Articulating the collaboration among the four major international data organisations to optimize the research data ecosystem

March 2020

With this document, the four major international data organisations outline their joint commitment to work together to optimise the global research data ecosystem and to identify the opportunities and needs that will trigger federated infrastructures to service the new reality of data-driven science.

Who we are

CONSENSUS
SPECIFICATIONS &
RECOMMENDATIONS

INTERNATIONAL
CORE SERVICES

TRANSLATION TO
ISC & OTHER
ORGANISATIONS

POLICY
DOCUMENTS

ENGAGEMENT
WITH MEMBERS

STRATEGIC
PROGRAMMES

EXPERT
REPORTS

TASK &
WORKING
GROUPS AND
COMMITTEES

CONVENING
EXPERTISE AND
ADVANCING
DATA POLICY
AND PROTOCOLS

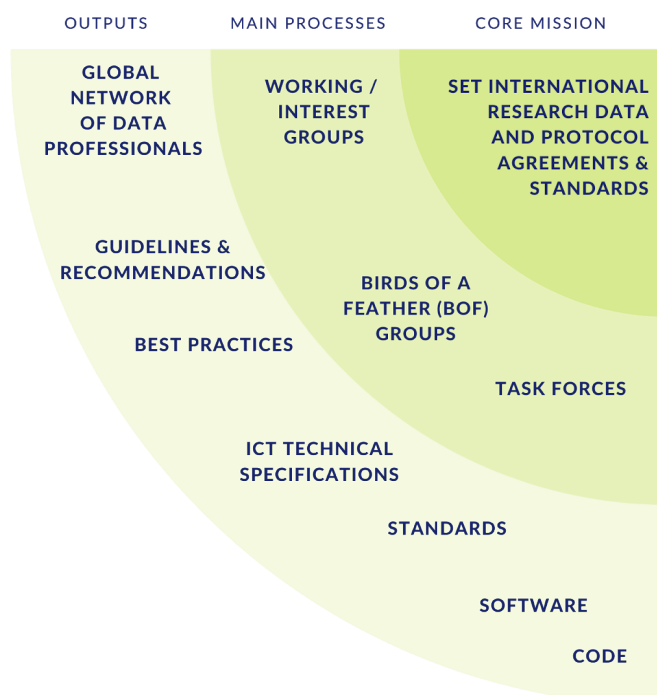OUTPUTS   MAIN PROCESSES   CORE MISSION

CODATA, the Committee on Data of the International Science Council (codata.org)

CODATA's mission is to connect data and people to advance science and improve our world. As the 'Committee on Data of the International Science Council (ISC)', CODATA supports the ISC's mission of 'advancing science as a global public good' by promoting Open Science and FAIR data. CODATA convenes a global expert community and provides a forum for international consensus building and agreements around a range of data science and data policy issues, from the fundamental physical constants to cross-domain data specifications. CODATA's membership includes national data committees, scientific academies, International Scientific Unions and other organisations.

OUTPUTS   MAIN PROCESSES   CORE MISSION

GLOBAL
NETWORK
OF DATA
PROFESSIONALS

WORKING /
INTEREST
GROUPS

SET INTERNATIONAL
RESEARCH DATA
AND PROTOCOL
AGREEMENTS &
STANDARDS

GUIDELINES &
RECOMMENDATIONS

BIRDS OF A
FEATHER (BOF)
GROUPS

BEST PRACTICES

TASK FORCES

ICT TECHNICAL
SPECIFICATIONS

STANDARDS

SOFTWARE

CODE

Research Data Alliance (rd-alliance.org)

A global, consensus-based, community-driven organisation of over 10,000 individual and institutional members from 144 countries whose mission is to provide a platform to drive innovation surrounding data sharing and interoperability. RDA enables data to be shared across geographical, technological and disciplinary boundaries through outputs developed by focused Working Groups and Interest Groups of volunteer experts from around the world and drawn from academia, the private sector and government. Established in 2013, RDA draws its membership from individuals and organizations across the data management ecosystem.

