POLARIN

POLAR RESEARCH INFRASTRUCTURE NETWORK

Deliverable 9.3. Quality Assurance Plan, including guidelines, best practise, and project handbook

V1, 29.05.2024

www.eu-polarin.eu

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POLARIN: POLAR RESEARCH INFRASTRUCTURE NETWORK

Funding programme: Horizon Europe

Grant Agreement No.: 101130949

Project Start Date: 01/03/2024

Duration: 60 months

Coordinator: Alfred Wegener Institute, Germany

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SUMMARY

The purpose of this document is to define a consistent set of working procedures, processes and guidelines to ensure quality standards of the project outcomes. The aim is:

- To manage the interaction between the beneficiaries during the project life
- To check the project progress on a regular basis
- To set editorial standards for project document contents
- To detail how and when the project will report to the European Commission
- To ensure that potential risks are assessed and addressed in time.

This document will also serve as a guide for the project coordinator, to ensure that quality. reviews will occur at appropriate points in the project, and as a reference for all project partners, to understand their responsibilities and roles, regarding the project deliverables and outcomes.

The document is split in 2 parts:

1) Project Handbook

The Project Handbook offers guidelines for the members of the POLARIN project. It covers the most important aspects of the project including the management structures, project reporting and working practices. Some of these aspects are only touched upon in this document, as they are or will be laid out more formally in the Grant Agreement, Consortium Agreement and the Data Management Plan.

The *Project Handbook* becomes the basis for managing the project throughout its lifecycle and is an important point of reference for all project members and stakeholders. The *Project Handbook* is kept up to date throughout the life of the project.

2) Quality assurance plan

The Quality Assurance Plan ensures that the project delivers high quality outputs. The aim is to describe the mechanisms that will be used throughout the project to ensure the quality level of the project deliverables and the project outcomes.

1. Project Handbook

1.1. Short facts about POLARIN

Acronym: POLARIN

Grant Agreement ID: 101130949

Title of the Project: POLARIN: Polar Research Infrastructure Network

Starting date / End date: 1st March 2024 until 28th February 2029

Project website: www.eu-polarin.eu

Cordis website project Fact Sheet: https://cordis.europa.eu/project/id/101130949/en

EU contribution: € 14 588 114,00

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Project Manager (PM):   Verónica Willmott (veronica.willmott@awi.de)

Grant Manager: Martina Schrage (martina.schrage@awi.de)

Executive Agency Scientific officer   Pierre Quertermont

1.2. Legal documents

1.2.1. Grant Agreement

By signing the Agreement and the accession forms, the beneficiaries accept the grant and agree to implement the action under their own responsibility and in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

The Agreement is composed of:

> Preamble
> Terms and Conditions (including Data Sheet)
> Annex 1 Description of the action1
> Annex 2 Estimated budget for the action
> Annex 2a Additional information on unit costs and contributions (if applicable)
> Annex 3 Accession forms (if applicable)2
> Annex 3a Declaration on joint and several liability of affiliated entities (if applicable)3
> Annex 4 Model for the financial statements
> Annex 5 Specific rules

1.2.2. Consortium Agreement

The Consortium agreement is based upon Regulation (EU) No 2021/695 of the European Parliament and of the Council of 28 April 2021 establishing Horizon Europe – the Framework Programme for Research and Innovation (2021-2027), laying down its rules for participation and dissemination(hereinafter referred to as "Horizon Europe Regulation"), and on the European Commission's General Model Grant Agreement and its Annexes, and is made on 1st March 2024 (Project start date).

Both documents are available in the POLARIN website intranet section:
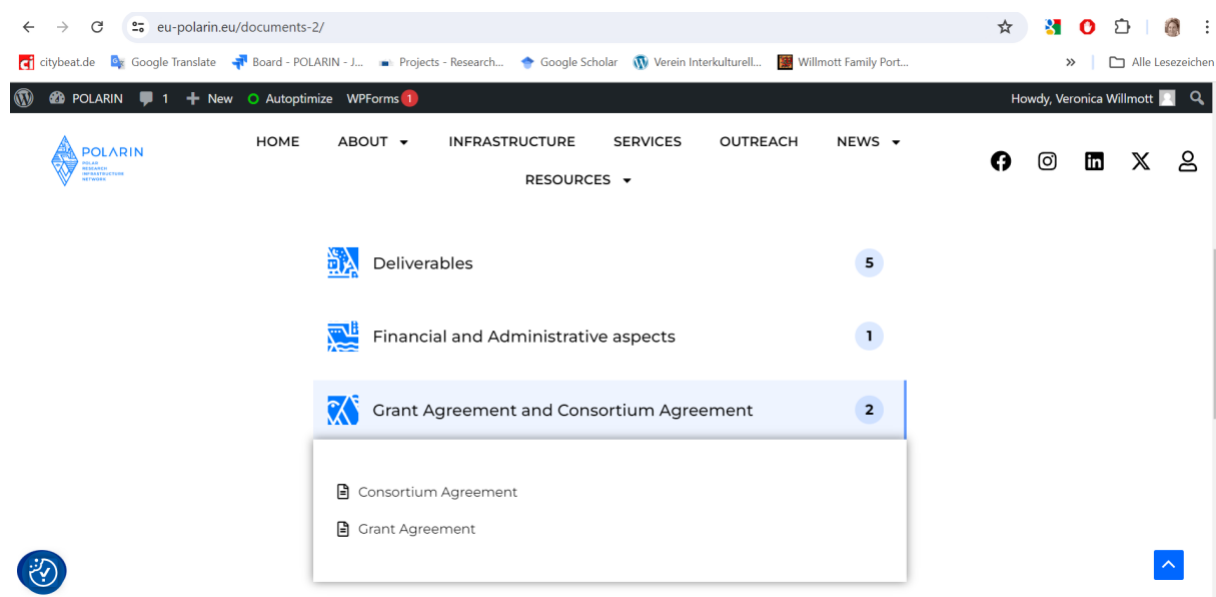
1.3. Project summary

The polar regions play a key role in the Earth's system. They are essential for our climate and are sentinels of climate change, human expansion, and the hunt of new resources. The polar regions are losing ice, and their oceans and land are changing rapidly. The consequences of this polar transition extend to the whole planet and are affecting people in multiple ways. Evidence-based policy recommendations are needed, but the polar regions are difficult to reach, and research infrastructures able to operate in these regions are scarce. To understand and predict key processes in the polar regions and provide evidence-based information, the polar research community needs access to world-class research infrastructure operating in these regions.

POLARIN is an international network of polar research infrastructures and their services, aiming at addressing the scientific challenges of the polar regions. The network includes a wide array of complementary and interdisciplinary top level research infrastructures: Arctic and Antarctic research stations, research vessels and icebreakers operating at both poles, observatories, data infrastructures and ice and sediment core repositories. POLARIN will provide integrated, challenge-driven, and combined access to these infrastructures to facilitate interdisciplinary research on complex processes.

POLARIN will:

- Provide challenge-driven transnational access to a large portfolio of research infrastructures.
- Improve the access to data by improving data availability and interoperability between data infrastructures.
- Provide virtual access to data and data services.
- Provide data products for the scientific community and decision makers.
- Train the young generation of polar researchers in optimally exploiting the infrastructures for their research.
- Duly advertise the services offered by POLARIN and engage the infrastructure users to share their research outcomes with society.

