

## Introduction

The ICSU World Data System (WDS) was created by the 29th General Assembly of the International Council for Science (ICSU). It builds on the 50-year legacy of the ICSU World Data Centre system (WDC) and the ICSU Federation of Astronomical and Geophysical data-analysis Services (FAGS). The WDS aims at a transition from existing stand-alone centres and individual services to a common globally interoperable distributed data system that incorporates emerging technologies and new scientific data activities. The new system will build on the potential offered by advanced interconnections between data management components for disciplinary and multidisciplinary applications.

WDS will enjoy a broader disciplinary and geographic base and will strive to become a world wide 'community of excellence' for scientific data. To this end, WDS will work closely with ICSU's Committee on Data for Science and Technology (CODATA) as well as other stakeholders. Through membership of the WDS, members will contribute to ICSU programmes and initiatives.

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## WDS Network Members Application Form

The purpose of this application is to supply a transparent, objective base for the evaluation of WDS candidates for Network membership into the WDS as well as for periodic assessment of WDS Network Members and the overall performance of the WDS. The procedures supplied ensure the trustworthiness of WDS Members in terms of authenticity, integrity, confidentiality and availability of data and services. Networks vary greatly in their makeup and responsibilities (e.g. central bureau, coordinating committee, secretariat, programme office) and how they take responsibility for the competence and ongoing performance of the network components (e.g. data centres, analysis centres, products).

The certification procedure is essentially based on a catalogue of evaluation criteria. The procedure, as applied to candidate Network Members and used for monitoring WDS members, consists of this application. All steps involved are carried out by the World Data System Scientific Committee (WDS-SC) which functions as a certification authority (CA) with the help of the WDS International Programme Office (IPO).

In principle, the goal is to have objective controls (criteria) against which Network Members can be evaluated. In some cases, questions can simply be answered as yes or no. In many cases, however, evaluation will be based on non-standardized information supplied by applicants indicating the degree of trustworthiness. In general, the information supplied for a specific criterion can be attributed to different levels of maturity: (0) not addressed, (1) conception phase, (2) implementation phase, (3) operational.

The decision about what is a valid concept or which service can be seen as fully operational is the responsibility of the WDS-SC, with input from other relevant experts as appropriate.

The catalogue of criteria comprises general requirements and policies, organizational framework and network framework description.

The criteria and procedures have been defined incorporating existing standards and best practices from other organizations and projects. Applicants are encouraged to comment on the different parts of the application form. Please, use the comment fields also in case you have questions and need support for specific criteria.

The application is structured into 6 sections. Feedback can be provided in section VI.

The sections are:

- I. Identification information
- II. Role(s) and scope within WDS
- III. WDS general requirements and policies
- IV. Organizational framework
- V. Network Framework description
- VI. Feedback from applicant

The application can be revisited as often as necessary. On the last page you will be requested to indicate the status of your application. A pdf version of the application can be downloaded at: [http://icsu-wds.org/images/files/WDS\\_Application\\_Network.pdf](http://icsu-wds.org/images/files/WDS_Application_Network.pdf)

Please, use the web interface for final submission of your application.

## I. Identification information

### 1. Name of Network organization

### 2. Organisation & contact information

Name of contact:

Address 1:

Address 2:

City/Town:

State/Province:

ZIP/Postal Code:

Country:

Email Address:

Phone Number:

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## II. Role(s) and scope within WDS

The WDS is a global federated system of long term data archives and data related services covering a wide spectrum of natural and social sciences and encouraging interdisciplinary science approaches. The system is integrating various facilities with different scope. Facilities within WDS may cover single disciplines or may be multidisciplinary. Their scope of work could be national, regional and global. Roles or functions within the federated system comprise the complete data management chain from data production to publication.

Network members may apply for single or multiple of the following roles:

- A. Data collection and processing (incl. QA/QC)
- B. Long-term data repository (data library, incl. open access to all data)
- C. Data publisher (incl. citability, usage of persistent identifiers, and peer review like procedures for data & data products)
- D. Community related service (e.g. data related service)
- E. General service (e.g. mapping, cataloguing, bibliography & bibliometrics, data dissemination)

### 3. Which role(s) do you apply for within WDS?

- A. Data collection and processing
- B. Long term preservation of data
- C. Data publisher
- D. Community related service
- E. General service

If other please explain

### 4. What is the scope of service(s) supplied?

- National
- Regional
- Global
- Space

Other (please specify)

## WDS Network Members Application Form

**5. What is your current national or regional role?**

**6. What is your current global role?**

**7. If you have been a member of the former ICSU System of World Data Centers (WDC) or the ICSU Federation of Astronomical and Geophysical data-analysis Services (FAGS), please, specify the name of the WDC or FAGS service.**

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### 8. What is the scientific background of your network organization?