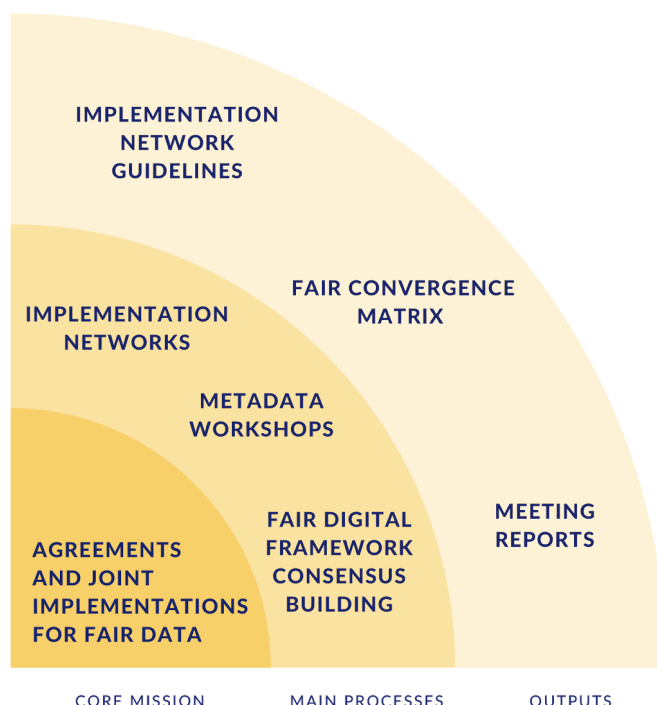## World Data System (world-data-system.org)

A research programme of the ISC that enables data repositories to use infrastructure and protocols that ensure long term custody of data, and to define services and resources that achieve greater interoperability between repositories and applications that consume data. Established in 2008, WDS draws its membership from data repositories and service providers who implement agreements that strengthen these organisations, and promote best practices.

CORE MISSION   MAIN PROCESSES   OUTPUTS

LONG-TERM STEWARDSHIP OF & OPEN ACCESS TO TRUSTWORTHY DATA & DATA SERVICES

WORKING / INTEREST GROUPS

MEETINGS, TRAININGS & WORKSHOPS

POLICY

STANDARDS - CoreTrustSeal

PROMOTING TRUST

SCHOLIX FRAMEWORK

TECHNICAL SUPPORT FOR MEMBER DATA REPOSITORIES

SUPPORT / AWARD FOR EARLY CAREER RESEARCHERS

GLOBAL NETWORKS OF DATA MANAGERS & TRUSTED REPOSITORIES

COMMUNICATIONS (REPORTS/BLOGS/WEB INARS)

WORLD DATA SYSTEM

GO FAIR

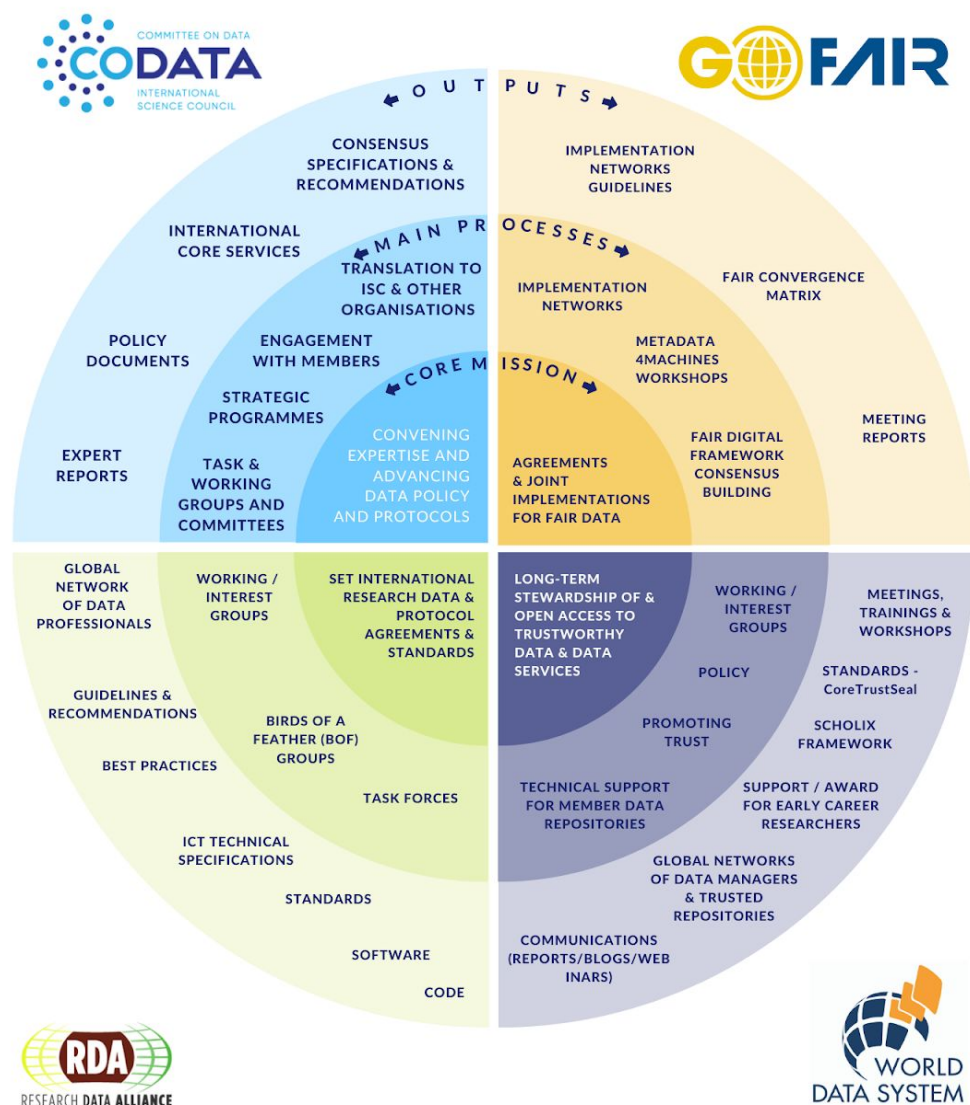## Global Open FAIR (go-fair.org)