1.4. Work Plan

1.4.1. Overall structure of the work plan
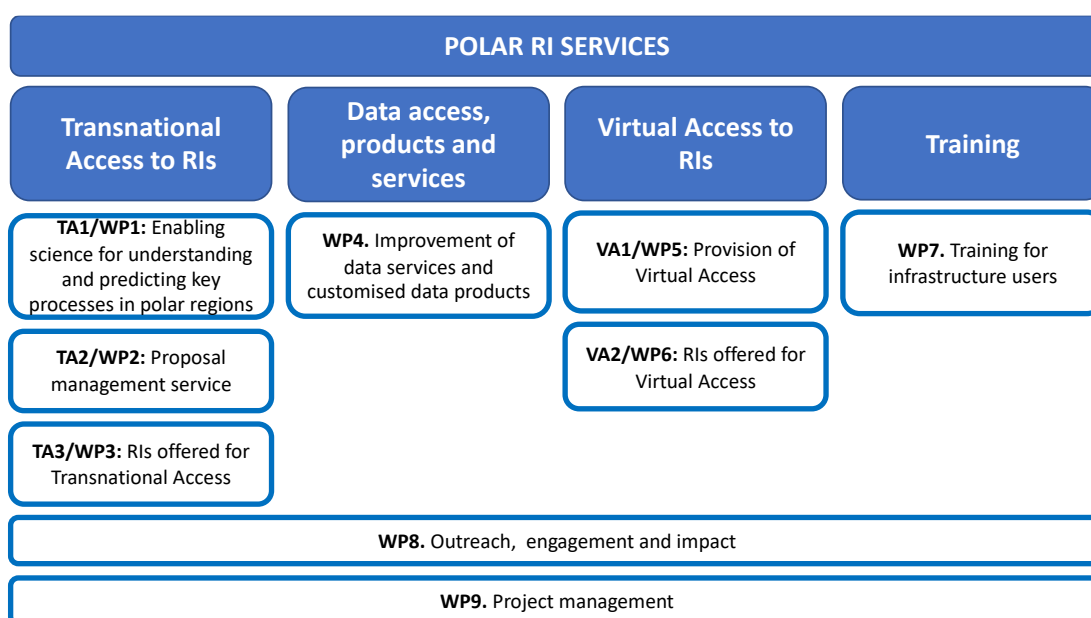
Figure 1: Overall structure of the work packages.

POLARIN will integrate polar RI capacities to facilitate science for understanding and predicting key processes in polar regions in the context of climate change, to enhance the society's problem-solving capacity and to support evidence-based policy making. The services offered by POLARIN are:

1. Challenge driven TA (in person and remote) to selected polar RIs of European interest,
2. Data access, data products and data services
3. VA to multidisciplinary polar data
4. Training for infrastructure users

Table 1: List of work packages

WP No	Work Package Title	Lead Partici-pant No	Lead Participant Short Name	Person-Months	Start Month	End month
1	Enabling science for understanding and predicting key processes in polar regions	9	CNRS	74	1	58
2	Proposal management service	2 & 4	UOULU & ULUND	108	1	60
3	RIs offered for Transnational Access	1 & 17	NASC & AWI	0	1	60
4	Improvement of data services and customised data products	5 & 12	CNR & ETT	49	1	60
5	Provision of Virtual Access	15	SIOS	52	1	60
6	RIs offered for Virtual Access	1 & 17	NASC & AWI	113	1	60
7	Training for infrastructure users	6 & 10	OGS & UCPH	72	1	60
8	Outreach, engagement, and impact	11	EPB	49	1	60
9	Project management	1	AWI	99	1	60
Total person-months				616		

TA1/WP1 will establish the background of research challenges to ensure that access to POLARIN RIs contributes to the specific challenges identified by international organisations

and programmes such as ESA[1], SCAR[2], IASC[3], UNDOS, and past and ongoing EU Polar Cluster projects. This WP will oversee the scientific evaluation of proposals (by an external board) and will assess the contribution of the projects and the infrastructure capability towards addressing the challenges.

TA2/WP2 will implement an easy access portal (one-stop shop) to POLARIN RIs to allow researchers to apply for any (or a combination of several) RI(s) in support of excellent multidisciplinary research. For that, the INTERACCESS proposal management system developed and implemented in the EU-funded project INTERACT, will be modified to allow the management of multiple infrastructures that, due to their nature, require specific information in the application. Challenge-driven calls for proposals will be launched to invite researchers to apply for TA. This WP is the link between the scientific frame (challenges, evaluation in TA1/WP1) and the RI operators. It will perform the logistic evaluation of proposals recommended by TA1/WP1.

TA3/WP3 describes all infrastructures offered for TA (either in-person or remote), including their description of work, outreach to new users and review procedure.

WP4 is dedicated to improving the access to data, development of online services and data products. It will improve the accessibility and interoperability of the data management landscape and it will establish a hub to find data suiting the user's needs. This WP will also create data products from raw data to facilitate the consumption of data generated by the RIs.

VA1/WP5 will create a gate to the VA of data offered within POLARIN, periodically monitoring the access through an external assessment board.

VA2/WP6 describes all infrastructures offering VA of data, including their description of work and outreach to new users.

WP7 will implement training for infrastructure users in different formats. It will implement 1) online seminars for a broad audience on scientific tools and equipment, land and sea expedition planning, and safety and sustainability. 2) online training on data stewardship, and 3) an in-person safety training in compliance with the Polar Code, to ensure selected expedition leaders are trained to guide their team to survive at least 5 days in extreme conditions.

WP8 will support all services as the Outreach, Engagement, and Impact work package to ensure that the services offered by POLARIN reach and engage a large audience. It will create

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[1] European Space Agency, https://www.esa.int
[2] Scientific Committee on Antarctic, Research https://www.scar.org
[3] International Arctic Science Committee, https://iasc.info

the project website, regular newsletters and will advertise the opportunities opened by POLARIN. It will engage the community of users in an Ambassador programme and evaluate the communication and engagement activities and the impact of POLARIN on multiple stakeholders.

WP9 will ensure a smooth project management and implementation of the project. It will enable synergies across the consortium, managing the information and communication flow, and with other projects and entities such as the EU Polar Cluster and ESA. It will implement an Advisory Board with relevant stakeholders to enhance the connection with international partners and organisations as well as with other European initiatives and projects.

1.2.3. Gantt chart

The timeline spans M1 (March 2024) through M60 (February 2029), across calendar years 2024–2029.

