

# Project Quality Assurance and Progress Monitoring Plan

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## **ABSTRACT**

This document describes the quality approach for the ExPaNDS project.

The Project Quality Assurance Plan (QAP) defines the overall policies, the participant roles and responsibilities, the quality standards and procedures, the means of ensuring that all the activities (R&D activities, deliverable writing, etc.) are applied and evaluated in conformance with the contract provisions and specifications.



## **Document Log**

Issue	Date	Comment	Author/Partner
1	17.01.2020	.2020 First Draft Valentina Piffer, Mirjam van Da	
2	29.01.2020	Internal review	Sophie Servan / DESY
3	31.01.2020	Second draft ready for review	Valentina Piffer, Mirjam van Daalen / PSI
4	05.02.2020	Final version	Sophie Servan / DESY



Date: 31/01/2020 2 / 19



### 1. Introduction

The purpose of a Quality Assurance Plan (QAP) is to establish the prerequisites of quality, to help monitoring and controlling the quality of all processes and deliverables and finally to ensure that all the activities are in conformance with the contract drawings and specifications.

The main goal of a QAP is the success of the project with high quality results. It is worth mentioning that all the consortium partners should be concerned with the quality approach.

The Quality Plan covers many activities of the project and defines the participant roles and responsibilities, the quality procedures concerning managerial, scientific and administrative aspects of the project (R&D activities, scientific report, work package deliverables, training activities, etc.). The project team has to follow these procedures throughout the project lifecycle to ensure the overall quality of the on-going project.

The QAP also provides guidelines in order to easily meet the quality requirements without any additional work. For example, a deliverable template or deliverable log is given and we need to make sure that quality standards (in terms of form, timeliness, electronic archiving, etc) are fulfilled. The use of guidelines provides a better and easier collaboration among the consortium partners. All the consortium partners are responsible for and engaged in the work (R&D activities, deliverables, training activities, etc.) produced within the ExPaNDS project.

## 2. Working Packages

ExPaNDS comprises six (6) work packages (WPs). WP1 is dedicated to managing the project and ensuring delivery of high quality results within the time and budget frames. It also comprises overriding work on achieving sustainability of the project results. WP2 extends and deepens the adoption and use of FAIR data principles within the Photon and Neutron science community. WP3 will coordinate the adoption or enhancement of existing solutions and link them to the PaNOSC federated metadata catalogue to make them available as a service of the European Open Science Cloud (EOSC) at all EU national Photon and Neutron Research Infrastructures (RIs). WP4 will exploit deliverables of WP2 and WP3 by coordinating existing data analysis services at national RIs with PaNOSC through the EOSC, and other existing national and thematic initiatives for the provision of data analysis services. WP5 will provide training materials, staff and user training based on the outcomes of WP2 to WP4. Finally, WP6 will ensure the dissemination of ExPaNDS' outcomes by supporting and promoting the ExPaNDS initiative in Europe and beyond, and promote Open Data and FAIR data principles to users and RIs.





