

# Call for Task Group Proposals for Presentation to the 33<sup>rd</sup> CODATA General Assembly 27-28 October 2023, Salzburg, Austria

This document invites proposals for Task Groups to be presented to the <u>33rd CODATA General Assembly</u> which will be held on 27-28 October 2023 in Salzburg, Austria.

The deadline for submissions of Task Group Proposals is 27 June 2023. Proposals will be reviewed by the CODATA Executive Committee and by external experts. Recommendations will be presented to the CODATA General Assembly which will vote on and select the Task Groups.

Task Groups are approved by the General Assembly for two years. Existing CODATA Task Groups may apply for renewal and are subject to the same criteria described below.

## Task Groups and the CODATA Strategic Plan, Mission and Strategy

Task Groups are an important means through which CODATA delivers on its mission and Strategic Programme. In this 2023 call, we strongly encourage Task Groups that contribute to one or more of the strategic priorities listed below and described further in this document. The CODATA ExComm as well as external reviewers of the proposal will be evaluating the relevance and merit of the proposed Task Group to the CODATA priorities.

## **Strategic Plan 2023-2027 Themes and Priority Activities**

As the Committee on Data of the International Science Council (ISC), CODATA helps realise ISC's vision of advancing science as a global public good. CODATA does this by promoting international collaboration to advance trustworthy, equitable and transparent science and to improve the availability and usability of data for all areas of research.

The Strategic Plan 2023-2027 (full document to be published in May 2023) describes four priorities through which CODATA takes forward this objective:

- 1. Making Data Work for Cross-Domain Grand Challenges: a programme of activity to help deliver areas of the ISC Action Plan.
- 2. Data Policy: promoting principles, policies and practices for FAIR Data and trustworthy, equitable and transparent science.
- 3. Data Science and Data Stewardship: advancing the frontiers of the science of data, particularly to enable interoperability and reusability.
- 4. Data Skills: building capacity for trustworthy, equitable and transparent science and data stewardship by improving data skills and education.

Proposals should state clearly and specifically how the Task Group will contribute to the realisation of one or more of these objectives and the priority activities.

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<sup>&</sup>lt;sup>1</sup> As stated in the scope of the CODATA Data Science Journal, "we regard data science as the 'science of data' — the evidence-based study of the socio-technical developments and transformations that affect science policy; the conduct and methods of research; and the data systems, standards, and infrastructure that are integral to research."



#### 1) Making Data Work for Cross-Domain Grand Challenges

The purpose of this strand of activity is 'to make data work for cross-domain grand challenges'. This means addressing issues of interoperability and reusability (the relatively neglected I and R of FAIR<sup>2</sup>) in the context of cross-domain research and most importantly, those international scientific activities that are a priority for ISC (including but not limited to climate change mitigation and adaptation, the sustainability science, disaster risk reduction, and measures of human development). This strand comprises two linked activities: a set of activities on cross-domain interoperability, now centred around the WorldFAIR project; and the Global Open Science Cloud initiative.

'WorldFAIR: Global cooperation on FAIR data policy and practice' is a two-year project (launched on 1 June 2022) to advance implementation of the FAIR principles, particularly in relation to interoperability. Funded by the European Commission with an explicit objective of advancing global collaboration and including partners from outside the European Union, WorldFAIR is coordinated by CODATA, with the Research Data Alliance (RDA) Association as a major partner. WorldFAIR is working with a set of eleven domain and cross-domain Case Studies. Each Case Study is developing an interoperability framework, recommendations, and/or a description of FAIR best practice for their discipline or interdisciplinary research area. Led by CODATA, a coordinating and synthesis activity has been supporting each Case Study in understanding their requirements through the completion of FAIR Implementation Profiles (FIPs). In turn these insights will be incorporated into the development of a Cross-Domain Interoperability Framework (CDIF) and more domain-sensitive recommendations for FAIR assessment and benchmarking.

A strategic priority for CODATA over the next few years will be to expand this work in a number of ways:

- Refining the WorldFAIR methodology, particularly the use of FIPs and the CDIF;
- Expanding the number of case studies (or petals in the WorldFAIR flower diagram and logo);
- Exploring and enabling implementations of CDIF, improving the model and demonstrating the benefits of the approach.

<u>GOSC</u> aims to encourage cooperation, alignment and ultimately interoperability among regional and national Open Science Platforms or Clouds. It proceeds through thematic Working Groups addressing shared challenges (governance and sustainability, data policy and legal issues, technical infrastructure, and data interoperability); and Case Studies for data sharing and collaboration across platforms.