Code	Description	Milestones & Deliverables (month)
WP1	**Understanding key processes in polar regions**	M1.1 (M7), M1.2 (M8), M1.3 (M18)
T1.1	Challenge driven call definition and integration	D1.1 (M6), D1.2 (M7), D1.4 (M9), D1.8 (M22), D1.11 (M33)
T1.2	Scientific evaluation	D1.3 (M7), D1.6 (M18), D1.9 (M30), D1.12 (M42)
T1.3	Optimising the scientific outcome of the access programme	D1.5 (M12), D1.7 (M20), D1.10 (M32), D1.13 (M58)
WP2	**TA Proposal management service**	M2.1 (M7), M2.2 (M10), M2.3 (M12), M2.4 (M24), M2.5 (M36)
T2.1	Integration of access procedures and call implementation	D2.5 (M36), D2.8 (M60)
T2.2	Logistic evaluation of proposals	D2.1 (M7), D2.3 (M21), D2.4 (M33), D2.6 (M45)
T2.3	Quality assurance and follow-up implementation	D2.2 (M19), D2.7 (M60)
WP3	**RIs offered for TA**	
	TA access	
WP4	**Improve data services and provide data products**	M4.1 (M12)
T4.1	Improving access to polar data	D4.1 (M6), D4.3 (M12), D4.7 (M15), D4.10 (M23), D4.11 (M24), D4.12 (M28)
T4.2	Improving polar data availability and interoperability	D4.4 (M12), D4.5 (M14), D4.6 (M15), D4.8 (M18)
T4.3	Data products, tools and data services	D4.2 (M10), D4.9 (M21), D4.13 (M33), D4.14 (M35), D4.15 (M56)
WP5	**Implementation of VA and improving online services**	M5.1 (M13), M5.2 (M18)
T5.1	Development of a virtual access portal	D5.1 (M12), D5.2 (M18)
T5.2	Monitoring and evaluation of the access	D5.3 (M24), D5.4 (M37), D5.5 (M56)
WP6	**RIs offerd for VA**	
	VA access	
WP7	**Training for infrastructure users**	M7.1 (M24), M7.2 (M30), M7.3 (M45)
T7.1	Training for ECRs and technical personnel	D7.3 (M23), D7.4 (M30)
T7.2	Training on data steawrdship	D7.1 (M13), D7.5 (M35), D7.6 (M57)
T7.3	Training for safe and sustainable polar expeditions	D7.2 (M14), D7.7 (M57)
WP8	**Outreach and engagement**	M8.1 (M9), M8.2 (M36)
T8.1	Visibility and communication of POLARIN	D8.1 (M2), D8.2 (M2), D8.3 (M3), D8.14 (M60)
T8.2	Engagement of service users and ambassadors	D8.4 (M5), D8.5 (M9), D8.7 (M37), D8.8 (M50), D8.10 (M58), D8.11 (M59), D8.12 (M60)
T8.3	Evaluation of communication and engagement activities	D8.6 (M24), D8.9 (M48), D8.13 (M60), D8.15 (M60)
WP9	**Project management**	M9.1 (M23)
T9.1	Contractual and financial management	
T9.2	Operational management	D9.1 (M2), D9.2 (M3), D9.3 (M4), D9.4 (M6), D9.5 (M14), D9.6 (M24), D9.7 (M37), D9.8 (M50), D9.9 (M54)
T9.3	Clustering with other initiatives	D9.10 (M59)

Legend: Active task | D Deliverables | M Milestones

1.5. Management structure
1.5.1. Project bodies description and responsibilities

POLARIN is a large project with 51 beneficiaries, six of them non-EU countries (USA, Canada, Chile, Ukraine, United Kingdom and Faroe Islands). It therefore requires close cooperation between many institutions and organisations on an international scale. Extensive managerial efforts are required to:

- Ensure that all beneficiaries perform the duties assigned in the Grant Agreement Annex I,
- Ensure that all deliverables/milestones/results are handed in in time and that each partner has sufficient resources,
- Detect and help to solve problems, which may arise due to insufficient communication between beneficiaries or for any other reason.

From a Quality Assurance (QA) point of view, it is important that the project management at all levels of the project (strategic, executive and operational), is high skilled and experienced in its duties. The following paragraph describes the responsibilities of each entity.

The responsibilities and composition of the different project governance bodies are described in detail in the POLARIN CA and the DoA. The following compilation in Table 2 is only a summary of the detailed description in these documents:
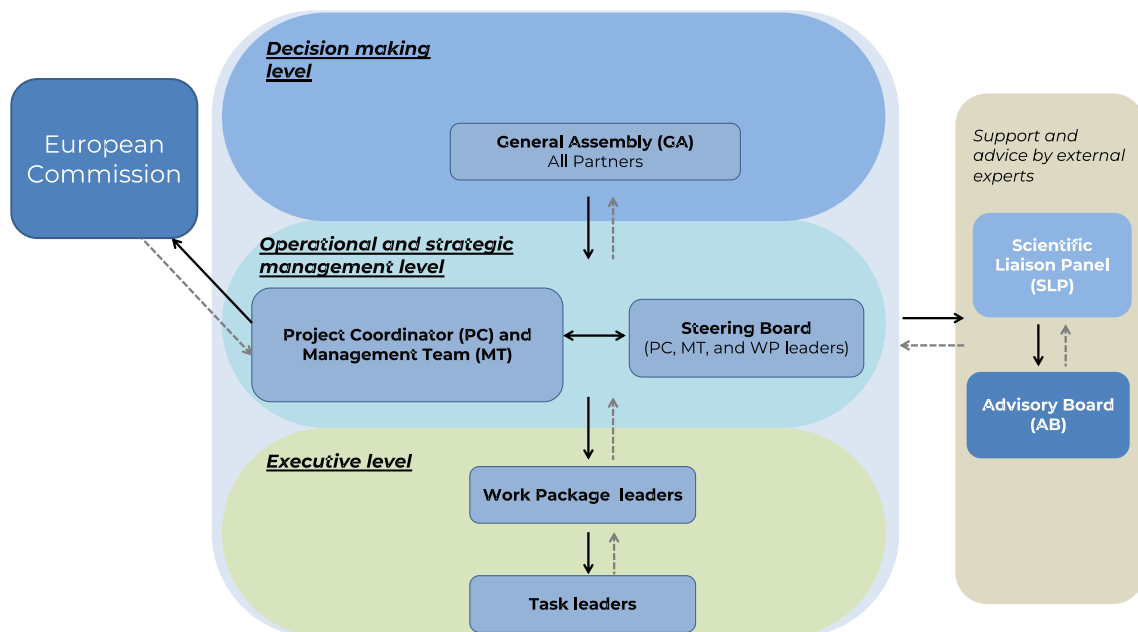

Figure 4. POLARIN general management structure.

Table 2: POLARIN governance bodies.