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Date: 31/01/2020 3 / 19

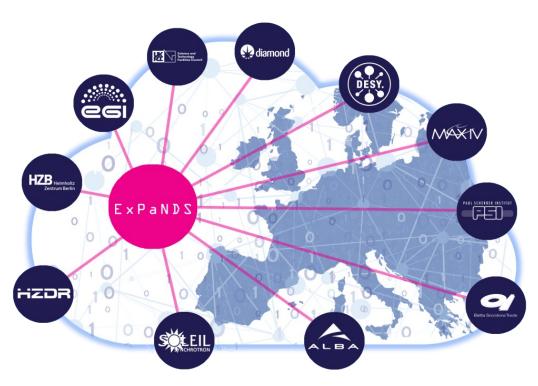


Figure 1: the ExPaNDS consortium partners

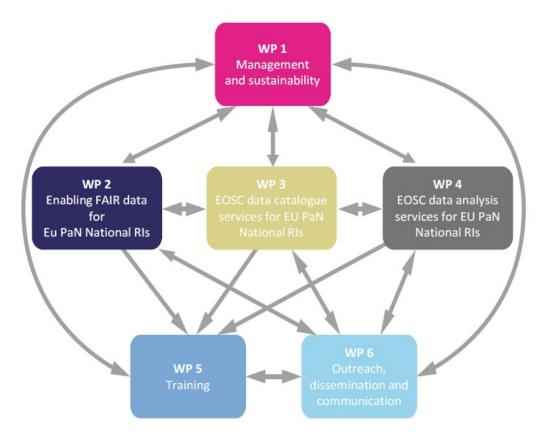


Figure 2: Relation among all ExPaNDS work packages



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Date: 31/01/2020 4 / 19



## 3. The Management and Coordination Structure

The management methodology used for ExPaNDS follows the process-oriented approach of the well-known PRINCE2 structured project management and is adapted to the rather moderate size of the project. The project is managed primarily by the coordinator, DESY, in collaboration with PSI and EGI. The project coordinator, the project manager and the project financial administration will be provided by DESY. The project manager will be leading the management of WP1 with a co-lead by PSI. The project progress is being divided into different stages with deliverables and milestones used as control points. Clear roles and responsibilities will be assigned to all persons involved in the project.

The **Project Coordinator (PC)** is in charge of the overall administrative and executive management of the project. The PC is appointed by the leading beneficiary (*DESY*). The PC is responsible for executing the project plan, for monitoring the technical achievements, effort reporting and resources consumption. It tracks issues in the Consortium relationships and in the development roadmap, proposing contingency plans in consultation with the other governing bodies. The PC produces periodic reports for the EC and acts as contact point between the commission and the beneficiaries.

The **Deputy Project Coordinator (DPC)** is appointed by the co-leading beneficiary (PSI), assists the PC and can represent the PC in the governing bodies in case of absence.

The **Technical Coordinator (TC)** decides on technical matters and leads the Technical Coordination Board. The TC reports to PC. In case of strong disagreement between the two, the decision is handled by the Project Executive Board and, ultimately, by the Collaboration Board. The TC is nominated by the Project Executive Board.

The Work Package Leader (WPL) is responsible for the coordination of the activities performed by the Work Package and ensures that the WP delivers according to the project schedule. It is appointed by the beneficiary leading the WP and represents the technical liaison with the PC and other governing bodies.

The **Deputy Work Package Leader (DWPL)** assists the WPL and can represent the WPL in the governing bodies in case of absence. The list of the WPLs and deputies are endorsed by the Collaboration Board.

The **Task Leader (TL)** is responsible for the execution of a specific task within the WP and assists the WPL in the day-to-day activities. The TL is appointed by the Beneficiary leading the task in agreement with the PC.

The **Collaboration Board (CB)** is composed by one representative per beneficiary. The CB coordinator is elected among its members and rotates according to the rules defined in the Consortium Agreement. The CB is responsible for approving changes to the Consortium, effort allocation and any other deliberation affecting legally or financially the beneficiaries. The CB can approve changes to the Description of Work (DoW). The CB will meet at least once per year.





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Date: 31/01/2020 5 / 19



The **Project Executive Board (PEB)** is responsible for the decisions affecting the project strategy, plans, delivery schedule, conflicts within the partners and risk management. It is composed of the Project Coordinator, the deputy project coordinator, the Work package Leaders, their deputies and the technical coordinator. It is chaired by the PC or its deputy. The PEB will meet at least once a month.

The **Technical Coordination Board (TCB)** assists the Technical Coordinator in defining the technical strategy and in deciding on specific technical issues. It is responsible for the technical overview of the project. It is composed by the TC and technical experts appointed by the partners (one per beneficiary). The TCB is also responsible for technology tracking in the areas of interest to the project, analysing the market offering of both commercial and open source solutions that can represent opportunities or new technical collaboration for the project. In this respect, the TCB will provide innovation and strategic advice to the PEB through technical reports or updated strategic documents when requested. If needed, the TCB can invite experts (for example, representatives of development teams for components not developed within the project) to join their meetings. The TCB will meet at least every second month.