- Agriculture
- Anthropology
- Archaeology
- Architecture and design
- Area studies
- Astronomy
- Business
- Chemistry
- Computer sciences
- Cultural and ethnic studies
- Earth sciences
- Economics
- Engineering
- Environmental studies and Forestry
- Family and consumer science
- Gender and sexuality studies
- Geography
- Health sciences
- History
- Languages and linguistics
- Life sciences
- Mathematics
- Physics
- Political science
- Psychology
- Sociology
- Space sciences
- Statistics
- Systems science
- Transportation

Please, name your specific field(s).

## III. General requirements and policies

### 9. Signed Letter of Agreement, Intent to Cooperate or similar with ICSU

- A Letter of Agreement, Intent to Cooperate, or comparable agreement will be signed with ICSU.

Guidance:

The ICSU WDS constitution states that the WDS member organizations must agree to a model consortium agreement, Letter of Agreement, or Intent to Cooperate with ICSU, or other comparable agreement. This will describe the commitment of the WDS Member organization to the goals of ICSU WDS.

A template is supplied at: <http://www.icsu-wds.org/membership/join-icsu-wds/template-agreement>

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## III. General requirements and policies

### 10. Network has relevant external experts to provide advice and guidance

**Guidance:**

Evidence of the arrangements in place for provision of expert advice or guidance to the network should be provided. This can vary in the degree of formality. For example, advice/guidance could be provided by relevant experts in the appropriate field, perhaps by means of reviews. These could be members of the Scientific Unions, but this is not essential.

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## III. General requirements and policies

### 11. Should attend WDS Conference every two years

- Representatives of the Network Member organization will attend biennial meetings

If you will not be able to attend meetings, please explain briefly why.

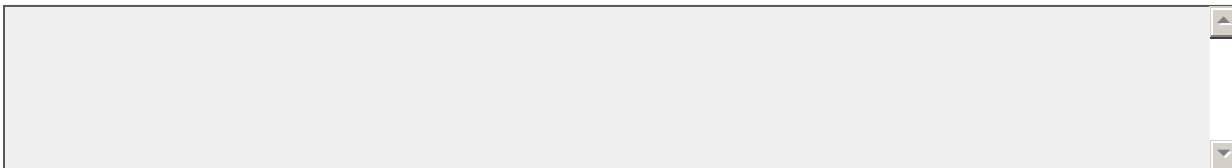
**Guidance:**

To be fully a part of the WDS, the Network Member must engage with other members, exchange expertise, review developments, etc, and the forum every two years is one important mechanism for this. In addition, participation indicates that the WDS member must have resources and funds available to support this.

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## III. General requirements and policies

### 12. Promote active communication with research community and other users



#### Guidance:

The WDS Network Member organization should provide an indication of outreach and communication activities, for example, regular report of activities (annual or every two years), participation in conferences and exhibitions, production of promotional leaflets, flyers and articles/papers.

WDS-SC will provide a template for a report. This will cover, for example, a short summary of the remit and status of the WDS node; an overview of activities and developments; new data, products and services; key targets for upcoming year, any changes relating to the WDS criteria, key performance indicators.

The type of information provided to the research community and other users by the WDS Network Member could cover:

- Data products and services available
- Linkages with other organisations who use the data for generation of products and services
- Current projects aiming to increase and promote use of data and services supplied
- Statistics/metrics indicating usage of data and services
- Availability of an Enquiries or Help Desk
- Details of surveys of customer satisfaction undertaken
- Training courses

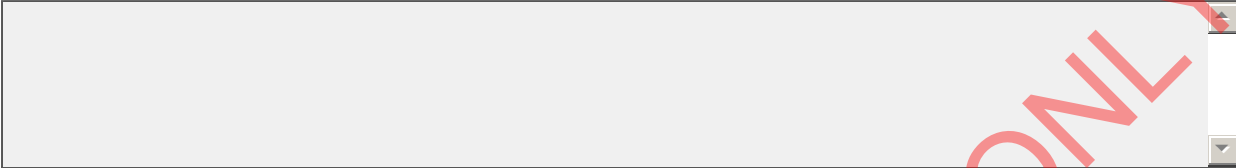
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## III. General requirements and policies

### 13. Provide full, open, timely, non-discriminatory and unrestricted access to metadata, data, products, and services, no cost or at the Cost of Fulfilling User Request (COFUR)

- Our organization and services supplied comply with the ICSU WDS data policy (see guidance)

Please, if you comply with this policy supply a reference to a corresponding document or web address. If you will not be able to comply to the ICSU WDS data policy, please explain briefly why.



#### Guidance:

The WDS Network Member organization must provide data in accordance with the WDS data policy:

- There will be full and open exchange of data, metadata and products shared within WDS, recognizing relevant international instruments and national policies and legislation;
- All shared data, metadata and products will be made available with minimum time delay and at minimum cost;
- All shared data, metadata and products being free of charge or no more than cost of reproduction will be encouraged for research and education.