Body	Composition/Responsibilities	Decision approval	Planned meetings
Project Coordinator (PC) and Management Team (MT)	The PC of POLARIN is Dr. Nicole Biebow, Head of the International Cooperation Unit at AWI. She has extensive experience in the management and coordination of large international consortia. The PC will be supported by the Management Team (MT) consisting of four persons based at AWI. The MT is led by Dr. Verónica Willmott (AWI and is tasked by the PC with the day-to day management of the project. She will be assisted by the responsible EU grant manager at AWI (Maria Eden /Martina Schrage). The PC supported by the MT will manage the entire Consortium ensuring POLARIN's progress and the achievement of all results envisaged in this proposal. The PC will make all day-to-day decisions and will be the intermediary between the European Commission (EC) and the consortium in all matters. She will be the primary representative of the project in dealings with the EC, policy makers, the public media and other organisations. The PC will task the PM to initiate and organise the production of all reports requested by the EC.	By GA and EB	N/A
Steering Board (SB)	The role of the SB is to ensure the successful execution of the project. The SB will report to and will be accountable to the General Assembly. The SB will consist of the project coordinator (PC), the project manager (PM), the WP leaders and specific partners with major task responsibilities. The SB will oversee the delivery of the work plan, which includes the approval of project deliverables, and periodic and final reports to the EC. Chaired by the PC, the SB will meet at least quarterly, or more often as required, throughout the course of the project. Any member of the SB will have	By GA	Quarterly

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	the right to call for an extraordinary meeting by a written request. The Steering Board shall monitor the effective and efficient implementation of the Project.		
General Assembly (GA)	One senior representative from each partner of the project forms the GA, the ultimate decision-making body of the consortium. The GA meets at least once a year, over the duration of the project. The GA is chaired by the PC. One permanent representative of the Advisory Board will assist the GA in its decisions but has no own voting rights. Extraordinary meetings of the GA can be convened by a written request from the Steering Board or 1/3 of the members of the GA. The GA´s responsibilities include the strategic planning of the project ARICE, the approval of the project deliverables as defined in the Grant Agreement, the approval of periodic and final reports to the EC, the review of the project progress against milestones, and monitoring and implementing any changes necessary in the Consortium Agreement.	Self-decision making organisation	Every year
WP Leaders	While the MT has the overall responsibility for the execution of the work plan, the WP leaders, in conjunction with the appointed task leaders, conduct and manage the project activities. They collaborate closely, using a system of regular internal reporting. At least every third month, task leaders shall summarise their progress towards project deliverables to the WP Leaders, who will review the activity against the work plan and, following discussion with the task leaders, consider if interim targets or measures are required. These reviews will also serve as the basis of more	By SB	When needed

	formal reports for the SB, PC, GA and, ultimately, the European Commission.		
Task Leaders	The task leaders are responsible for the implementation of the individual tasks of the work plan and shall report the task progress to the WP leaders. Task leaders shall establish interactions between individual partners of the task by arranging individual task meetings (video-teleconferenced/web-based virtual meetings, if appropriate). They are also responsible for establishing and maintaining links to other tasks as necessary.	By WP leaders and SB	When needed

Each consortium body shall not deliberate and decide validly unless a quorum of two-third (75%) of its members are present or represented, as specified in the CA (article 6.2.3).

1.5.2. Work Package and Task management

The management of the WPs and a frequent interaction between WP and task leaders is one of the critical aspects of the success of POLARIN. The project is divided into 9 work packages including several tasks which are closely interrelated under a coordinated management scheme (WP)) (see table 3).

Table 3: POLARIN Work Packages and Tasks.

WP#	Work Packages	WP and Task Leads	WP Leads
TA1/WP1	Enabling science for understanding and predicting key processes in polar regions	WP Lead: CNRS	Marie-Noelle Houssais, CNRS
	Task 1.1. Challenge driven call definition and integration	CNRS, UGOT-UL	
	Task 1.2. Scientific evaluation	OGS/OUOLU	

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	Task 1.3 Optimising the scientific outcome of the access programme	AU	
TA2/WP2	TA Proposal management service	WP Lead: UOULU	Hannele Savela (OULU)
	Task 2.1. Integration of access procedures and call implementation	INPA, INKODE, UOULU, ULUND	
	Task 2.2 Logistic evaluation of proposals	UTM-CSIC, AWI	
	Task 3.3. Quality Assurance and follow-up implementation	UOULU, ULUND	
TA3/WP3	RIs offered for Transnational Access	WP lead: AWI	Verónica Willmott (AWI)
WP4	Improvement of data services and customised data products	WP lead: CNR	Antonio Novellino (ETT) and Vito Vitale (CNR)
	Task 4.1. Improving access to polar data	Task 4.1 ETT/CNR	
	Task 4.2. Improving polar data availability and interoperability	Task 4.2 CNR, AU	
	Task 4.3. Data products, tools and data services	Task 4.3 SIOS, NILU	
VA1/WP5	Provision of virtual access	WP lead: SIOS	Ilkka Matero (SIOS)
	Task 5.1 Development of a virtual access portal	SIOS, ETT, INKODE	
	Task 5.2 Monitoring and evaluation of the virtual access	CNR, SIOS, INPA	

VA2/WP6	RIs offered for Virtual Access	WP lead: NASC	Verónica Willmott (AWI) and Sofia Zherebchuk (NASC)
WP7	Services - Training for multiple audiences	WP Lead: UCPH	Michele Rebesco (OGS) and Morten Rasch (UCPH)
	Task 6.1. Training for ECRs and technical personnel to optimally use leading-edge RIs	UiT (APECS), UCPH	
	Task 6.2. Training on data stewardship	OGS, SIOS	
	Task 6.3. Training to perform safe and sustainable polar expeditions	FLPO, UCPH, AU	
WP8	Service: Outreach, Engagement and Impact	WP Lead: EPB	Eva Horovcakova (EPB)
	Task 8.1. Visibility and communication of POLARIN	EPB, INACH, IGOT-UL	
	Task 8.2. Engagement of Service Users and Ambassadors	EPB, IGOT-UL, INACH	
	Task 8.3. Evaluation of the communication and engagement activities and the impact of POLARIN	EPB, IGOT-UL	
WP9	Project Management	WP Lead AWI	Veronica Willmott (AWI)
	Task 9.1. Contractual and financial management	AWI	
	Task 9.2. Operational management	AWI	

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	Task 9.3. Clustering with other initiatives	ULUND, EPB, AWI	

1.5.3. External Boards

POLARIN is supported in its activities by the following external boards:

Advisory Board (AB)

An Advisory Board (AB) has been implemented at the onset of the project.

The AB provides independent advice to the GA and SB to support strategic decisions. It will also critically review the project progress to ensure its relevance and excellence and to provide important feedback to the POLARIN consortium. It will support the evaluation process for TA to make sure that the funding decisions are fair and transparent and that they follow the strategy of POLARIN.

The AB is fundamental in stimulating connections with international partners and organisations as well as with other European initiatives and projects.

AB Members

The AB is comprised of experts and representatives of related organisations (e.g. FARO/COMNAP, ESA) and policy making.

Name	Position	topic
Diego Fernández	Head of the Research and Development Section at the European Space Agency.	ESA, Earth Observation
Jennifer Mercer	Former Chair of the Forum of Arctic Research Operators (FARO).	FARO Arctic
Juanjo Danobeitia	Former General Director of EMSO	Infrastructures/observation
Juliet Hermes	Manager of the South African Antarctic Programme (SAPRI)	International cooperation

Nicolás Villacorta	Policy Officer for European Research Infrastructures at the Helmholtz Association in Brussels	EC actions

The chair of the AB will be elected from the board members and recommended to the GA for approval. Members of the AB are invited to meetings of the GA but will have no voting rights.

AB Meetings

Meetings of the AB will take place adjacent to the yearly GA to give the AB members the possibility to follow project progress most closely and to be directly involved in the discussions leading to strategic decisions. In between GAs, the AB will be invited to attend a progress report by the SB, to get a project update at least every 6 months. All AB members serve as volunteers for the full project duration.

