

# **Framework for Collaboration in Open Science**

THE EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH (“CERN”), an Intergovernmental Organization having its seat at Geneva, Switzerland, ,

AND: THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (“NASA”), of the United States,

Recognizing that CERN, an Intergovernmental Organization, is a leading global laboratory in particle physics, providing for collaboration of a pure scientific and fundamental character, with participation by scientific institutes from all over the world;

Considering that Zenodo is a multi-disciplinary open repository maintained by CERN for the preservation and making available of research, educational and informational content. Access to Zenodo’s content is open to all, for non-military purposes only;

Recognizing that NASA is an independent agency of the U.S. federal government responsible for the U.S. civil space program, aeronautics research, and space research, NASA is responsible for unique scientific and technological achievements in human spaceflight, aeronautics, Earth and space science, and space applications that have had widespread impacts on the U.S. and the world;

Considering that the NASA Chief Science Data Office is responsible for the policies associated with the sharing of scientific information produced from research funded by NASA’s Science Mission Directorate with the goal of increasing access and preservation of that information;

Acknowledging that the NASA and CERN (or “the Participants”) wish to collaborate in open science (the principle and practice of making research products and processes available to all, while respecting diverse cultures, maintaining security and privacy, and fostering collaborations, reproducibility, and equity) and lower the entry barriers for research communities with the intended outcome of enabling access, discovery, and exploitation of research output by all scientists as well as the expected outcome of promoting open science best practices that are designed to increase research reusability and reproducibility across the globe;

**It is hereby understood as follows:**

## **Section 1. Purpose of this Framework**

- 1.1. This Framework endeavours to establish a common working protocol between the Participants concerning an intended collaborative effort in Open Science transformation (“the Project”), which is used for peaceful purposes only.

- 1.2. It is expressly acknowledged that this Framework is not legally binding and each Participant's involvement in the Project is expected to be on a "reasonable efforts" basis.
- 1.3. Each Participant's involvement in the Project should be governed by its internal policies and regulations and the laws to which it is subject.
- 1.4. This Framework does not imply any commitment of resources. Each Participant intends to bear the costs of its expected contributions to the Project.

## **Section 2. NASA's contributions**

NASA intends to contribute to the Project by supporting the following activities:

- Promoting Open Science with the intended outcome of increasing the reproducibility, inclusion, and accessibility of scientific knowledge.
- Curating NASA-funded results of scientific research that appear in Zenodo.
- Expanding the findability and discovery of scientific research related to Earth and Space Science that is currently shared on Zenodo.
- Collaborating on the study of interoperable platforms that advance scientific data and computing.
- Periodically reviewing NASA-funded data that appears in Zenodo to ensure the discoverability of the data and software being shared, including reviewing the data or software for any restricted information.
- Collaborating on Open Science communications to support increased knowledge and awareness of Open Science practices.
- Supporting an Open Science Event hosted by CERN in the context of the Year of Open Science 2023.

## **Section 3. CERN's contribution**

Subject always to Zenodo's Terms of Use<sup>1</sup>, CERN intends to contribute to the Project by supporting the following activities:

- Promoting Open Science with the intended objective of helping increase the reproducibility, inclusion, and accessibility of scientific knowledge.
- Accepting meta-data indicating funding by NASA and/or the ability to tag data that is funded by NASA.
- Providing for the ability to discover NASA-funded data sets in Zenodo.
- Providing NASA with access to any Zenodo data tagged as being funded by NASA.
- Removing from Zenodo any data identified by NASA as being restricted information that should not be shared.
- Make available material on how Zenodo can be used to share data openly.
- Collaborating on the study of interoperable platforms that advance scientific data and computing.

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<sup>1</sup> <https://about.zenodo.org/terms/>

- Collaborating on Open Science communications to support increased knowledge and awareness of Open Science practices.
- Hosting an Open Science Event in the context of the Year of Open Science 2023.

## Section 4. Publications

4.1 The Participants intend to jointly publish the results of their collaboration under this Framework as Open Access publications.

4.2 Publications are intended to acknowledge the collaboration between the Participants, including, wherever appropriate, the experts having taken part in the development of the results covered by the publication.

## Section 5. Interpretation of this Document

The Participants intend to discuss any differences in interpretation of this document in a friendly and collaborative manner, which any potential disputes settled amicably between them.

## Section 6. Length of Performance

6.1 This Framework is intended to commence on the date of signature by the last Participant . It will remain operative for the initial term of five years, unless NASA or CERN request that it cease to have effect earlier.

6.2. Either NASA or CERN may propose changes to this Framework at any time. Any changes must be in writing and be mutually decided by both NASA and CERN.

6.3 Either NASA or CERN may withdraw from this Framework by giving a minimum of three months written notice to the other Participant.

**For the European Organization for  
Nuclear Research (CERN) as the  
Host Organization**

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Enrica Porcari  
Head of Information Technology  
PP Robert JONES  
Date: deputy head of IT dept

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**For the National Aeronautics and  
Space Administration (NASA)**

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Kevin Murphy  
Chief Science Data Officer  
Date:

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