19 April 2023

ISC-WDS Bylaws

Approved at the virtual meeting of the ISC on 19 April 2023

Preamble

These Bylaws are authorized by the Constitution of ISC-WDS and are developed by the WDS-SC in consultation with all WDS Member Organizations.

Article I. WDS Membership

1. Data Sharing Principles

The mission of the World Data System is to enhance the capabilities, impact and sustainability of our member data repositories and data services by:

- creating trusted communities of scientific data repositories
- strengthening the scientific enterprise throughout the entire lifecycle of data and all related components creating first-class data that feeds first-class research output
- advocating for accessible data and transparent and reproducible science

As the leading international, multidisciplinary organization in providing trusted data services, the WDS has adopted Data Sharing Principles to advance its goals. The Principles express core ethical commitments that are operationalized in WDS Certification. For Regular and Network Members, it is anticipated that existing organizational policies align with these Principles; Partner, Associate, and Candidate Members are not subject to certification and therefore are not required to adopt them but are encouraged to do so. The Principles embody the spirit of 'open science' meant to unite diverse communities of data producers and data users and thus could be adopted by anyone pursuing science for the public good.

Principles

- Data, metadata, products, and information should be fully and openly shared, subject to national or international jurisdictional laws and policies, respecting appropriate extant restrictions, and in accordance with international standards of ethical research conduct.
- Data, metadata, products, and information produced for research, education, and public domain use will be made available with minimum time delay and free of charge or for no more than the cost of dissemination, which may be waived for lower-income user communities to support equity in access.

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- All who produce, share and use data and metadata are stewards of those data and ensure that the data's authenticity, quality, provenance, and integrity are preserved. Respect for the data source is maintained by ensuring privacy where appropriate and encouraging appropriate citation of the dataset and original work and acknowledgment of the data repository.

- Data should be open by default and labeled 'sensitive' or 'restricted' only with appropriate justification and clearly defined protocols. They should, in any event, be made available for use on the least restrictive basis possible.

- Data should be treated with integrity and confidentiality and treated with the security requested by the data steward and producers.

- To the greatest extent possible, data and data repositories should follow the best data management and stewardship practices, such as the FAIR Principles for scientific data management and stewardship[1], the TRUST Principles for Data Repositories[2], and the CARE Principles for Indigenous Data Governance[3].

As part of the WDS membership requirements, Regular and Network Members agree to adhere to the WDS Data Sharing Principles [see Article 3].

2. Categories of Membership

The WDS Scientific Committee (WDS-SC) has established five categories of membership.

- **Regular Members:** Organizations that are data stewards and/or data analysis services (e.g., data centers and services that support scientific research by holding and providing data or data products).

- **Network Members:** Umbrella bodies representing groups of data stewardship organizations and/or data analysis services, some of which may or may not be WDS Regular Members. Usually serve as coordinating agents for nodes with common characteristics and disciplines (e.g., International Oceanographic Data and Information Exchange).

- **Partner Members:** Organizations that contribute support or funding to WDS and/or WDS Members but are not data stewards or data analysis services (e.g., ISC and its International Scientific Unions supporting data services and public and private agencies that provide technical or financial support).

- **Associate Members:** Organizations interested in the WDS endeavor and participating in our discussions but do not contribute direct funding or other material support (ISC National Members, Academies, and some commercial entities could be in this category).

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[1] https://www.go-fair.org/fair-principles/
[2] https://doi.org/10.1038/s41597-020-0486-7
[3] https://www.gida-global.org/care

- **Candidate Members: Organizations** who wish to become Regular Members but who currently do not have all the processes and documentation in place to undergo the certification.

3. Accreditation of Regular and Network Members

To be accredited as WDS Regular and Network Members, candidate organizations will be subject to membership requirements, including proof of certification from the CoreTrustSeal Standards and Certification Board. The certification will ensure the trustworthiness of WDS in terms of authenticity, integrity, confidentiality, and availability of data and services.

The certification process is based on a catalog of evaluation criteria: one catalog for Regular Members and another for Network Members. Candidates demonstrate their capabilities by using an application form based on the relevant catalog of criteria. Guidance will be provided for each criterion. All applications will be subject to a minimum of two independent reviews. The final certification decision will be the responsibility of the CoreTrustSeal Standards and Certification Board, which functions as the certification authority.

