessible for DB members and IERS Associate Members, all presentations given at IERS DB meetings since 2000 were made available.

The IERS Annual Report 2014 was printed and distributed. The CB edited the IERS Annual Report 2015 and published it online in December 2016. Along with the reports of the IERS components, provided by them, the annual reports contain general information on the IERS assembled by the CB. The CB compiled also summaries of DB meetings and its own report, and drafted a report of the Working Group on Site Coordinate Time Series Format. Starting with the report for 2016, the CB will use \LaTeX instead of InDesign for formatting the IERS annual reports. For this a \LaTeX template was developed.

The contribution of IERS to IAG’s “The Geodesists’ Handbook 2016” was submitted in June 2016 (open access: <https://link.springer.com/article/10.1007/s00190-016-0948-z>).

During the year 2016, 33 IERS Messages (Nos. 287–319) were edited and distributed. They include news from the IERS and of general type as well as announcements of conferences.

Address and subscription information have regularly been updated in the IERS user database. There were about 2800 users in 2016 with valid addresses who subscribed to IERS publications for e-mail and regular mail distribution.

Questions from IERS users concerning IERS publications and products as well as Earth rotation and reference frames in general were answered or forwarded to other specialists. In connection with the leap second at the end of 2016, the CB received several requests from newspapers and radio stations. Also public popular talks about the leap second and its background were given.

The Director of the CB, Daniela Thaller, chairs the IERS Working Group on SINEX Format and is ex officio member of the other IERS WGs. She was also a member of the UN Working Group GGRF (Global Geodetic Reference Frame) and contributed to the “Roadmap for the Global Geodetic Reference Frame for Sustainable Development”, endorsed by the UN-GGIM 6th session in August 2016. Wolfgang Dick continued to work in the Control Body for an ISO Geodetic Register Network, which will contain standardized and proved data on reference systems.

IERS Data and Information System (DIS)

The IERS Data and Information System (IERS DIS) is continuously being adapted and extended by new components in order to fulfil the requirements for a modern data management and for the access to the data by the users. Besides routine work like maintenance of the data bases of users, products and web pages, in 2016 further developments of the IERS DIS concentrated on the new system for data management, the development and improvement of interactive tools, and some improvements to the address management.

Together with a software company, a concept for improving the management system for IERS data was developed and the implementation of a first draft of the new system was installed within a testing environment. In addition, the parsers used in the existing system and the data download were optimized.

For higher security, the IERS web server was moved from http to the https protocol. Improvements were made to the Content Management System used for the IERS web site.

Further improvements of the IERS DIS included the following:

- The different output formats of the IERS products were homogenized.
- XML schemes for IERS Bulletins C and D were written.

- The search for users in the address management system by the system managers was enhanced.
- Guiding external users through the address management system was improved.
- The EOP Reader was connected with the IERS Plot Tool for better service.
- New IERS web services for EOP, leap seconds and time scales were developed.
- A tool to manage the lists of acronyms used in the web site and in the IERS annual reports was created.

In preparation to a forthcoming major change of BKG's IT infrastructure, a detailed description of all components of the DIS (hardware, software, interfaces) was prepared.

Staff in 2016

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Sabine Bachmann, *scientist*
Dr. Wolfgang R. Dick, *scientist*
Sonja Geist, *technician*
Sandra Schneider-Leck, *technician*

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