CODATA encourages Task Group proposals that aim to contribute to these strategic activities and suggests the following as non-exhaustive examples:

- Case Studies in specific scientific disciplines or cross-domain research areas that would undertake FIPs and help refine the 'WorldFAIR' methodology;
- Activities to address specific (additional) aspects of the CDIF;
- Policy or technical contributions to alignment among Open Science Platforms or Clouds;
- Proposals to increase participation in WorldFAIR or GOSC-related activities and to support engagement of Case Studies, technical alignment or policy recommendations.

<sup>&</sup>lt;sup>2</sup> Wilkinson, M., Dumontier, M., Aalbersberg, I. et al. The FAIR Guiding Principles for scientific data management and stewardship. Sci Data 3, 160018 (2016). <a href="https://doi.org/10.1038/sdata.2016.18">https://doi.org/10.1038/sdata.2016.18</a>



#### 2) Data Policy

CODATA promotes principles, policies and practices for FAIR Data and services for Open Science. The main mechanism is through the International Data Policy Committee, which develops policy research, strategy, and guidance for CODATA in support of its role in advancing the International Science Council (ISC)'s vision of science as a public good.

This is a critical time for developing data policy in the context of advancing frameworks for data sharing, Artificial Intelligence, Data Diplomacy, Digital economies, the revision of Research Assessment in universities, and the drive toward Open Science. Data policy lies at the intersection of science, public policy, and enterprise in the rapid advancement of the digitalization of societies across the world. The achievements of science in society increasingly rely on the purposes to which data is put and how it is managed for the achievement of private and public goods. CODATA's International Data Policy Committee (IDPC) will focus on developing pathways to data policy that promotes leadership in data integrity, data ethics, FAIR data, and data leadership and diplomacy.

Current priorities for the IDPC include:

- 1. Data policy for data integrity and reliability;
- 2. Education for data policy;
- 3. Data policy for specific populations;
- 4. Data policy for emergencies;
- 5. Data ethics.

CODATA encourages Task Group proposals that would contribute to these or other potential activities of the IDPC.

#### 3) Data Science and Data Stewardship

CODATA convenes a global expert community and provides a forum for international consensus and agreements around a range of data science and data stewardship issues. The objective is to enable Open Science and FAIR data by advancing data science and data stewardship. CODATA does this in partnership with its National Committees, institutional bodies and other related organisations, by providing the connection to adequate data practices and communities, organisation of global and regional events on various technical and scientific issues related to data science, publications in the <a href="Data Science Journal">Data Science Journal</a>, support of the key Task Groups and Working Groups, endorsement of good practices and recommendations. As a locus of expertise and authority, CODATA now maintains the <a href="RDM Terminology">RDM Terminology</a>, which it <a href="took over from CASRAI in 2020</a>.

The Data Science Journal is an outlet for the scholarly outcomes from *all* of CODATA's strategic priorities. As indicated in the scope of the Journal, the focus of CODATA activities in this area is on 'the science of data' — i.e. 'the evidence-based study of the socio-technical developments and transformations that affect science policy; the conduct and methods of research; and the data systems, standards, and infrastructure that are integral to research' — rather than data science in the common general sense. CODATA thus works to advance the frontiers of the science of data. Priority issues in the science of data include transparency and reproducibility, data policy and ethics, data community practice, interoperability, stewardship and



preservation. The mechanisms are Task Groups and Working Groups, the Data Science Journal, the maintenance of authoritative resources such as the RDM Terminology, and conferences or workshops.

#### **CODATA Task Groups contributing to this priority area should:**

- Focus on the science of data and data stewardship to address priority areas such as:
  - Implications of AI for science and data, including transparency, reproducibility, provenance, trust and the role of metadata;
  - FAIR for vocabularies, or for models and workflows (such as the work of the <u>IUSSP-CODATA</u> WG on FAIR Vocabularies);
  - Enabling the transition <u>from a bibliographic to a data engineering model for data</u> stewardship;
  - Sustainability and business models for standards, specifications, terminologies and other semantic artefacts;
  - Other priority and frontier areas in the science of data and data stewardship.
- Prioritise collaboration with Unions/Associations and programmes in the ISC family, or with international data organisations and standards authorities;
- Address cross-cutting issues highlighted by National Committees and other members.