When a potential WDS Regular Member applies for certification under the umbrella of a WDS Network Member, the certification process might be conducted under the auspices of the Network Member if its certification procedure is aligned with that of the CoreTrustSeal Standards and Certification Board. In this case, the WDS-SC will require the applying Regular Member to provide evidence of its existing certification and may request further evidence to confirm its suitability for WDS membership.

As part of WDS membership requirements, WDS Regular and Network members will be invited by the WDS-SC to conduct a maximum of two membership certification reviews per year for CoreTrustSeal to contribute to the scientific community effort.

WDS Regular and Network Membership is a five-stage process:

I.   Candidate organization completes an Expression of Interest for WDS Regular or Network Membership
II. The organization shows proof of CoreTrustSeal certification
III. The organization adheres to the WDS Data Sharing Principles [see Article 1] and signs a Memorandum of Understanding with the International Science Council (ISC) [see Article 5].
IV. Membership as a WDS Regular or Network Member is granted once evidence of the organization's suitability is deemed satisfactory by the WDS-SC.
V.   Membership will be reviewed every three years, and organizations recertified.

4. Accreditation of Candidate, Partner, and Associate Members

Candidate, Partner, and Associate Members submit the appropriate *Expression of Interest for WDS Membership*, which the WDS-SC will review. If accepted, an official invitation will be sent, and the

Candidate, Partner, or Associate Members are then co-opted. Candidate, Partner, and Associate Members are not subject to the WDS certification procedure and Data Sharing Principles [see Article 1] but are expected to sign a Memorandum of Understanding with the International Science Council (ISC) [see Article 5]

5. Memorandum of Understanding with the International Science Council (ISC)

All categories of WDS membership require signing a Memorandum of Understanding (or a similar document) between the Member Organization and the WDS. Templates for this agreement are provided on the WDS website (http://www.worlddatasystem.org/members).

6. Official Representatives

WDS Members will designate an Official Representative to act as the contact person with the WDS-SC and WDS International Program Office (WDS-IPO). This Official Representative, or their designee, shall attend the WDS Members' Forum and Conference every two years. All official communications and consultations with WDS Members will be sent to the Official Representative.

7. WDS Members' Public Profiles

Part of the information gathered during the accreditation process will be utilized to build the public profile of a WDS Member for use on the WDS website and in other publications. This public profile is editable by the Members' Official Representative or designee through the membership portal on the WDS website.

8. WDS Members' Forum

A one-day WDS Members' Forum will be organized at SciDataCon, held in conjunction with International Data Week since 2016. The Forum will be managed by the WDS-IPO and WDS-SC and include a *Scientific Session* and a *Plenary Session.* The Scientific Session will allow WDS Members to report on their activities and engage with other Members. The Plenary Session will provide a formal mechanism for membership consultation, where Membership issues can be discussed. The WDS-IPO will invite WDS Members to submit any questions, concerns, or complaints to be addressed at least six months before the Plenary Session.

9. Activity Reports

Official Representatives of WDS Members or their designee are expected to attend and participate in the WDS Members' Forum, as agreed upon during admission into WDS. They will be urged to present a Report (oral or poster) on their organization's activities over the previous two years. All WDS Members will also be requested to submit a brief Activity Report to the WDS-SC. For Regular and Network Members, this will be part of the recertification every three years.

Article II. WDS Working Groups (WDS-WGs)

As stated in Article IIV of the WDS Constitution, the 'WDS Scientific Committee (WDS-SC) may establish committees, working groups, or task groups to accomplish WDS goals and objectives'. WDS Working Groups are defined as follows.

1. WDS-WG Functions

WDS-WGs may be established to define, coordinate, and facilitate the implementation of projects or activities addressing the goals and objectives of WDS.

2. Chairs and Membership

The WDS-SC will appoint one of its members to Co-chair every WDS-WG and may appoint other Co-chairs from the representatives of participating WDS Members or other organizations. If the term of the WDS-SC appointed Co-chair ends before the termination of the WG, another Co-chair from the WDS-SC shall be appointed. WDS-WGs' membership shall include representatives from external participating organizations and community experts. The WDS-IPO Executive Director, or a designated WDS-IPO staff, shall be an *ex officio* member of each WDS-WG.