The **EOSC Liaison Group (ELG)** is composed by the PC, an EGI Foundation representative working for the PaNOSC liaison work package within ExPaNDS. Representatives holding key roles in the infrastructures connected to the European Open Science Cloud will be invited to join the group. The ELG is responsible for maintaining active relationships with the infrastructure and technology providers. The EOSC Liaison Group is managed and supported by WP1.

## 3.1 Decision-making process and project control

The decision making process is primarily determined by the roles of individuals and groups in the project as described above. The Project Coordinator (PC) is responsible for implementing the description of work as defined in the Grant Agreement. The PC is supported by WP Leaders and the Technical Coordinator through the Project Executive Board. Depending on the scope of engagement, task leaders, work package leaders, technical coordinator and project coordinator make the decisions. The Technical Coordination Board is frequently updated on the progress of the Work Packages 2, 3 and 4 and advises the Technical Coordinator and, if necessary, the Project Coordinator in the possible adjustments of the work performed.





Date: 31/01/2020 6 / 19



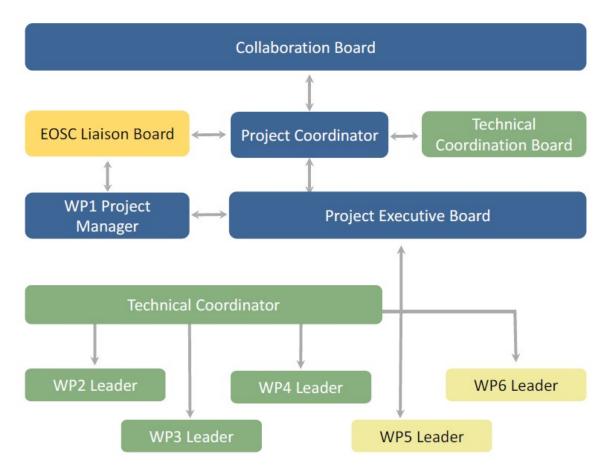


Figure 4: The ExPaNDS management and coordination structure





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Date: 31/01/2020 7 / 19



## 4. Quality Plan

## 4.1 Quality Standards for Deliverables

The quality plan provides guidelines and quality procedures in order to meet the quality requirements easily and effectively. A deliverable template is given to make sure that quality standards (in terms of form, revision, approval, electronic filing, etc.) are fulfilled. The use of guidelines provides a better and easier collaboration among the consortium partners.

#### 4.1.1 Document name

To ensure effective identification and versioning of each document, a specified document identifier is introduced.

For REPORT DELIVERABLES, the document identifier will have the following format:

ExPaNDS\_<D#>\_<Deliverable Title>\_<version #>

For example, for the present deliverable the identifier is the following: ExPaNDS\_D1.2\_Project Quality Assurance and Progress Monitoring Plan\_v0.1

When published onto the EU portal, the document will be named according to EU policy, as follows:

#### GRANT#\_<Deliverable #><Deliverable Title>

For ALL OTHER DOCUMENTS (presentations, communication papers, publications, etc.), the document identifier will have the following format:

ExPaNDS\_<WP#>\_<Document Name>\_<version #>

## **4.1.2** Deliverable Template

The deliverable template will be available to download on the internal section of the ExPaNDS website <a href="https://expands.eu/">https://expands.eu/</a>.