If a licensing scheme is in use, please provide details.

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## IV. Organisational framework

**\* 14. Please provide details on the scope of the data, products or services offered**

**\* 15. Please provide details on the responsibilities for the long-term preservation of data, products or services**

**\* 16. Please provide details on target user communities and their needs**

**\* 17. Please provide details on the rights of users to access and use data, products or services**

**\* 18. Please provide details on processes for responding to changing scientific requirements and to evolving technologies**

Guidance:

The WDS Network member organization should provide evidence of its goals and objectives through a strategy document, mission statement, etc. and other supplementary documentation (for example, detailing data sets, products, services). These are often published in the form of a policy or contractual documents describing the commitments. This should also include a forward look. It should also note if any of the goals are beyond its remit, and provide the reason for this (e.g. not appropriate for user community, real-time data service where the responsibility for the long term preservation of the original data lies elsewhere).

## IV. Organisational framework

**19. Please provide information on the organizational form of the network in terms of funding**

**\*20. Please provide information on the organizational form of the network in terms of sufficient numbers of qualified staff**

**\*21. Please provide information on the organizational form of the network in terms of organizational structure**

**\*22. Please provide information on the organizational form of the network in terms of long-term planning**

Guidance:

In order to be certified, the WDS Network Member organization must provide evidence that it is a recognised institution (ensuring long-term stability and sustainability) appropriate to its user community. That it has sufficient funding, including staff resources, IT resources and a budget for attending meetings. Ideally this should be for a 5 year period minimum, and the information should be updated regularly. Evidence should also include a description of the range and length of expertise of both the organisation and its staff. Any appropriate affiliations (e.g. national or international bodies, etc.) should also be noted.

**IV. Organisational framework**

**23. Does the network offer oversight of international  
repute (scientists, data specialists) to its members or is  
there some other mechanism?**

Guidance:

WDS Network Member organizations should provide local oversight to affiliated facilities. Please explain the mechanisms. This could be done by means of an existing document.

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## IV. Organisational framework

**24. Is there a continuity plan for the facilities within your Network in the event of the facility host shift of interests or reaction to substantial changes? Please describe.**

Guidance:

The WDS Network Member facilities should provide a long term stewardship plan indicating options for relocation or transition of the activity to another body in the event of a shift in interest of the host institution. These need to be reviewed by the Network Member or other appropriate body to ensure an orderly transition.

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## IV. Organisational framework

**25. Is the network committed to formal, periodic review and assessment to ensure responsiveness to scientific and technological developments and evolving requirements?**

Guidance:

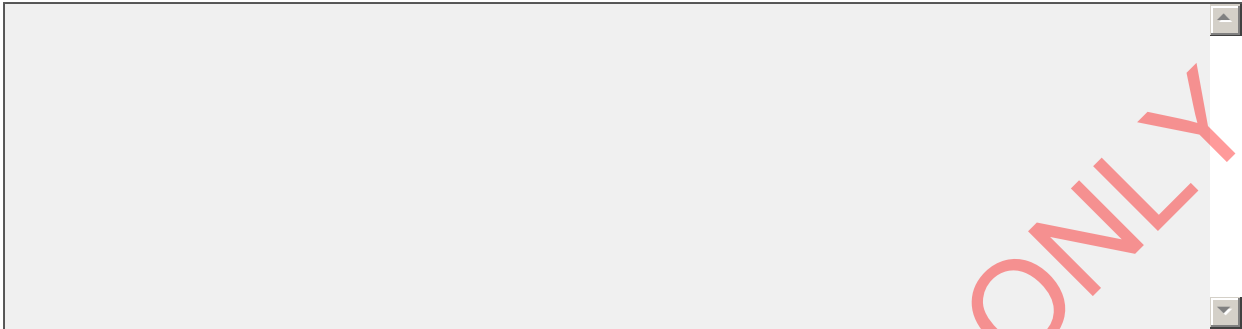
This will be met by the WDS network Member providing a report every two years, including a forward look covering planned response to new scientific developments as well as new technological requirements. Certification through WDS-SC will be regularly reviewed (e.g. every 3-5 years) by the approved process.

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**V. Network Framework Description**

**\*26. Please provide information describing the systems in place to assess the capability of its network components (for example through its own accreditation process), information about how new members are recruited, and if relevant, capacity building undertaken to improve the operational performance of network members. If new members join (or leave), this should be reported as part of the biennial reporting and when the facility membership is reviewed.**



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## VI. Feedback from applicant

**27. Please, indicate the status of your application.**

- Draft version
- Draft version - feedback needed
- Final version

**28. The WDS certification procedure is not seen as final. We need your input for further improvements. Therefore, let us know your opinion about the quality of this application form and the relevance for your organization. In addition to the scale you are encouraged to leave corresponding comments.**

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Ranking                   

Comments

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