A sustainability sheet for each ExPaNDS outcome

- Same template for all outcomes, including PaNOSC's
- Responsible persons from all WPs
- Most sheets are well advanced and open to discussion
- Will be finalised, polished and published in Zenodo before the end of ExPaNDS

Solution	*Description of the solution introduced and the problem it solves* The PaNET ontology provides a taxonomy of experimental techniques relevant for the Photon and Neutron community. The ontology has several applications. It allows a unique and unambiguous description of the experimental technique(s) to be added to datasets (and related research objects) in order to document how the material was created. It may also be used to tag many other items; for example, training material, analysis services, analysis pipelines, analysis software, workshops. Currently experimental techniques are often described using a natural language in some plain text description field. This makes discovery harder.
Target audiences	*Who benefits from this particular outcome?* - Beamline scientists - Data stewards - Data managers
Benefits for target audiences	*In what way?* - Use a common set of standard technique names - Be able to refer to global persistent identifiers - Ease interoperability of data catalogues and search across facilities - Enrich search results with subclasses and alternative labels
Competitors	*Other tools / services / projects that developed similar solutions or intend to* Wikidata contains entries for several experimental techniques.
Technology readiness	*Prototype, pilot, in production? And short justification* In production: used in Search API via the ontology service, which (in turn) is used by the PaNOSC search portal. Used in the PaN training platform.
Accessibility	*Where it is, who can access it?* Ontology can be browsed in BioPortal or in the documentation Source code at https://github.com/ExPaNDS-eu/ExPaNDS-experimental-techniques-ontology
	The persistent URL service is used, which redirects terms to their definition.
Licence	https://creativecommons.org/licenses/by/4.0/
Documentation	*Link to existing documentation for users and maintainers - missing documentation if any* - Document describing ontologies in the frame of ExPaNDS, including PaNET: https://doi.org/10.5281/zenodo.4806026 - Documentation http://purl.org/pan-science/PaNET/
EOSC integration status	*Link to the EOSC marketplace if already onboarded, status otherwise* A production instance of the ontology service, provide by PSI has been on-boarded as the photon-and-neutron-techniques-ontology-service
Short-term maintenance	*Hosting infrastructure + personnel in charge now* Hosted in GitHub.com and ExPaNDS WP3 in charge until end of the project
Plans and conditions for long-term sustainability	*Hosting infrastructure + personnel in the future if known or FTE and hardware, costs vs. benefits in the long term* - Continue to be hosted in GitHub.com (likely under a different organisation) - Core team of five individuals from four institutes who are meeting once a month to discuss the maintenance of PaNET, meeting that will continue after ExPaNDS end - Initial version of the release process is documented.
Feedback mechanism	*How can feedback / new requirements / bugs be reported and taken into account?* Monthly meeting of PaNET developers and contributors - in the future, including data stewards of each facility? GitHub issue tracking used to request new terms or indicate problems with existing terms. Review process and release defined and taking place in the github repo https://github.com/ExPaNDS-eu/ExPaNDS-experimental-techniques-ontology#review-process-and-release
Exploitability potential	*What/who could benefit from this outcome and yet doesn't?* - PaN search API could enrich its results using PaNET - PaN-training catalogue and E-learning platform to use PaNET to control the vocabulary used for tags - Embedding PaNET terms within NeXus - Use PaNET terms in user-office systems (within proposals)
Conditions to increase exploitability	*To-do list or pre-requisites to reach exploitability potential* Various actions to increase visibility and exploitability have been opened as Github issues; e.g., - PaNET issue #75 Register PaNET with ontology catalogues - PaNET issue #63 Including PaNET within a NeXus file?
Other	There may be interest within national projects; for example, the DAPHNE4NFDI project. The Helmholtz Metadata Collaboration (HMC) have also expressed interest in supporting PaNET. There may also be interest in science domain specific communities; e.g,. EOSC-Life/ELIXIR.

This project receives funding from the *European Union's Horizon 2020 research and innovation programme* under grant agreement No 857641

Sustainability levels

- Level 1: “Prototype”

New concept which is not mature enough to be already adopted. It is **transferred to another project/organisation** for further development.

- Level 2: “Pilot”

Mature concept attracting interest from at least a few LEAPS and LENS facilities who are ready to maintain it, before it is adopted more widely. **The maintainer group is organised** already.

- Level 3: “In production”

Already adopted by several LEAPS and LENS facilities or other sustainable organisations, e.g. NIAC, and **part of their main process**.

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Current status - to be discussed this afternoon

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OAI-PMH endpoint

- Adopted at CERIC-ERIC, ELETTRA, HZDR, ISIS, MAX IV and PSI
- Integrated in SciCat and Icat
- Consumed by external services e.g. B2FIND

Nexus ontology

- Adopted by NIAC and integrated in their process
- v2 already on the way

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- Level 2: “Pilot”

Mature concept attracting interest from at least a few LEAPS and LENS facilities who are ready to maintain it, before it is adopted more widely. **The maintainer group is organised** already.

PaNET ontology

- Organised maintainer group (for now)
- A lot of exploitability potential

PaN training platform

- HZDR maintaining it
- A lot of interest and exploitability potential, esp. in Germany

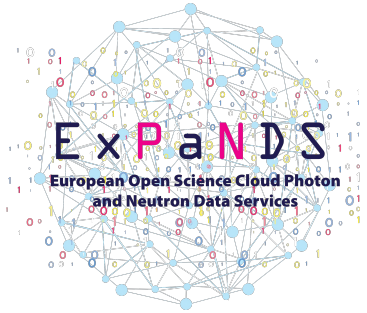
VISA

- In production at ILL and interest from several other RIs
- Currently being discussed in the frame of the **VISA MoU**

DMP framework

Metadata framework

- Currently being discussed in the frame of the **data management MoU**



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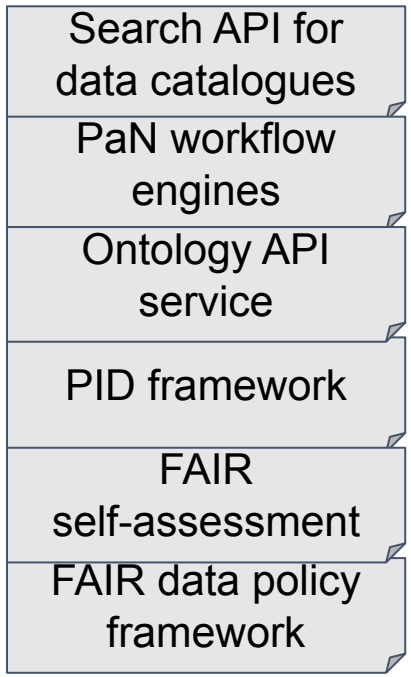

- Identified care-takers so far: DAPHNE4NFDI and OSCARS
- Depends on the uptake of data managers / data stewards at facilities
- Actions to increase exploitability still ongoing

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