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Date: 31/01/2020 8 / 19



## 4.2 Deliverables and Milestones

The project success will be evaluated and measured by the punctual achievement of the following 28 milestones:

Milestone	Milestone title	WP	Lead	Due Date (in
number	whiestone true	number	beneficiary	months)
MS1	Kick Off Meeting	1-6	DESY	1
MS2	Management Structure Implemented	1-6	DESY	2
MS18	Website	6	DLS	3
MS19	Social Media Strategy	6	DLS	3
MS3	Report on Quality Assurance, Risks and Contingency Plan	1-6	DESY	4
MS4	General Architecture Ready	2, 3, 4	DESY	6
MS25	Collaboration Network of communicators in place with regular updates	6	DLS	6
MS28	Infographic and KPI presentation	6	DLS	6
MS27	Standard ExPaNDS information sheet	6	DLS	8
MS22	AAAS & ESOFAttendance	6	DLS	10
MS5	First all-hands meeting organised	1-6	DESY	12
MS10	Production of draft FAIR Data Framework	2, 3, 4, 5	UKRI	12
MS20	Vision and Roadmap documents	6	DLS	12
MS21	Reference from community websites	6	DLS	12
MS6	Successful completion of mid term review	1	DESY	18
MS7	Second all-hands meeting organised	1-6	DESY	20
MS23	AAAS & ESOFAttendance	6	DLS	22
MS12	Meta data catalogue release	3	PSI	24
MS14	Analysis Services Prototypes	4	DESY	24
MS16	First (pilot) national training event organised and performed	5	SOLEIL	24
MS29	Taxonomy Strategy	6	DLS	24
MS8	Third all-hands meeting organised	1-6	DESY	30
MS13	Meta data catalogue as EOSC service	3	UKRI	30
MS17	Training websites and e-platforms online available	5	SOLEIL	32
MS11	Production of final FAIR Data Framework	2, 3, 4, 5	UKRI	34
MS15	Analysis Services for EOSC	4	DESY	34
MS24	AAAS & ESOFAttendance	6	DLS	34
MS26	Dedicated European User Meeting	6	DLS	35
MS9	Successful completion of final review	1	DESY	36

The following table indicates all deliverables that will be provided by each WP, monitored and finally evaluated by the PC during the entire course of the ExPaNDS project.

Number	Title	WP	WP Lead	Туре
D1.1	Human Resources Allocation	1	DESY	Report
D1.2	Project Quality Assurance Plan & Progress monitoring Plan	1	DESY	Report
D1.3	Risk Analysis and contingency Plan	1	DESY	Report
D1.4	Risk Analysis and contingency Plan (II)	1	DESY	Report
D1.5	Communication Plan	1	DESY	Report
D1.6	General Architecture in relation to the EOSC services	1	DESY	Report
D1.7	Sustainability policy report	1	PSI	Report





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Date: 31/01/2020 9 / 19

# ExPaNDS

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D1.10         Data Management Plan (DMP)         1         DESY DESY         Report           D1.11         Collaboration Agreement(s)         1         DESY         Report           D2.1         Draft extended data policy framework for Photon and Neutron RIS         2         UKRI         Report           D2.2         Draft recommendations for FAIR Photon and Neutron RIS         2         UKRI         Report           D2.3         Final data policy framework for Photon and Neutron RIS         2         UKRI         Report           D2.4         DMPs for Photon and Neutron RIS         2         UKRI         Report           D2.5         Advanced infrastructure for PIDs in Photon and Neutron RIS         2         UKRI         Report           D2.5         Self-evaluation Photon and Neutron RIS for FAIR data certification         2         UKRI         Report           D2.6         Self-evaluation Photon and Neutron RIS         2         UKRI         Report           D2.7         Final recommendations for FAIR Photon and Neutron         2         UKRI         Report           D2.7         Final recommendations for FAIR Photon and Neutron         2         UKRI         Report           D2.7         Final recommendations for FAIR Photon and Neutron RIS         2         UKRI         Repor	D1.8	Periodic Progress Report	1	DESY	Report
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Date: 31/01/2020 10 / 19

