DC POWER

D2.5 Open Science platform

June 2024

WIP Renewable Energies

dcpower.tech

Document Information

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	Final
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ACKNOWLEDGMENT & DISCLAIMER

EXECUTIVE SUMMARY

The deliverable presents the type of data that the project will have and the repository that will be used during the project period January 2024- December 2027 to allow open access to the scientific publications realised by the partners.

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1 Types of project data

1.1 Research data management

DC-POWER will deliver three classes of project results:First, the **system concept** of the DC-Power system.This data and other results will be made partly publicly available to allow Open Science initiatives.

Second, **Prototype components** like DC/DC converters, rectifiers, protection components for MVDC application, and their specifications. These results will be protected as primary exploitation will require further development either by a project partner or by a third party under license from a project partner.

The protection of intellectual property rights (IPR) is required to safeguard the investment to bring these results to market.

Third, the **pilot testing**. The operational data from the pilot sites will be partly confidential.This data and other results will be made partly publicly available to allow Open Science initiatives, and to show The benefits and disadvantages of our chosen MVDC distribution system over AC systems.

Data will be gathered using a comprehensive suite of IoT-connected sensors installed on every pilot site. The type of sensors may differ from site to site, but typically includes those measuring voltages, currents, solar irradiation intensity. Some data from these sensors (probably processed into meaningful parameters) will be publicly available via the internet, allowing its use by third parties. Updating and recording intervals are TBD, and historical recorded datasets are also publicly available.

The consortium will manage the data in line with the FAIR (Findable, Accessible, Interoperable and Reusable) principles as described in the deliverable D1.3 Data Management plan.

WIP will deposit the data and metadata in a trusted repository, federated in the EOSC in compliance with EOSC requirements, ensuring open access under the latest available version of the CC BY or CC 0.

1.2 Open access to scientific publications

WIP will ensure open access to peer-reviewed scientific publications relating to the project results. WIP will ensure that a machine-readable electronic copy of the published version or the final peer-reviewed manuscript accepted for publication, is deposited in a trusted repository for scientific publications.

The publication will have open access via the repository, under the Creative Commons Attribution International Public Licence (CC BY) or a licence with equivalent rights (e.g. CC BY-NC, CC BY-ND) and information is given via the repository about any research output or any other tools and instruments needed to validate the conclusions of the scientific publication.

WIP will retain sufficient intellectual property rights to comply with the open access requirements.

Metadata of deposited publications must be open under a Creative Common Public Domain Dedication (CC 0) or equivalent, in line with the FAIR principles.

2 Zenodo repository

The DC-POWER consortium publication open access will be guaranteed in accordance with the "COMMUNICATION, DISSEMINATION, OPEN SCIENCE AND VISIBILITY" published by the European Commission (EC) in the article 17 of the Model Grant Agreement for Horizon Europe projects, thus ensuring free of charge, online access to all publications relating to project results.

Open access refers to the practice of providing online access to scientific information that is free of charge to the end-user and reusable.

"Green" or "Gold" open access model terms are used to define the publication process. In green open access model, also referred to as self-archiving, a published article or the final peer-reviewed manuscript is archived (deposited) in an online repository before, alongside or after its publication. Repository software usually allows authors to delay access to the article ('embargo period'). If this route is chosen, beneficiaries must ensure open access to the publication within a maximum of six months (twelve months for publications in the social sciences and humanities). Gold open access means that an article is immediately provided in open access mode (on the publisher/journal website). These articles are licensed under the Creative Commons (CC) license, this guarantees that they can be distributed and shared without cost.

All project publications are disseminated via Zenodo. Zenodo is an open-repository platform developed under the European OpenAIRE program and operated by CERN. Zenodo allows users to upload research papers, datasets, research software, reports, and other research-related digital artifacts. These publications are citable.

WIP has created an account on Zenodo, considered as trusted and user-friendly repository where the project 15 scientific publications can be uploaded by the end of the project.

At the time of the preparation of this document, DC-POWER didn't yet publish any data on Zenodo.
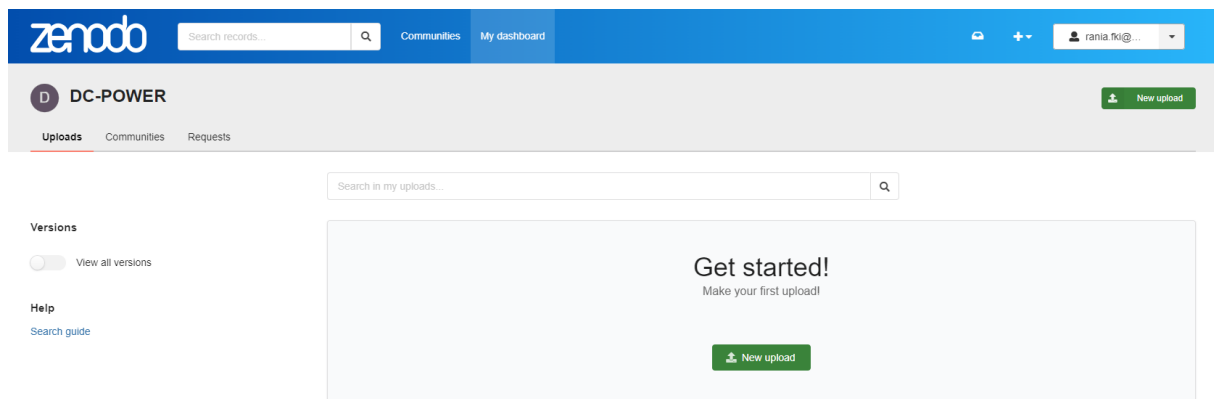

Figure 1: DC-POWER Zenodo account dashbord

Zenodo advantages:

- **Safe**: The research is stored safely for the future in CERN's Data Centre for as long as CERN exists.

- **Trusted**: Built and operated by CERN and OpenAIRE to ensure that everyone can join in Open Science.

- **Citeable**: Every upload is assigned a Digital Object Identifier (DOI), to make them citable and trackable.

- **No waiting time**: Uploads are made available online as soon as we publish, and the DOI is registered within seconds.

- **Open or closed**: Share e.g. anonymized clinical trial data with only medical professionals via Zenodo restricted access mode.

- **Versioning**: Easily update the dataset with versioning feature.

- **GitHub integration**: Easy to preserve the GitHub repository in Zenodo.

- **Usage statistics**: All uploads display standards compliant usage statistics

As communication and dissemination partner, WIP is responsible for managing the Zenodo account.

3 Partners