

Terms of Reference for the Review of the Committee on Data for Science and Technology (CODATA)

Purpose and objective of the Review

The Committee on Data for Science and Technology (CODATA) is an Interdisciplinary Body of ICSU set up in 1966 to improve the quality, reliability, management and accessibility of data of importance to all fields of science and technology. In line with the recommendations from various strategic reviews, CODATA has been engaged in recent years in addressing issues of high priority to ICSU, especially at the data management and policy levels. These have included representation of the scientific community at the World Summit on the Information Society (WSIS), the development of data-sharing guidelines for the Global Earth Observation System of Systems (GEOSS) and support for polar data management. CODATA has a central role to play over the coming six years in addressing the recommendations from the ad-hoc Strategic Coordinating Committee on Information and Data (SCCID), and the earlier ICSU Priority Area Assessment of Scientific Data and Information, and in helping to address the data challenges faced by ICSU's new interdisciplinary initiatives, e.g. on disaster risk and global sustainability. In this context, the ICSU Strategic Plan II, 2012-2017 foresees (p. 34) a dedicated review of the performance and future strategic remit of CODATA during 2012-2013.

The Review will examine the links between CODATA, ICSU, the ICSU National and International Scientific Union Members and ICSU's other Interdisciplinary Bodies. It will focus on both internal and external interactions, and have, as its overriding objective, an evaluation of the extent to which CODATA: (a) adds value to the scientific and technological data and information arena, and to the national programmes that contribute to it, and (b) helps the scientific community address key data-related challenges facing science today and in the future.

Organization and methodology of the Review

A Review Panel made up of individuals familiar with ICSU, its organization, activities and programmes, and with current and future data challenges, will be established by ICSU's Committee on Scientific Planning and Review (CSPR) to carry out a review of the performance and future strategic remit of the Committee on Data for Science and Technology (CODATA). The Review Panel will consist of five to six members, one of whom will be a serving member of the CSPR. The Chair of the Panel will be named by the CSPR.

To initiate the review process, the Panel will be provided with background information by the ICSU and CODATA Secretariats in Paris. The latter will also assure access to the CODATA archives, including copies of all reports and volumes published over the past five years. Any electronic consultation thought necessary among ICSU family members will be carried out by the ICSU Secretariat on behalf of the Review Panel.

The Panel will meet either electronically or in person with officers of the CODATA Executive Committee and Secretariat. The review is also expected to gain benefit from the holding of the 23rd CODATA International Conference on 28-31 October 2012 in Taipei.

In carrying out the Review, the Panel will be expected to:

1. Assess the strategic planning and objectives of CODATA

This assessment should:

- (a) assess how CODATA strategies are established, priorities are set, topics for activities are selected, and the role Members and the Executive Committee play in these processes;
- (b) assess how the overall ICSU strategy and priorities are integrated into CODATA's planning processes and activities;
- (c) establish the extent to which CODATA's objectives and stakeholder expectations are taking into account advances in data collection, handling and management capabilities and needs, and other factors of concern to the international scientific community.

2. Evaluate the recent performance of CODATA

This should include:

- (a) an assessment of: (i) the extent to which CODATA is meeting its strategic objectives and stakeholder expectations, (ii) the impact of CODATA on the broader scientific community, and (iii) other CODATA significant accomplishments;
- (b) identification of the key audiences for CODATA activities, and an evaluation as to whether CODATA is successfully reaching them with its outputs, and whether the activities fulfil the needs of those audiences; and
- (c) an assessment of the extent to which CODATA involves a geographically wide community of research scientists and institutions, including those of the less developed countries, and is able to attract the interest of young scientists.

3. Assess organization and governance mechanisms

This should be based on consideration of:

- (a) CODATA's organizational and management structure and its relationship to CODATA's ability to perform to the level expected;
- (b) CODATA's funding strategy to implement its scientific agenda and to develop future activities; the role of the Executive Committee in attracting supplementary funding; and
- (c) competition and cooperation with other ICSU bodies and scientific organizations with respect to donor funding, time of volunteer scientists, and the attention of policy makers – and the relative scarcity of these three resources.

4. Identify the inherent challenges and make recommendations on the future evolution of CODATA

These might include:

- (a) the challenges encountered by CODATA in meeting its objectives and the expectations of its stakeholders, including the broader user community;
- (b) the relevance of CODATA's mission to its Members, ICSU and the broader scientific community;
- (c) the levels of visibility and communications efforts of the organization;
- (d) the readiness and ability of CODATA to address the relevant recommendations from the ad-hoc Strategic Coordinating Committee on Information and Data (SCCID); and
- (e) CODATA's overall positioning to collaborate with the other main actors in the science data community in a rapidly changing data and information environment.

Workplan and timeframe

Following the approval of the Terms of Reference for the review by CSPR (March 2012), nominations for membership of the Review Panel will be sought among the ICSU family. CSPR will be consulted on these nominations electronically and the Review Panel will be established, and its Chair named. The Panel will begin its work in July, meeting with officers of the CODATA Executive Council and the Executive Director as appropriate. The main work of the Review Panel, including data collection and analysis, will take place during the period July 2012-April 2013. The draft report on the strategic review is expected to be prepared by the Panel by April-May 2013, and the revised report submitted to ICSU by 31 July 2013, for presentation to the 26th Meeting of CSPR in September 2013.

Key milestones

Approval of ToRs of the Review	March 2012
Appointment of Review Panel	Late June 2012
First meeting of Panel	Late July 2012
Information gathering	July-September 2012
23 rd CODATA Conference, Taipei	28-31 October 2012
Draft report discussed with CODATA	April-May 2013
Revised report submitted to ICSU	31 July 2013
Examination of Report by CSPR	September 2013

25 April 2012