# ExPaNDS

Number	Title	WP	WP Lead	Туре
D5.4	Demonstrator for using e-learning platforms	5	SOLEIL	Demonstrator
D5.5	Dedicated websites and e-platforms with teaching material	5	SOLEIL	Report
D5.6	Report on lessons learned and future prospects for adopting best practices	5	SOLEIL	Report
D6.1	Communication and Dissemination Plan	6	Diamond	Report
D6.2	Project Website	6	Diamond	Websites, patent filling, etc.
D6.3	Social Media Strategy	6	Diamond	Demonstrator
D6.4	Vision and roadmap documents for key audiences	6	Diamond	Report
D6.5	ExPaNDS representation material for relevant large international conferences	6	Diamond	Other
D6.6	ExPaNDS representation material for relevant large international conferences (II)	6	Diamond	Other
D6.7	ExPaNDS representation material for relevant large international conferences (III)	6	Diamond	Other
D6.8	ExPaNDS presentation for conferences	6	Diamond	Other
D6.9	ExPaNDS presentation for conferences (II)	6	Diamond	Other
D6.10	ExPaNDS presentation for conferences (III)	6	Diamond	Other
D6.11	ExPaNDS presentation for conferences (IV)	6	Diamond	Other
D6.12	ExPaNDS presentation for conferences (V)	6	Diamond	Other
D6.13	ExPaNDS presentation for conferences (VI)	6	Diamond	Other
D6.14	Engage science communicators based at PAN RIs	6	Diamond	Other
D6.15	Dedicated European user meeting focused on ExPaNDS	6	Diamond	Other
D6.16	Dedicated European user meeting focused on ExPaNDS (II)	6	Diamond	Other
D6.17	Standard information sheet on ExPaNDS and the benefits of Open Data for RI users	6	Diamond	Report
D6.18	Infographic of metrics and KPI linked to WP2, WP3 and WP4	6	Diamond	Websites, patent filling, etc.
D6.19	Assistance to the development of the taxonomy strategy for the relevant data catalogues	6	Diamond	Other
D6.20	Assistance to the development of the taxonomy strategy for the relevant data catalogues (II)	6	Diamond	Other
D7.1	POPD – Requirement No. 1	7	DESY	Ethics



Date: 31/01/2020 11/19



## 4.3 Deadline Compliance

To ensure the submission of high-quality deliverables according to the contractual deadlines, a Quality Assurance Procedure (QAP) should to be implemented. The Project Coordinator (PC) has the authority to enforce this procedure, which he/she must initiate and control throughout the duration of the process.

The **delivery date** corresponds to the last business day of the delivery month. The delivery date is the submission date.

To implement effective quality delivery, the QAP needs to start in due time to ensure punctual submission to the EU. According to the deliverable, the PC will assess the more appropriate implementation schedule

#### Step 1:

The PC, with agreement to the WP Leader, sends a message (email) to the mailing list with the following information:

- the deliverable title;
- the deliverable name;
- the deliverable template;
- the person in charge of the deliverable (coordinating author);
- the date of submission.

#### Step 2:

The coordinating author submits the deliverable to the WP Leader. The latter is responsible both of the form and of the content of the deliverable. He/She should communicate directly to the author the required changes within one week. All messages about the deliverable should be addressed (in copy) to the mailing list.

#### Step 3:

The coordinating author has one week to make the required changes and to check whether all formal requirements are met.

#### Step 4:

The coordinating author submits the final version of the deliverable to the Project Management for the last revision and approval procedures within one week.

#### Step 5:

Once the deliverable is approved by the project management, its final version is referenced and filed on the ExPaNDS intranet site as well as in the appropriate community on Zenodo. It will





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

Date: 31/01/2020 12 / 19



then be published onto an appropriate section of the <a href="https://expands.eu/">https://expands.eu/</a> website and submitted to the EU portal.

SOFTWARE and other IT-related material will be published as a snapshot from GitHub repositories into the Zenodo ExPaNDS community.

## 4.4 Project Meeting Minutes

It is the responsibility of WP1 Project Management to keep a record of all meetings. Meeting minutes will be shared with all members (the minutes will include a list of common decisions and a task schedule that partners should be able to check anytime).

## 5. Project Objectives and Key Performance Indicators (KPIs)

KPIs will provide a measurement of the impact and success of the project against its objectives and with regard to how frequently services have been accessed and used, and the quantity of new data that has been uploaded.

