

# Open research: linking the bits and pieces with OpenAIRE-connect

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## Introduction

Open research is growing in neuroimaging. The community is constantly expanding online resources including: data (e.g. [1–3]), code (e.g. [4]), materials (e.g. [5]), tutorials, etc. This trend will likely amplify in the future and is also observed in other areas of experimental sciences.

Open resources are typically deposited in dedicated repositories that are tailored to a particular type of artefact (e.g. [6,7]). While this is best practice, it makes it difficult to get the big picture: artefacts are scattered across the web in a multitude of databases. Although one could claim that the publication is here to link all related artefacts together, it's not machine-readable and does not allow searching for artefacts using filters (e.g. all datasets created in relation with a given funder).

Here, we present **OpenAIRE-connect**, an overlay platform that links together research resources stored on the web: <https://beta.ni.openaire.eu/>.

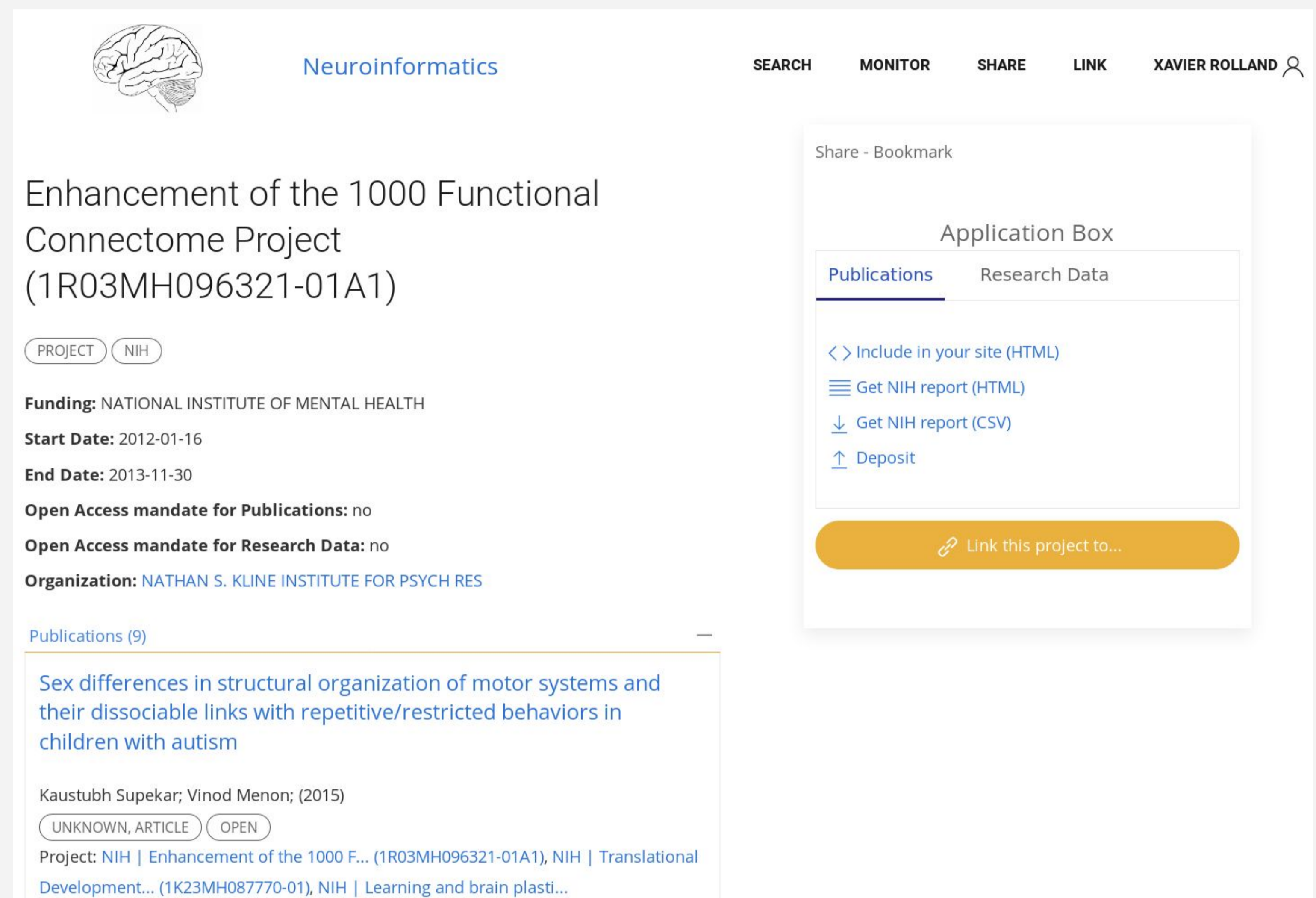


Fig. 1: Example of project page on the OpenAIRE-connect portal

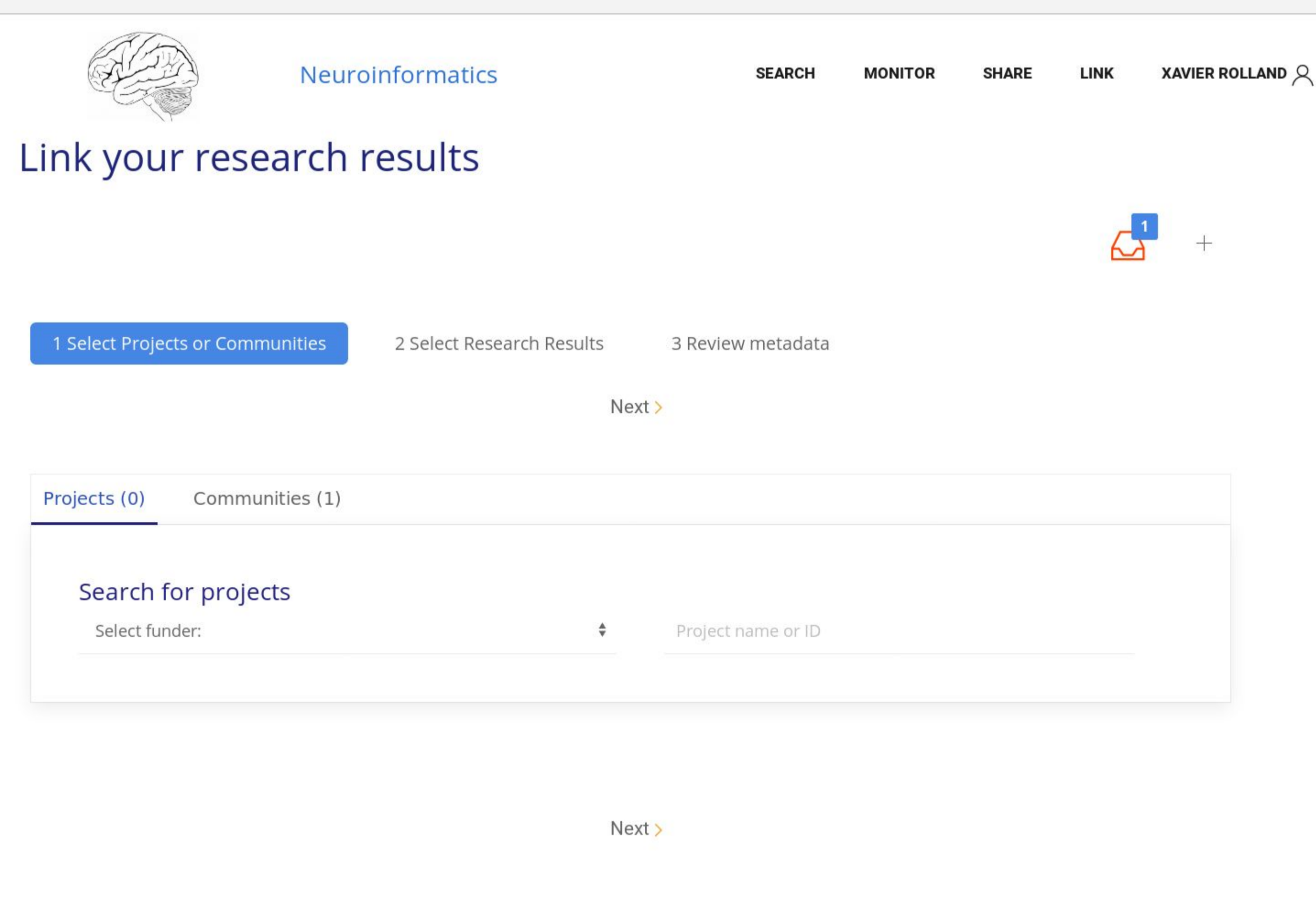


Fig. 2: Link page where users can associate a resource to other resources (e.g. a paper to analysis code)

## Methods

Within the OpenAIRE-connect project, we developed, set up and made available an online dashboard to:

- **Search:** Look for research artefacts by funder, project, publication date, access mode, type, language, content provider or free text.
- **Share:** Deposit research artefacts (publication, code, date, etc.) in relevant existing repositories.
- **Monitor:** View statistics about open research artefacts by type and funders.

Additionally logged in users can:

- **Link:** Select existing research artefacts, funders and/or communities and link them together.

Additionally administrators can:

- **Customize** display of the dashboard
- **Specify** content providers.

Source code:

<https://svn-public.driver.research-infrastructures.eu/driver/dnet40/modules/uo-ia-connect-portal/trunk>

## Results

The portal is currently released in beta (<https://beta.ni.openaire.eu/>) and contains a total of: 22 060 publications, 789 datasets, 86 software, 1 735 other research products, 9 projects and is linked to 6 content providers.

### Use case 1: linking artefacts related to a publication

With OpenAIRE, authors can link analysis code and datasets to a publication and have a single entry point for all the publication resources.

### Use case 2: searching for artefacts related to a funded project

With OpenAIRE-connect, researchers can have a single page summary where all contents related to a certain project can be found easily and quickly (e.g. fig. 1).

### Use case 3: adding new artefacts to the portal

With OpenAIRE, users can add artefacts to a community. To do so, they can either use the resource page and add a link with the community (similarly to the procedure used to link related content), or they can use the link menu (fig. 2).

Once an artefact has been added to a community, it can be accessed through the community's search engine.

## Conclusion

We have introduced OpenAIRE-connect, a new overlay platform to: search, share, monitor and link open research resources. We hope that this platform will support researchers and funders in getting a better understanding of the open resources landscape and that, in the future, this will lead to more data reuse and collaborative research.

## Acknowledgments

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## References

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