3. WDS-WG Establishment

The WDS-WG Co-chairs are responsible for preparing the WG Charter for approval by the WDS-SC. This document includes the WG's name and its Terms of Reference, deliverables and milestones, procedures, meetings schedule, financial support, and proposed membership. WGs are customarily established for a maximum period of two years.

4. Progress, Review, and Termination

During the WDS-SC meetings, the Co-chairs of a WDS-WG will report to the WDS-SC Executive Committee on progress and accomplishments at least twice a year. In addition, the membership of WGs can be changed, their Charter revised, and the WG terminated if necessary. At the end of its two-year period, each WG shall be reviewed by the WDS-SC—possibly involving WDS Members—and a decision will be taken to terminate or extend the WG for a further period.

5. WDS Support

Individual members' participation in WDS-WG meetings is voluntary, and no financial support is available from the WDS-IPO for travel and other costs. Any financial support needed by a WDS-WG must be clearly defined in its Charter and will be met with additional funds received through grant applications. Meetings will be conducted by videoconference provided by the WDS-IPO or other partners. Face-to-face meetings at international conferences may be organized as the opportunity arises. Funding is not always available to support travel for the SC. Hybrid meetings, which include both face-to-face and online entities and virtual meetings, are allowable as well.

Article III. WDS Conference

The biennial conferences of WDS and the Committee on Data of the International Science Council (CODATA) have complementary objectives and overlapping audiences. As a result, both organizations have decided to merge their Conferences and co-organize a unique event, SciDataCon, to become the world's principal conference on scientific data. In 2016, CODATA, WDS, and the Research Data Alliance (RDA) combined SciDataCon with the RDA Plenary to form the International Data Week Conference. SciDataCon, including the WDS Members' Forum, is held within this joint event. Official Representatives of WDS Members will be expected to participate and contribute to SciDataCon, the joint CODATA–WDS Conference, and the WDS Members' Forum, all of which are a part of International Data Week.

1. Title of Conference

The Conference title will consist of two parts: the standard generic Conference name, SciDataCon, followed by the year, and a specific scientific theme. For example, 'SciDataCon 2014: Theme of the Conference'. The theme of each Conference will be jointly determined by the Executive Committees of WDS and CODATA (the joint ExCom). International Data Week also consists of two parts: the standard Conference name, International Data Week, followed by the year, and a specific theme proposed by the winning host bid and approved by the Executive Committees of CODATA, RDA, and WDS.

2. Organization and Funding

The International Data Week Conference will be convened and organized by CODATA, RDA, WDS, and the local host organization. However, it will be open to other organizations from academia and the private sector to co-sponsor and financially support the event.

3. Conference Scientific Program

The scientific program for International Data Week will be under the responsibility of a Scientific Program Committee and the Organizing Committee jointly appointed by CODATA, RDA, and WDS. The Conference Program will be spread over 2–3 days.

4. Venue

As folded into International Data Week, CODATA, RDA, and WDS will make a joint call to their respective constituencies to host the subsequent Conference. This call will also be open to other organizations. The Executive Committees of all organizations will proactively encourage synergies between their members and partners to maximize the chances of solid proposals. The final decision of the joint ExComm on the host and venue of the subsequent Conference will be announced at the end of each Conference.

Once selected, the local host of the Conference shall provide the necessary support for its realization. An onsite visit shall be organized by CODATA, RDA, and WDS such that the details can be negotiated and discussed with the local organizers. In particular, registration fees should be kept to a minimum.

5. Business Meetings

A joint ExComm meeting will be organized immediately following the conclusion of the Conference for half a day. The WDS-SC will then commence its regular Committee meeting on the morning after the joint ExComm (2 days).

Article V. Parliamentary Authority

The rules contained in the current edition of Robert's Rules of Order[4] shall govern WDS for cases in which they are applicable and in which they are not inconsistent with these Bylaws and any special rules that WDS may adopt.

Article VI. Amendment

The WDS-SC shall amend these Bylaws after consultation with WDS Members at any of their regular or special meetings or by electronic consultation.

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[4] Robert, Henry M. (Henry Martyn) et al. *Robert's Rules of Order: Newly Revised*. 12th edition, 50th anniversary / by Henry M. Robert III, Daniel H. Honemann, Thomas J. Balch, Daniel E. Seabold, and Shmuel Gerber. New York: Public Affairs, 2020. Print.