ExPaNDS will provide a series of new opportunities where users will have remote access to the petabytes of open, raw data from previous research carried out at other RIs; it is not yet possible to gauge the number of users who will do this at present as there is no service to compare this with, although the enthusiasm for these services can be seen from the number of letters of support ExPaNDS has received; thus it is expected levels of users will be high and the resulting discoveries to provide significant advances in the world of science and technology.

Future projects will be able to benefit from the figures resulting from ExPaNDS since this will provide benchmark figures from which to judge future achievements.

During the project's kick-off meeting in September 2019, the KPIs described in the following table were discussed and agreed upon by all consortia members.





Date: 31/01/2020 13 / 19

# ExPaNDS

KPI	Description	Collection
Take-up in provisioning of ExPaNDS services by national PaN RIs in support of their science programme	Count number of national PaN RIs that provide data catalogue services to be integrated into the EOSC	Monitor the number of services available over time to measure take-up rate
ExPaNDS PaN datasets linked to peer review publications	Count how many such publications are linked to ExPaNDS datasets through their Digital Object Identifiers (DOIs)	Statistics of Peer-review publications linked to PaN user communities by key subject areas or research techniques
ExPaNDS data DOIs per PaN RI	Count how many data DOIs are issued by PaN each RI	Information will be available in PaN the relevant repositories and catalogues of each RI
Classification of PaN data sets and publications	Adoption of taxonomy and ontology requirements from ExPaNDS onto PaN data sets	Aggregated ExPaNDS data catalogue
PaN data analysis software services, Technology Readiness Level (TRL)	Monitor the ExPaNDS component of EOSC services catalogue and carry out periodic assessment of the TRL of PaN data analysis services	Periodic assessment of the TRL of PaN data analysis services
Effectiveness of ExPaNDS communications	Count the number of publications, posters and conference papers	Monitor and record all communication activities
Successful integration of national PaN RIs data catalogues into the EOSC	Count the number of PaN users accessing ExPaNDS data catalogue services through the EOSC	Measured through the EOSC monitoring and accounting
Successful integration of national PaN RIs data analysis services into the EOSC	Count the number of users processing PaN processing data through at the EOSC	Measured through use of EOSC monitoring and accounting
Successful engagement with PaN user communities within training, workshops and outreach events	Count the number of attendees at ExPaNDS training, workshops and out-reach events	Part of planning, managing and review event to ensure accurate capture of information on attendees. Publish as document
Engagement and communication with the governing bodies of the EOSC	Record level of participation in to EOSC working groups and contribution to EOSC governance.	Through attend and other communication of EOSC meetings and forums.



Date: 31/01/2020 14 / 19



The table below assigns KPI to the objectives of ExPaNDS.

Objective 1.	To deliver the EOSC to the wide variety of PaN users
Description	The EOSC offers an opportunity to improve the availability and effectiveness of data services for users to deliver their science. ExPaNDS aims to develop and deliver capability within the EOSC, which can be utilised across the user base.
ExPaNDS action	This is tackled across ExPaNDS by enabling data sharing that complies with FAIR data practises within WP2, delivering data derived from research at RIs within the EOSC in WP3 and delivering data services in WP4.
KPI	Scientific applications across the RIs science programme using the EOSC will be monitored through effective metrics.
Objective 2	To enable FAIR scientific data at European national RIs
Description	Data sharing within the EOSC by national RIs requires the enabling and adoption of FAIR data principles and practices within RIs, for managing and publishing data within the EOSC. A FAIR data framework of policies, practices and guidelines tailored to the PaN domain will be developed in consultation with national RIs and their user communities which they in turn will adopt.
ExPaNDS action	A FAIR data framework will be developed within WP2 and adopted and promoted in WP3 and WP5.
KPI	FAIR Data evaluation metrics of national RIs against FAIR data certification schemes will be developed.
Objective 3	To make national RI data accessible to user communities via the EOSC
Description	National RI FAIR data will be made accessible and shareable across wide user communities by ensure RI's data catalogues conform to common standards and APIs and made available within the core EOSC Portal and data search services. This will make data more accessible to existing and potential new user communities, offering new opportunities for more effective data exploitation and reuse, and provide innovative data and catalogue services for the PaN community and beyond.
ExPaNDS action	Data catalogues will be harmonised and made available to the EOSC within WP3.
KPI	Successful integration of RIs data catalogues into the EOSC will be measured.
Objective 4	To enrich the set of data services available in the EOSC with services from national RIs
Description	National RI FAIR data processing and analysis services targeted at specific user communities will be made available and shared across wide user communities by ensuring RI's data services conform to common standards and APIs and will be made available within the EOSC Portal services. This will make services more accessible to existing and potential new user communities, allowing access to the tailored, scalable services to a wider community, offering new opportunities for more effective data analysis.
ExPaNDS action	Data services will be harmonised and made available to the EOSC within WP4.
КРІ	The successful integration of RI's data services targeted at specific communities into the EOSC will be measured.