Scientific Liaison Panel (SLP)

SLP members

The Scientific Liaison Panel (SLP)) (currently in recruitment) will be comprised of internationally recognised experts in the fields of polar research more of 50 % external to the POLARIN consortium. The members of the SLP are identified by TA1/WP1 and appointed by the GA. The role of the SLP is to assist POLARIN in the development of the scientific framework of the TA calls and the evaluation process. It will act as liaison of the POLARIN project and the scientific community.

The role of the SLP is to 1) advise POLARIN on the key research challenges, 2) assist POLARIN in the evaluation process, and 3) ensure the transparency in the evaluation process.

The chair of the SLP will be elected from the board and recommended to the GA for approval.

SLP Meetings

Meetings of the SLP will take place to perform a consensus evaluation of the proposals. Members of the SLP will be convened (per videoconference) to rank/approve the list of proposals recommended for fundings. The Char of the SLP will take part on the GA meetings and advise on scientific issues.

1.6. Communication

Effective communication is key for the successful delivery of the POLARIN project. Communication is required at a number of different levels as follows:

- Internal communication within the project consortium;
- Communication with the European Commission
- Communication with external audiences.

1.6.1. Communication within the Consortium

1.6.1.1. Meetings

Below is a list of the types of meetings planned in POLARIN; meetings will be held online and in-person.

General Assembly (GA) meetings: POLARIN will meet once a year throughout the duration of the project. The Project Coordinator is responsible for setting up the agenda together with the local organisers.

As a general rule, an in-person GA will take place in alternate years (years 1, 3 and 5), unless otherwise agreed. Attendance is mandatory for at least one member per institution partner.

#	Date/Period	Type of Meeting	Meeting Place
1	17/04/2024-19/04/2024	Kick-Off Meeting (KOM) and 1rst General Assembly	Bremerhaven, Germany
2	Spring 2025	2nd General Assembly	Tbd/Online
3	Spring 2026	3rd General Assembly	Tbd
4	Spring 2027	4th General Assembly	Tbd/online
5	Spring 2028	5th General Assembly	Tbd

Steering Board meetings

At least one meeting every 3 months. The meetings for 2024 have been planned as follows:

#	Date/Period	Meeting place	
1	4th March 2024	VC	

2	5th April 2024	VC	
3	17th June 2024	VC	
4	11th September 2024	VC	Joint meeting Steering Board and Advisory Board
5	December 2024	VC	

Review meetings: Two review meetings are expected during project lifetime: after M24, and after the final periodic report has been submitted. In the review meetings, the Project Coordinator and Work Package Leaders meet with the Research Executive Agency (REA) of the European Commission, and the reviewer appointed by the Commission, generally in Brussels or online. The Project Coordinator and Work Package Leaders present progress of the project and answer the questions of external evaluators and representatives from REA/EC.

Work Package and Task meetings: Work Package and Task leaders organise meetings at a frequency necessary for project implementation to follow planned progression. Partners involved in the Work Package and Tasks must ensure their representation at these meetings. It is recommended to have Work Package meetings at least once a month.

1.6.1.2. Communication tools

To facilitate internal communication within the consortium, several communication tools and channels are available:

Project Meetings (as listed above)

Intranet: the intranet repository https://eu-polarin.eu/intranet/ is active and constantly updated. To be granted access contact polarin_info@listserv.dfn.de or the Project Manager Veronica.Willmott@awi.de

News from the Coordination Team: At least every 6 months the Coordination Team will inform the Consortium of the project progress per email.

Mailing lists have been created to ease the communication between such a large consortium. To avoid spam, some mailing lists can only be used by list members.

The memberships for each of the lists will be placed in intranet. If there are participant changes during project implementation, it is the responsibility of each beneficiary to notify the Project Coordination Team to keep the contact file up to date.

You can contact the POLARIN Coordination Team at polarin_management@listserv.dfn.de or the Project Manager Veronica.Willmott@awi.de

1.6.2. Communication with the European Commission

In addition to scheduled deliverables and milestones, regular reporting will be made to the European Commission regarding the progress of the project. Between reporting periods, any queries to the European Commission can be made to the Project Officer in the Research Executive Agency (REA) assigned to POLARIN, via the Project Coordinator. In addition, any communication with the Directorate-General for Research and Innovation (DG RTD) should be channelled through the Project Coordinator only.

1.6.3. External Communication

External communication is communication aimed for audiences and parties beyond the consortium, including interested and relevant stakeholders for POLARIN. A project website (https://eu-polarin.eu) and social media channels Facebook, LinkedIn and X (formerly Twitter) have been created and will be used as channels for external communications. A YouTube channel will be opened to host videos generated by POLARIN (eg. general information video and training materials).

Communications materials

Several communication materials have been created for the project which can be found on the POLARIN intranet site. For now, these include several versions of the POLARIN logo, including animated versions, roll-up and brochure.

Acknowledgement of EU funding

Beneficiaries of EU funding must display the EU flag and funding statement ("Funded by the European Union" in all their communication and dissemination activities or major result results funded by the grant.

The EU flag and funding statement must be displayed in a way that is easily visible for the public and with sufficient prominence.

EU funding must moreover be acknowledged in all types of public outputs *(including patent applications, EU standardisation of results)*, media contacts and other public statements.

The EU flag and funding statement are available in the Grant Agreement and on the Europa website.

1.7.   Keeping records

Each partner must – for a period of five years after the payment of the final balance – keep records and other supporting documentation in order to prove the proper implementation of the project and the declared costs to be eligible (EC-GA Art. 18). They must make them available upon request or in the context of EC checks, reviews, audits or investigations.

− The documents must be the original documents. Digital and digitalised documents are accepted only, if this is applicable by national law.

− The partners must keep the records and documentation according to their usual cost accounting practices and internal control procedures. Costs declared for the EU project must be linked to the recorded amounts in the accounts and supporting documents.

Beneficiaries must keep records, originals and supporting documents for a period of up to five years.

Keeping records of:

(a) actual costs: adequate records and other supporting documentation to prove the costs declared, e.g. contracts, subcontracts, invoices and accounting records.

(b) unit costs: adequate records and other supporting documentation to prove the number of units declared. Beneficiaries do not need to identify the actual eligible costs covered or to keep or provide supporting documentation (such as accounting statements) to prove the amount per unit.

(c) Flat rate costs (lumps sums, etc.): adequate records and other supporting documentation to prove the eligibility of the costs to which the flat-rate is applied. The beneficiaries do not

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need to identify the costs covered or provide supporting documentation (such as accounting statements) to prove the amount declared at a flat rate.