A global initiative of community-driven implementation networks that enable data-related agreements, data services and protocols that support FAIR (Findable, Accessible, Interoperable and Reusable) sharing and reuse of data and related tools. Established in 2017, GO FAIR draws its membership from domain-specific communities of practice that are invested in the development of best practices for data management.

IMPLEMENTATION NETWORK GUIDELINES

IMPLEMENTATION NETWORKS

FAIR CONVERGENCE MATRIX

METADATA WORKSHOPS

AGREEMENTS AND JOINT IMPLEMENTATIONS FOR FAIR DATA

FAIR DIGITAL FRAMEWORK CONSENSUS BUILDING

MEETING REPORTS

CORE MISSION   MAIN PROCESSES   OUTPUTS

What we do

Each organisation has a unique *modus operandi* and works with different stakeholders, but they share a number of characteristics:

➢ Each has a global mandate from their respective constituency.
➢ All are impartial and independent, serving the international data community without a particular political bias.
➢ They operate at a supra-disciplinary level, and especially address data related issues that emerge in that scope.
➢ All are pathfinding and strategic without being funding agencies.

Why we collaborate

The availability and integrity of data is central to scientific research and crucial for decision- and policy-making. Existing statements about data access policies describe how the research data ecosystem should function in an ideal world. Directives and protocols from funders, publishers and scientific organisations at the national and international level encourage data access and reuse.

Implementing these guidelines and mainstreaming open data for scrutiny, reuse, and equitability is not easy. Several organisations are involved in facilitating the implementation process.

How we work together

For data to be effectively shared and reused at scale, to advance research and to benefit society, a number of things are necessary, including:

- ➢ Generalised agreements
- ➢ Policy recommendations
- ➢ Protocols, technologies and infrastructure
- ➢ Specifications and standards
- ➢ Community engagement and building trust
- ➢ Developing community consensus
- ➢ Coordinated responses to specific issues

Worldwide research activity is vast and the task of developing and implementing these components is enormous. It requires support from the stakeholder communities, as well as the activities, engagement and support mechanisms developed by the four partner organisations.

In many instances these groups have shared objectives and serve overlapping communities. At the same time, each organisation draws on separate mandates, diverse funding streams, and advances distinct but complementary strategies and outcomes.

The shared and distinct objectives of the four organisations will be achieved more efficiently through transparent coordination and cooperation. This document takes a first step towards clarifying the organisations' distinct and complementary missions and roles. It also lays out areas of collaboration, below.

Through regular dialogue and strategic meetings, it is intended that this should become a framework and roadmap to address the challenges of global research Data Together.

Contact Us

Simon Hodson
Executive Director
simon@codata.org
www.codata.org

Hana Pergl Sustkova
Operations Officer
hana.pergl@go-fair.org
www.go-fair.org

Hilary Hanahoe
Secretary General
hilary.hanahoe@rda-foundation.org
www.rd-alliance.org

Rorie Edmunds
Executive Director
rorie.edmunds@icsu-wds.org
world-data-system.org