Date: 31/01/2020 15 / 19



Objective 5	To raise the level of awareness and competence in FAIR data practices within user communities
Description	FAIR data publication, data sharing and the potential value of sharing services and resources within the EOSC are not familiar to the wider user community served by national RIs. ExPaNDS seeks to raise the awareness of the potential benefits of FAIR data sharing within the EOSC by engaging with different stakeholder communities, particularly user groups. This will offer advocacy, guidance and training to raise the level of awareness and competency of FAIR data practices and use of shared services within the EOSC.
ExPaNDS action	Training and outreach programmes in WP5 and WP6 will direct a programme targeted at users groups and other stakeholders.
KPI	Successful engagement with user communities within training workshops and outreach events will be evaluated.
_	To engage with the EOSC programme to empower national RI user communities and to maintain sustainability
Description	In order to fully realise the potential gains from FAIR data sharing within the EOSC, the national RI community needs to engage with the broader EOSC programme to understand the potential synergies with activities across the EOSC, deliver their benefits back to the national RI communities, and to feedback experiences and requirements to influence the further development of the EOSC. ExPaNDS will participate in the emerging governance structures of the EOSC (e.g. Executive, Stakeholder forums, technical Working groups) to ensure it is represented within the evolution of the EOSC. Further, ExPaNDS will participate in the work undertaken within a wide variety of EOSC activities.
ExPaNDS action	WP1 will closely engage with EOSC governance structures to ensure representation and sustainability for the national RIs, and will have direct involvement with other EOSC stakeholders in the EOSC Liaison Group. Throughout the ExPaNDS programme of work the project will liaise with other EOSC projects and activities.
KPI	Successful engagement with the governing bodies of the EOSC will be measured.

## 6. Gender Equality in the ExPaNDS Project

All ExPaNDS consortium members fully subscribe to the goals in Horizon 2020 in support of equal gender opportunities. Integrating the gender dimension in research and innovation (R&I) content, helps improve the scientific quality and societal relevance of the produced knowledge, technology and/or innovation.

Reflecting the present situation in the natural sciences community, the consortium does not currently have an equal gender balance across its membership. For this reason, one of the aims of the ExPaNDS project is to strive for gender balance in research in all positions and beyond by paying special attention to this issue in all public material as well as education and training programs. Gender-balanced research teams, stakeholder groups or project consortia may serve as examples stimulating the effort to achieve gender balance in other communities.





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

Date: 31/01/2020 16 / 19



This commitment is expressed through equal opportunities in all job advertisements related to ExPaNDS. Moreover, for all recruitment to groups where one gender constitutes less than 40% of the practitioners, the project will hire a person from the underrepresented group if that person is ranked equal on all other parameters to a person from the majority group.

Three Work Packages are led and two co-led by women, this ensures a gender-balanced environment in decision-making and coordination. Through WP6, relating to outreach, the consortium will ensure gender balance is achieved in all training, communication and outreach materials. This is also important in communicating to underrepresented groups that a successful and positive career is attainable within a STEM environment.