If the audit shows ineligible costs, substantial errors, irregularities, or fraud or serious breach of obligations, it may lead to suspension, termination, cost rejection, grant reduction and recovery and, in very serious cases, to exclusion and/or financial penalties. In some cases, findings may result in the acceptance of additional costs (if the beneficiary declared them). Please make sure that you keep records for the different cost categories:

Direct personnel costs:

− proof of work: time records, e.g. signed monthly time sheets, absences might be cross-checked with Human Resources Department (template at sciebo\topAM\010 Templates)

− proof of employment: employment contracts (or appointing act)

− proof of payment: payroll, accounting documentation, calculation of hourly rate

Direct costs of subcontracting:

− proof of correct procurement procedure (purchase order/ tender)

− quotation showing the decision for best value for money or lowest price (three comparative offers)

− signed subcontracts (include acronym and GA number)

− evidence of payment (invoices, state of bank account)

− eligible is the price and related taxes (non-deducible VAT)

Other direct costs (travel costs and related subsistence allowances, costs for other goods and services)

− For other goods and services: evidence of payment (invoices, state of bank account) choice of best value for money or lowest price (three comparative offers) eligible is the price and related taxes (non-deducible VAT)

− For travel costs: agenda, signed attendance lists, supporting travel documents, boarding cards. [best practice: provide evidence for unexpected delays, additional tickets]

− For attending (external) conferences, workshops: evidence of active participation (programme, presentation, poster, etc.)

− For restaurant invoices: documentation of participants, signed attendance lists.

Equipment costs (low value assets or depreciation costs)

− payment documents (invoices, statement of bank account)

− documentation for depreciation rates and percentage of use of equipment in the project

− quotation showing the decision for best value for money or lowest price (three comparative offers)**.**

2. Quality Assurance Plan

This Quality Assurance Plan (QAP) outlines the processes, standards, and practices to ensure the highest quality of outputs and deliverables throughout the project lifecycle. It aligns with Horizon Europe's expectations for robust management and high-quality results in funded projects.

2.1. Quality Objectives

The primary objectives of this Quality Assurance Plan are to:

1. Ensure compliance with Horizon Europe guidelines and requirements.
2. Deliver high-quality outputs that meet project objectives and stakeholders' needs.
3. Maintain transparency and accountability across all project activities.
4. Foster continuous improvement and excellence.Click or tap here to enter text.

2.2. Quality Management Structure
2.2.1. Quality Assurance Team

A dedicated Quality Assurance (QA) team will oversee the implementation of this plan. The team will consist of:

- **Quality Assurance Manager (QAM):** Responsible for overall QA activities and reporting.
- **Work Package (WP) Leaders:** Responsible for ensuring quality within their respective work packages.
- **External Advisory Board (AB):** Provides independent oversight and guidance on quality matters.

2.2.2. Roles and Responsibilities

- **Project Coordinator:** Ensures overall project alignment with the QAP and Horizon Europe guidelines.
- **QA Manager:** Develops, implements, and updates the QAP; monitors compliance and quality of deliverables (role performed by the Project Manager).
- **WP Leaders:** Implement QA activities within their work packages, ensure compliance, and report on progress.
- **AB:** provides feedback, and ensures alignment with scientific, technical, and ethical standards.

2.3. Quality Standards and Processes

To ensure alignment between the project outputs and the project requirements, an approach to Quality Management has been defined. It consists of two main phases:

- Quality Planning
- Quality Control and Monitoring.

Overall, this will contribute to carry out activities according to proven methods, techniques and standards.

2.3.1. Quality Planning

Quality planning refers to all procedures and processes expected to be followed in preparing project deliverables and project activities. Quality planning also includes the provision of guidelines for the drafting of documents and the implementation of communication actions.

2.3.1.1. Templates

A set of templates have been provided and are available for download in the Intranet members area, including a deliverable template and general presentation template.
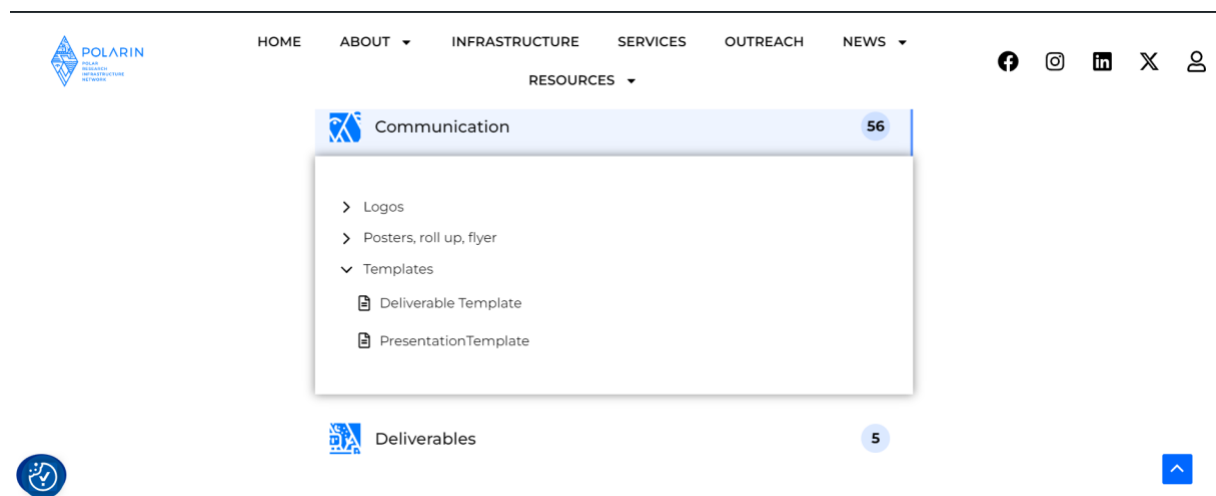
2.3.1.2. *Documentation and Reporting*

All project documents and reports will adhere to the Horizon Europe guidelines and the following standards:

- **Consistency:** Uniform format, style, and structure for all documents.
- **Clarity:** Clear and concise language to ensure understanding by all stakeholders.
- **Accuracy:** Precise and accurate data, findings, and references.

2.3.1.3. *Ethics and Data Protection*

The project will comply with all ethical standards and data protection regulations, including a **Data Management Plan (DMP), a** comprehensive plan for data collection, storage, and sharing, aligned with FAIR principles (Findable, Accessible, Interoperable, Reusable).

2.3.2. Quality control and monitoring

The focus of quality control and monitoring is on feedback and deviation management in the project. This entails the definition of an internal review process of deliverables and the monitoring of all communication activities, KPIs and milestones. In addition, three time-driven quality control measures are foreseen: the project periodic reporting, the project reviews and the internal reporting, which monitors both technical and financial status of the project.

2.3.2.1. *Deliverable Review Process*

Each deliverable will undergo a structured review process before submission:

1. **Internal Review:** Conducted by WP Leaders and QA Manager to ensure compliance with objectives and quality standards.
2. **Peer Review:** Conducted by project partners or designated reviewers to ensure technical and scientific accuracy.
3. **Steering Board Review:** The SB systematically reviews all deliverables before approval.

2.3.2.2. *Project reporting*

On behalf of the project consortium, the project coordinator submits all reports, payment requests, proof of deliverables and other documents through the grant management service.

2.3.2.3. Project Deliverables

A total of 71 deliverables must be provided by POLARIN according to the Grant Agreement (see table with details in Annex 1).

2.3.2.4. Periodic reports

The **periodic report** consists of two parts, the Technical Report and Financial Report.

The **Technical Report** is itself also divided in two parts, Parts A and B:

- Part A: contains the structured tables with project information (retrieved from the Grant Management System).
- Part B (the narrative part): mirrors the application form and requires the participants to report on differences *(delays, work not implemented, new subcontracts, budget overruns etc.)* It must be uploaded as PDF document.