#### 4) Data Skills and Education

In a rapidly changing world in which data intensive science, AI/ML are becoming more and more important to address global challenges, it is essential that science systems and the science/policy interface have access to data experts, practitioners, and data stewards who can promote, manage, and apply the FAIR principles and other related good practice. CODATA takes a full lifecycle approach to skills development for data science and data stewardship, covering definition and scope, through development of curricula and materials, to delivery, and fostering and measuring impact of the activities it oversees.

The flagship activity in data skills is the CODATA-RDA Data Schools initiative which has been successful in preparing reusable curricula and materials, and in delivering training across the globe.

The other longstanding training activity is the series of International Training Workshops that have been hosted at CNIC, CAS in many years since 2012. These events are targeted towards early career researchers from LMICs and where possible, have cross-fertilised materials with the Data Schools, but have often added expertise from local institutions as well as from CODATA initiatives and Task Groups, to give students an insight into practical data projects and the CODATA mission.

The CODATA Connect Early Career Group has been an important addition to these activities, drawing its membership from the alumni of the Data Schools and Training Workshops, as well as from ECR members of CODATA TGs and WGs.

Building on the collaboration around DDI-CDI, CODATA now has an established partnership supporting the DDI Alliance Training Webinars, raising the profile of both organisations and demonstrating how CODATA can play a constructive role in collaboration with partner organisations.



## Priority future activities where TG proposals would be welcome include:

- Supporting and expanding the capacity, curriculum and materials of the CODATA-RDA Data Schools;
- Continuing and extending the International Training Workshops while inviting collaboration with and expertise from CODATA Task Groups and Working Groups;
- Scoping and defining a data skills and education activity with the National Committees;
- Exploring other collaborations with partner members along the lines of the successful DDI webinars;
- Exploring other areas in which data skills activities may be useful:
  - Data literacy, linking with data diplomacy to address policy makers, science advice;
  - Skills for data stewards;
  - Data Science Literacy;
  - Engage with data skills work in the library / information science communities.

## **Partnerships**

Task Group proposals are strongly encouraged to consider engagement with and involving other CODATA partners and stakeholders, such as:

- The ISC stakeholders and partners;
- UN Agencies and other Intergovernmental Organisations;
- Intergovernmental Data Organisations, such as GEO or GBIF;
- CODATA's Members National Committees, International Scientific Unions, Institutions, Partners;
- Global data organisations (GO FAIR, RDA and WDS).

## **Responsibilities of CODATA Task Groups**

Please also refer to the <u>Task Group Guidelines</u> for more detailed information.

Task Groups (TGs) are expected to:

- 1. Contribute to the realisation of the CODATA Strategic Plan 2023-2027 (and to the Decadal Programme 'Making Data Work for Cross-Domain Grand Challenges' in particular) and of CODATA's overall mission.
- Contribute to global collaboration around Open Science, FAIR data, and as an 'extension' of the WorldFAIR project, including participation and engagement from CODATA's Members and from international scientific and data organisations (including ISC stakeholders and partners, intergovernmental organisations, CODATA National Committees, International Scientific Unions, and other global data organisations).
- 3. Pursue clearly stated and well-defined objectives and produce tangible public outputs that contribute to the realisation of these objectives. This includes an appropriate use of CODATA branding, and following CODATA guidelines and expectations for outputs.
- 4. Participate in CODATA activities and events, including SciDataCon/International Data Week and other major CODATA Conferences.



- 5. Follow CODATA expectations for reporting, communication, and Task Group organisation.
- 6. Maintain regular reporting and prompt and proactive communication with the CODATA Secretariat.
- 7. Ensure regular contact and communication with the assigned CODATA Executive Committee (EC) Liaison(s). This responsibility is an essential aspect evaluated by the ExComm when considering an approval of the TG annual funding and/or the TG performance in relation to potential application for renewal of the TG in the following term.
- 8. Provide public and transparent accounts of their activities via the CODATA website and other communication channels, including working with the CODATA Secretariat to ensure communications and key information about the TG are disseminated regularly and kept up to date.

# Task Group membership and composition

Please also refer to the <u>Task Group Guidelines</u> for more detailed information.

CODATA's mission is to connect data and people to advance science and improve our world. TGs are intended to bring people together under the CODATA umbrella in support of this mission and to encourage global scientific cooperation around data.

**Co-chairs:** TGs must have 2 or more named Co-chairs, with regional and gender diversity. Co-chairs provide direction for the TG and are the key point of contact with CODATA. TG Co-chairs are expected to communicate frequently with and engage all named TG members.