The consortium members will also actively expose and promote the women in the project by adopting the "Women in Science" activity from NMI3 (<a href="https://nmi3.eu/news-and-media/women-in-science.html">https://nmi3.eu/news-and-media/women-in-science.html</a>), where the women involved act as positive role models for other women ensuring that they see a positive and valuable career path, thus attracting female applications to the project.

Research highlights and outstanding achievements by users presented on the ExPaNDS website and in social media will be selected with particular attention to a balanced share of principal investigators of both genders. Furthermore, opportunities to present female junior researchers as role models will be explored. Social Media will also highlight existing initiatives, like "Girls'Day" in Germany and "Zukunftstag" in Switzerland as a way to promote young women's presence in the STEM disciplines.

The Project Management will regularly assess the gender balance in recruitment and promotion procedures, as well as in access to, and take-up of, staff development and training measures.

The Project Management will ensure that all professionals involved in training and communication activities is aware of potential gender differences in learning strategies and perceived self-efficacy. The measures adopted ideally build on research, innovative approaches and best-practice examples.

## 7. Progress Monitoring Plan

## 7.1 Main activities and related achievement per year

The achievement of each WP activity and deliverable (see chapter 4.2) will be closely monitored by the Work Package Leader (WPL), who will ensure that the WP delivers according to the project schedule. The PC, together with the WP1 project manager, will also closely monitor all WP activities and will intervene in case of unpunctual or unsuccessful delivery.

As formal progress monitoring, two Periodic Progress reports are delivered to the EU. They occur two times during the project, the first covering the first half (M1 to M18), the second the second half (M19 to M36).





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

Date: 31/01/2020 17 / 19



#### Their content is both technical:

- explanation of the work carried out,
- overview of the progress,
- dissemination and communication activities,
- a summary for publication explaining to a broad public the project, its goals and achievements
- answers to the questionnaires about gender equality and open data,

#### and financial:

- individual financial statement,
- explanation of the use of resources.

The PC is responsible for the technical report and the overall financial report but each partner has to fill out the financial report for its organisation in the EU portal.

To ensure a smooth reporting period the following organisation is put into place:

## Step 1: Day 1 of the reporting period

The PC sends a message (email) to all ExPaNDS partners announcing the opening of the reporting period and the deadlines for submission (see table below).

## Step 2: Day 30 of the reporting period

All WP leaders send their technical report and all partners send their financial report to the PC. A consolidation period of 30 days then follows.

## Step 3: Day 60 of the reporting period

All reports are submitted to the EU portal.





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

Date: 31/01/2020 18 / 19



The reports dates for ExPaNDS are the following:

Deadline		Date
Start of interim report #1	T1	01/06/2020
End of interim report #1	T1+30 days	01/07/2020
End of ExPaNDS period #1	T2	28/02/2021
Start of EU periodic report #1 (EU portal open)	-	01/03/2021
Deadline for report to the PC	T2+30 days	31/03/2021
Deadline for report to the EU	T2+60 days	29/04/2021
Start of interim report #2	Т3	01/11/2021
End of interim report #2	T3+30 days	31/11/2021
End of ExPaNDS period #2 – end of project	T4	31/08/2022
Start of EU periodic report #2 (EU portal open)	-	01/09/2022
Deadline for report to the PC	T4+30 days	30/09/2022
Deadline for report to the EU	T4+60 days	30/10/2022

## 7.2 Progress achieved on KPIs

Key Performance Indicators describe how well a project is achieving its objectives and play a key role in the progress monitoring process. This indispensable management tool allows enabling evidence-based decision-making, and aiding in the development of future strategies.

The KPIs described in chapter 5 will be used throughout the course of the ExPaNDS project to punctually monitor and evaluate the progressive success.

## 7.3 Monitoring the risks

The task within a successful Quality Assurance Plan is to establish and monitoring the risks and to develop contingency plans. As stated in D1.3 Risk Analysis and Contingency Plan, risk monitoring and management is an on-going activity, which will be performed throughout the life of the ExPaNDS project.





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Date: 31/01/2020 19 / 19