The **Financial Report** consists of the structured individual and consolidated Financial Statements (retrieved from the Grant Management System). In addition, most programmes require either a detailed cost reporting table (Excel table) or the use of resources report (online wizard) and, for payments above a certain threshold, a certificate on the financial statements (CFS).

The technical report Part A and the financial report is generated automatically on the basis of the data in the Grant Management System; Part B needs to be prepared outside the tools (using the template downloaded from the system) and then uploaded as PDF (together with Annexes, if any).

All participants should contribute to the parts, but it is the Coordinator who will have to submit them as a single report.

Reporting Periods

Reporting Period No.	From Month	To Month	Duration	Start Date	End Date	Payment Type
1	1	18	18	01/03/2024 (00:00)	31/08/2025 (23:59)	Interim payment
2	19	42	24	01/09/2025 (00:00)	31/08/2027 (23:59)	Interim payment
3	43	60	18	01/09/2027 (00:00)	28/02/2029 (23:59)	Final payment

2.3.2.5.   Milestones

POLARIN has identified the following milestones that need to be achieved at specific due dates, ensuring the adequate progress of this project.

Milestone number	Milestone name	Related WP(s)	Due date (in month)	Means of verification
M1.1	Scientific evaluation procedure provided for INTERACCESS updates	TA1/WP1	M7	D1.4
M1.2	Initial definition of scientific priorities	TA1/WP1	M8	D1.3
M1.3	Scientific evaluation of first call	TA1/WP1	M18	D.1.6
M2.1	Logistic evaluation procedure provided for INTERACCESS updates	TA2/WP2	M7	D2.1
M2.2	Beta testing of INTERACCESS	TA2/WP2	M10	INTERACCESS portal up and running
M2.3	Launching of the first call for proposals	TA2/WP2	M12	Calls open on website
M2.4	Launching of the second call for proposals	TA2/WP2	M24	Calls open on website
M2.5	Launching of the third call for proposals	TA2/WP2	M36	Calls open on website
M4.1	POLARIN web data portal implemented	WP4	M12	D4.3
M5.1	Machine interfaces to catalogue established	VA1/WP5	M14	D5.1
M5.2	VA portal established	VA1/WP5	M18	D5.2

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M7.1	First guidelines on the handling of data collected on research expeditions published	WP7	M24	D7.1
M7.2	First training course for POLARIN TA-users on optimal use of POLARIN RI's accomplished	WP7	M30	Training course performed
M7.3	Field course on safe and sustainable polar expeditions accomplished	WP7	M45	Training course performed
M8.1	Introductory online seminar to POLARIN call 1	WP8	M10	Recordings of seminar
M8.2	Online photo exhibition on POLARIN website	WP8	M40	Compilation of photo exhibition
M9.1	Mid-term retreat and internal evaluation of POLARIN's achievements and progress	WP9	M26	D9.6

2.3.2.6. *Review meetings*

The EC is entitled to check, review, investigate and audit the proper implementation of the project and its compliance with the Grant Agreement. The reviews of the proper implementation of the action (including assessment of deliverables and reports) include technical reviews to guarantee the continued scientific or technological relevance of the project. Reviews refer mainly to the technical implementation of the project (scientific and technological relevance), but may also cover financial and legal aspects or compliance with other obligations under the EC-GA. The coordinator and project manager will inform the partners well in advance of these meetings and ask for support to prepare the technical review meetings.

2.4. Risk management

Potential risks to project quality will be identified at the project's inception and continuously throughout the project lifecycle.

A risk register will be maintained, and mitigation strategies will be developed for identified risks.

Critical risks for implementation

The following risks have been identified at the project conception. POLARIN will monitor any risk affecting the project, and the extent of the application of risk-mitigation measures.

Description of risk (indicate level of (i) likelihood, and (ii) severity: Low/Medium/High)	Work package(s) involved	Proposed risk-mitigation measures
A partner is not collaborating, leaves the consortium, or is unable to fulfil his task - **Low/Medium**	All WPs	Even though the risk of one partner not collaborating is very low, the organisations involved have the sufficient experience to overcome this and, in that case, an experienced alternative partner can take over.
Coordination and communication between the interlinked tasks are insufficient **– Low/Low**	All WPs	The Project Coordinator and Management Team will regularly monitor and coordinate interlinked activities.
Basic deliverables necessary to progress in following tasks are delivered late or incomplete - **Low**	All WPs	The management structure of the project is designed with several levels of responsibility and coordination to avoid this. The Management Team is experienced in managing large consortiums and will closely follow the work plan. The WP leaders and Task leaders will continuously monitor WP and Task progression until the deliverable submission. WP leaders will report to the Steering Board regularly to monitor the project progress.
Quality of deliverables is unsatisfying **– Low/high**	All WPs	A quality management routine will be implemented to ensure the structure and quality of deliverables. The Steering Board will review all deliverables before submission.

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TA cancellations due to "force majeure" or inaccessible working area – **Low/Medium**	TA2/WP2, TA3/WP3	The COVID-19 crisis has taught us that travel restrictions (associated with a pandemic in the recent case, but also due to other natural phenomena) can take place even at global scale. **The duration of this project will be set to five years** to ensure that the implementation of TA can take place as expected within the duration of the project. This will allow the infrastructures to reorganise their schedules in case of "force majeure" without major implications for the project.
Proposal submission platform not ready in time to integrate all infrastructures simultaneously – **Low/Medium**	TA2/WP2	The submission platform will be based on the INTERACCESS system developed by INTERACT to handle very large volumes of proposals. Its modification to allow the submission of proposals to very different RIs will start right at the beginning of the project to ensure it is ready in time.
Few applications are received to apply for POLARIN infrastructure access – **Low/Medium**	TA1/WP1, TA2/WP2 & WP8	POLARIN will put into force effective measures to reach the research community.
External reviewers are difficult to engage – **Medium/Medium**	TA1/WP1	This is a problem infrastructure projects face regularly. POLARIN will encourage researchers to review proposals by implementing a pool of reviewers and by providing certificates of contribution to project evaluations.

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ANNEX 1: List of deliverables

In order by Due Date, updated August 2024.