**Secretary:** In addition to the Co-chairs, it is strongly encouraged for the TG to have a named Secretary who will plan meetings, respond to requests for information, maintain the TG wiki, blog or other tool etc. This role could be taken by a Co-chair, an early career member or a secondee/intern. The Secretary will take primary responsibility for key aspects of TG coordination.

**Early Career Members:** TGs are encouraged to have at least two named early career members who will be strongly involved in substantive aspects of the TGs activity. These members should also become involved with the CODATA Connect early career and alumni network and receive benefits from that engagement (including where available, training opportunities, bursaries, network benefits etc).

**Internships/Secondments:** TGs are strongly encouraged to increase capacity through internships/secondments. Effort might be lent to the TG by CODATA National Members or by partner organisations, for example. Similarly, the activity of the Task Group might be one that incorporates a topic for post-graduate or post-doctoral research.

**TG Membership Diversity:** One of the benefits of CODATA TGs is to bring international and diverse perspectives and cooperation to bear on an issue. TG membership should be geographically and gender diverse.



## **Task Groups Funding**

Please also refer to the <u>Task Group Guidelines</u> for more detailed information.

**CODATA Funding:** CODATA designates part of its budget for Task Groups and, at the discretion of the Executive Committee, provides a small amount of seed funding. Historically this has ranged from 1K to 10K Euros annually. In recent years, allocations of 4K Euros per year have been most common. Such funding must be used to achieve tangible TG outputs. For example, directly supporting the drafting, publication or testing of TG outputs. Convening a workshop or similar event, such as a side-event to IDW, is within scope; speculative attendance at a conference is not. CODATA Task Group funding is allocated annually. The 12-month progress report from each Task Group will be used to guide funding allocation decisions for year two. Funding is expected to be expended in the calendar year it is received unless permission otherwise received from the CODATA Secretariat.

Shortly after approval at a General Assembly, the CODATA Secretariat will contact the new TG to request information, including the TG's work plan and a budget request with details on how any funding will be used, which will be considered by the Executive Committee. CODATA's usual practice is to disburse funds on receipt of an invoice or expenses claim within the budgeted amount. By arrangement, where necessary, funds can be advanced in response to a detailed activity plan.

**External Funding:** TGs are strongly encouraged to look for funding from external sources and historically the status of being a CODATA TG has assisted with this. The CODATA Secretariat and Executive Committee are willing in principle to provide letters of support and to assist in other ways with such proposals. Proposals to CODATA to continue a TG or to establish a new TG should indicate what steps will be taken to pursue external funding.

#### **How CODATA Assesses Task Group Proposals**

Task Group proposals are peer reviewed and are also assessed by the Executive Committee.

The criteria used include the following:

- Alignment of the proposal with the **Requirements of CODATA Task Groups** described above;
- The significance and merit of the proposed work and its contribution to CODATA's mission and Strategic priorities outlined in Strategic Plan 2023-2027;
- The clarity and merit of the objectives, outputs and outcomes described;
- The feasibility of the work plan;
- The existence of appropriate collaboration with other organisations of groups, ensuring the proposed work does not duplicate other activities;
- The expertise and appropriateness of the Task Group membership, including gender balance, the participation of early career scientists, and appropriate representation from developing countries;
- The existence of other likely sources of funding and support if needed to accomplish the work;
- Progress and performance of the Task Group in previous terms (applicable only to TG renewal proposals).

On the basis of the peer review and its own assessment, the Executive Committee will make recommendations to the General Assembly.



Proposers will be required to give either a presentation or poster at the General Assembly. The presentation or poster may be given virtually or by a CODATA Member Delegate in case travel of the proposer(s) may not be feasible. The General Assembly takes the presentation and the recommendations of the Executive Committee into account when deciding which TG proposals to approve.

## **Submission Procedure and Deadlines**

Applications should be made by filling out the <u>form available at CODATA website</u> by **27 June 2023**. This form is the principal information source used for evaluating the proposals.

Proposers are encouraged to <u>download a template</u> to pre-fill proposed membership of the Task Group for easy upload to the webform when submitting the proposal.

For existing CODATA Task Groups that are applying for renewal, there is an additional section required, in which the Task Group should report on its activities, outputs and outcomes to date.

Proposers are encouraged to liaise with the CODATA Secretariat and contact us at <a href="mailto:info@codata.org">info@codata.org</a> as early as possible in the process for guidance, advice and to ensure the application criteria are fully met.