



ExPaNDS Develops a Data Policy Framework for National Photon & Neutron Research Infrastructures

The Challenge

The [European Open Science Cloud \(EOSC\) Photon and Neutron Data Service \(ExPaNDS\)](#) project aims to expand, accelerate, and support the data management and data services provided through the EOSC for national Photon and Neutron Research Infrastructures (PaN RIs). ExPaNDS will make the majority of PaN RIs' data open in line with the FAIR principles and will harmonise efforts to migrate facility data analysis workflows to EOSC platforms, enabling them to be shared in a uniform way.

PaN RIs have a significant track record in publishing and implementing data policies to support the access and use of experimental data generated by their user community. However, recent developments within European science policy, in particular the drive towards supporting FAIR data in the EOSC, meant that it was time to review and revise these data policies.

In developing their new [draft data policy framework](#), ExPaNDS drew on [established Photon and Neutron \(PaN\) data policy](#) while also incorporating newer developments and expectations related to FAIR.

PaN RIs differ from many of the organisation types (e.g. universities, research institutes, funders, libraries, publishers) covered by a recent FAIRSFAR data policy landscape analysis (see below). In PaN RIs, the facility sets up the measurement workflows at its instruments, controls the data curation, typically stores the data in its archives, and controls access to the data as well as retention times — while both users and user funding are typically from outside the RI. Given this unusual situation, ExPaNDS could not assume that all of the FAIRSFAR recommendations would be a perfect fit for PaN RIs.

ExPaNDS

European Open Science Cloud Photon
and Neutron Data Services

[ExPaNDS.eu](https://expands.eu)

FAIRSFAR Outputs Adopted

The task drew on the results of the [ExPaNDS 2019 PaN RI landscape assessment](#) and other [recent work on draft policy framework recommendations](#) undertaken within the PaNOSC project, which is closely related to ExPaNDS.

The task also considered the FAIRSFAR Policy enhancement recommendations. Presented in [FAIRSFAR deliverable D3.3](#), these are a set of practical, policy-related recommendations based on a recent analysis of the FAIR data policy landscape and the actions set out in the [Turning FAIR into Reality \(TFiR\) report](#). Each of these FAIRSFAR recommendations was examined in turn to evaluate if and how it might apply to PaN RI data policy. Where it made sense, a PaN RI-relevant recommendation was supplied to sit next to the relevant FAIRSFAR recommendation and associated TFiR action(s).

In this way, ExPaNDS was able to use and apply the FAIRSFAR recommendations but situationally-framed and in language highly-relevant to the PaN RI context.





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The Details

Dr Abigail McBirnie explains how ExPaNDS used the FAIRsFAIR Policy Enhancement Recommendations.

"In some cases, the FAIRsFAIR recommendations encouraged us to think carefully about our ambitions, especially the realistic position that our data policy framework could occupy in the bigger picture of FAIR. For example, FAIRsFAIR recommendation 1, 'provide practical guidance to researchers and data stewards on how to implement FAIR within different domains...', led to a discussion about limitations around the extent to which PaN RIs, given the user-based model on which they function, could enable FAIR data in practice. Out of this emerged ExPaNDS policy enhancement recommendations 1.1 and 1.2, both of which focus on a commitment to the delivery of FAIR data 'at the point it leaves the facility'. This caveat reflects the reality of data stewardship in the PaN domain: while we can control what happens with data at our facilities, we cannot control what the user does with those data once they leave the facility.

In other cases, the FAIRsFAIR recommendations provided specific practical guidance or highlighted missing elements. FAIRsFAIR recommendation 3, 'support policy makers to ensure that they include the dates of validity for their policies as well as any planned review dates', is one such example. Although the 2019 ExPaNDS landscaping survey showed that PaN RI data policies typically include 'valid from' dates, the policies rarely provide planned review dates. ExPaNDS policy enhancement recommendation 3.1 addresses this missing element: "The Policy Framework should specify that the policy includes dates of validity and planned review dates."

Why the FAIRsFAIR Recommendations Were Useful

Says Abigail, "Whether we were considering bigger picture issues or smaller practical matters, the FAIRsFAIR policy enhancement recommendations provided us with a helpful place from which to start discussions, offered us specific advice that we could act on, and ensured we considered a wide range of issues as we looked to build our ExPaNDS data policy framework. The recommendations also served as a useful sense check that our own data policy framework does indeed reflect well the wider FAIR policy landscape and the policy-related actions set out in the TFiR report."

Next steps

According to Abigail "ExPaNDS deliverable [D2.1 Draft extended data policy framework for Photon and Neutron RIs](#) (Sep 2020) documents a new (draft) data policy framework for national PaN RIs and examines the possible application of FAIRsFAIR recommendations to national PaN RIs.

We are now in the process of consulting with ExPaNDS project partners with the aim of producing a final version of the framework in August 2021. Aspects of these conversations definitely reference the ExPaNDS PaN-specific policy enhancement recommendations, and hence, indirectly, also those of FAIRsFAIR.

We fully expect the impact of the [FAIRsFAIR policy enhancement recommendations](#) to be apparent in the final version of the ExPaNDS data policy framework for national PaN RIs."

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