Work Package No	Deliverable Related No	Deliverable Name	Lead Beneficiary	Type	Dissemination Level	Due Date
WP8	D8.1	Implement POLARIN website and social media channels	IGOT UL	DEC	PU	30.04.24
WP8	D8.2	Brand Identity and guidelines package (logos, general lay-out etc.)	INACH	OTHER	PU	30.04.24
WP9	D9.1	Internal website of POLARIN implemented	AWI	DEC	SEN	30.04.24
WP8	D8.3	POLARIN promotional materials (press releases, promotion video, flyers, roll-ups etc.)	INACH	OTHER	PU	31.05.24
WP9	D9.2	Organisation and minutes of the first POLARIN GA (in-person)	AWI	R	SEN	31.05.24
WP8	D8.4	POLARIN Communication, dissemination, and engagement plan	EPB	R	PU	30.06.24
WP9	D9.3	Quality Assurance Plan, including guidelines, best practise, and project handbook	AWI	R	PU	30.06.24
WP1	D1.1	Implementation of the SLP with Terms of Reference	CNRS	R	PU	31.07.24
WP1	D1.2	Report on procedure for provision of TA	IGOT UL	R	PU	31.08.24

WP4	D4.1	Data Management Plan for generated and collected data incl. ethical guidelines for data and derived data products	ETT	DMP	PU	31.08.24
WP9	D9.4	Implementation of the project Advisory Board (AB) incl. Terms of Reference	AWI	OTHER	PU	31.08.24
WP1	D1.3	Description of the evaluation process, evaluation criteria, code of conduct, and guidelines and templates for external reviewers	OGS	R	PU	30.09.24
WP2	D2.1	Report on requisites for access and description of the logistic evaluation procedure	CSIC	R	PU	30.09.24
WP1	D1.4	Overview report of existing science priorities by major Arctic and Antarctic organisations and validation/calibration needs by in-situ observation, remote sensing and modelling communities	CNRS	R	PU	31.10.24
WP8	D8.5	Content Creation Guidelines (short video tutorials) for POLARIN service users to support outreach and engagement	EPB	DEC	PU	31.10.24
WP4	D4.2	POLARIN graphic products package for multiple audiences and gap analysis	AU	DEM	PU	31.12.24
WP1	D1.5	Polar Knowledge gaps and potential of POLARIN RIs in addressing them	AU	R	PU	28.02.25

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WP4	D4.3	POLARIN web portal	ETT	OTHER	PU	28.02.25
WP4	D4.4	Guidance on dataset granularity	CNR	R	PU	28.02.25
WP5	D5.1	A unified semantically consistent virtual data catalogue with machine interfaces	SIOS	OTHER	PU	28.02.25
WP4	D4.5	Use case documents for data discovery processes	ETT	R	PU	30.04.25
WP7	D7.1	Online material on data stewardship training	SIOS	DEC	PU	30.04.25
WP9	D9.5	Organisation and minutes of the second POLARIN GA (virtual)	AWI	R	SEN	30.04.25
WP4	D4.6	General guidance material on FAIR data	AU	R	PU	31.05.25
WP4	D4.7	Guidance material for research infrastructures	CNR	R	PU	31.05.25
WP7	D7.2	Training material for in-the-field course on polar expedition safety and sustainability	AWI	R	PU	31.05.25
WP3	D3.1	Synthetic report on TA provided to date	UOULU	R	PU	30.06.25
WP9	D9.6	Rreport on TA implemented to date	AWI	R	PU	30.06.25
WP9	D9.7	Budget allocations for TA to date (I)	AWI	R	PU	30.06.25

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WP1	D1.6	Selection report of the first call for proposals	OGS	R	PU	31.08.25
WP2	D2.2	Quality Assurance Programme report for access provision	UOULU	R	PU	31.08.25
WP4	D4.8	Dockerised open-source software components that cover architecture implementation requirements	CNR	OTHER	PU	31.08.25
WP5	D5.2	A web portal providing guidance documentation and a graphical user interface to the virtual data catalogue	INPA	OTHER	PU	31.08.25
WP9	D9.8	First Policy briefing	EPB	R	PU	31.08.25
WP2	D2.3	Logistic evaluation report of the first call	UOULU	R	PU	31.10.25
WP7	D7.3	Online training material on optimal use POLARIN RIs	UCPH	DEC	PU	31.01.26
WP4	D4.9	POLARIN Data services	SIOS	OTHER	PU	28.02.26
WP4	D4.10	Usability report of POLARIN data access hub and data services	ETT	R	PU	28.02.26
WP5	D5.3	VA Assessment Report (I)	CNR	R	PU	28.02.26
WP8	D8.6	Assessment of communications, outreach and engagement activities to date, and update of the Communication, dissemination, and engagement plan	EPB	R	PU	28.02.26

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WP9	D9.9	Organisation and minutes of the third POLARIN GA and mid-term retreat (inperson)	AWI	R	SEN	30.04.26
WP1	D1.7	Selection report of the second call for proposals	OGS	R	PU	31.08.26
WP7	D7.4	Package of short information material on optimal use of POLARIN RIs	AU	R	PU	31.08.26
WP2	D2.4	Logistic evaluation report of the second call	UOULU	R	PU	31.10.26
WP7	D7.5	Package of short information material on data stewardship	AU	R	PU	31.01.27
WP2	D2.5	Report on integrated access provision; planning and execution	ULUND	R	PU	28.02.27
WP8	D8.7	Online seminar of POLARIN service users' stories call 1	EPB	DEC	PU	28.02.27
WP9	D9.10	Organisation and minutes of the fourth POLARIN GA (virtual)	AWI	R	SEN	30.04.27
WP5	D5.4	VA Assessment Report (II)	CNR	R	PU	30.06.27
WP9	D9.11	Budget allocations for TA to date (II)	AWI	R	PU	30.06.27
WP1	D1.8	Selection report of the third call for proposals	UOULU	R	PU	31.08.27
WP9	D9.12	Second policy briefing	AWI	R	PU	31.08.27
WP2	D2.6	Logistic evaluation report of the third call	UOULU	R	PU	31.10.27

WP8	D8.8	Online seminar of POLARIN service users' call 2	EPB	DEC	PU	29.02.28
WP9	D9.13	Organisation and minutes of the final POLARIN GA (in-person)	AWI	R	SEN	30.04.28
WP7	D7.6	Assessment of the training on optimal use of POLARIN RI's and on data stewardship	OGS	R	PU	31.07.28
WP7	D7.7	Assessment report of the in-the-field course on polar safety and sustainability	UCPH	R	PU	31.07.28
WP5	D5.5	VA Assessment Report (III)	CNR	R	PU	30.09.28
WP9	D9.14	Report on the contribution of POLARIN to the EU Polar Cluster, international polar organisation, and the ESA – EC cooperation	EPB	R	PU	30.09.28
WP8	D8.9	Online Seminar of POLARIN service user stories call 3	EPB	DEC	PU	31.10.28
WP9	D9.15	Organisation and minutes of the POLARIN final conference	AWI	R	PU	30.11.28
WP1	D1.9	Synthesis report on the scientific input, significance, and preliminary results of Transnational access and funded projects	AU	R	PU	31.12.28
WP8	D8.10	"POLARIN Stories" a service users and ambassadors seminar series	EPB	R	PU	31.12.28

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WP9	D9.16	Budget allocations for TA to date (III)	AWI	R	PU	31.12.28
WP2	D2.7	Report on access provision (calls, volume, statistics) and lessons learned	UOULU	R	PU	28.02.29
WP2	D2.8	Report on plans forward for INTERACCESS	INKODE	R	PU	28.02.29
WP6	D6.1	Synthetic report on VA	CNR	R	PU	28.02.29
WP8	D8.11	Final report on POLARIN communications, outreach, and engagement activities, including POLARIN Ambassadors activities	EPB	R	PU	28.02.29
WP8	D8.12	Report on POLARIN publication repository	IGOT UL	R	PU	28.02.29
WP8	D8.13	Impact evaluation report	AWI	R	PU	28.02.29
WP9	D9.17	Third Policy briefing	EPB	R	PU	28.02.29