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NI4OS-Europe

National Initiatives for Open Science in Europe

NI4OS-Europe Governance structure model

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The NI4OS-Europe Consortium consists of:

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ATHENA RC	Beneficiary	Greece
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UCY	Beneficiary	Cyprus
IICT	Beneficiary	Bulgaria
SRCE	Beneficiary	Croatia
RBI	Beneficiary	Croatia
KIFU	Beneficiary	Hungary
DE	Beneficiary	Hungary
ICI BUCURESTI	Beneficiary	Romania
UEFISCDI	Beneficiary	Romania
ARNES	Beneficiary	Slovenia
UMUKM	Beneficiary	Slovenia
IPB	Beneficiary	Serbia
UOB	Beneficiary	Serbia
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References

- [1] Grant Agreement – AMD-857645-12
- [2] Consortium Agreement
- [3] Project NI4OS-Europe-857645 - Annex I - Description of the Action

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1. Introduction

On June 10th 2021 the first project review from European Commission took place and the overall assessment was that NI4OS-Europe has fully achieved its objectives and milestones for the period from September 1st 2019 until February 28th 2021. As stated in the report: "The project has an impressive inclusive governance structure, which proved to be extremely effective given that despite the many partners involved in the project, substantial diversity in the region, and global pandemic affecting the project, all milestones and deliverables have been achieved according to the plan. However, information about the governance and how decisions are made and potential conflicts resolved was up to now available only within the Consortium Agreement – document which is not widely read and accessible."

This current document under the title "Governance structure model" is an extra document derived from the European Commission (EC) recommendation about the *Project Governance Structure as Best Practice Example*, in order to provide a dedicated publicly available output where the governance model of the project is given as a best-case example for the community.

2. NI4OS-Europe official documents

2.1. Grant agreement

The NI4OS-Europe Grant Agreement sets out the rights and obligations and the terms and conditions applicable to the grant awarded to the beneficiaries for implementing the action entitled 'National Initiatives for Open Science in Europe' — 'NI4OS-Europe'. This document also includes information about the duration of the actions, budget, grant amount, eligibility of costs and third parties involvement in the project.

2.2. Consortium agreement

The NI4OS-Europe Consortium Agreement is based upon REGULATION (EU) No 1290/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 December 2013 laying down the rules for the participation and dissemination in "Horizon 2020 – the Framework Programme for Research and Innovation (2014-2020)" (hereinafter referred to as "the Rules"), and the European Commission Multi-beneficiary General Model Grant Agreement and its Annexes and it signed between the 22 beneficiaries / parties of the project. The purpose of Consortium Agreement is to specify with respect to the project the relationship among the parties, in particular concerning the organization of the work between the parties, the management of the project and the rights, obligations and liabilities of the parties concerning inter alia liability, Access Rights and dispute resolution, supplementing but not conflicting with those set out in the Grant Agreement.

In case of contradiction between the provisions of the Grant Agreement and this Agreement the former shall prevail.

The DESCA Model Consortium Agreement was followed to create NI4OS-Europe Consortium Agreement, a template which is specifically designed for collaborative research projects as the "Research and Innovation Actions" and "Innovation Actions" of Horizon Europe.

3. Project Management

In the following sections a concrete description of WP1 is described which is the management of NI4OS-Europe project.

3.1. Objectives

- Ensure the consistency of the overall resources used and the work performed.
- Control the progress of the work so the results of the project adhere to the grant agreement.
- Organize and co-ordinate the production of deliverables, meetings, workshops.
- Resolve any project internal conflicts and build accountability into the project's work.
- Report on project progress to the EC and to potential project sponsors.

3.2. Management structure

NI4OS-Europe aims to support EOSC governance and various national EOSC providers, and representation of all target countries in the Project Management Board is crucial to give overall guidance and strategy to the project. On the other hand, the management structure requires enough focused authority to lead, implement and control the overall project execution, thus the Project Activity Board is formed, which executes the project within a focused team consisting of WP leaders, Project Director and Project Coordinator. The responsibilities as well as the interaction (including reporting mechanisms) amongst the management bodies are described in Section 4.2 "Governance structure".

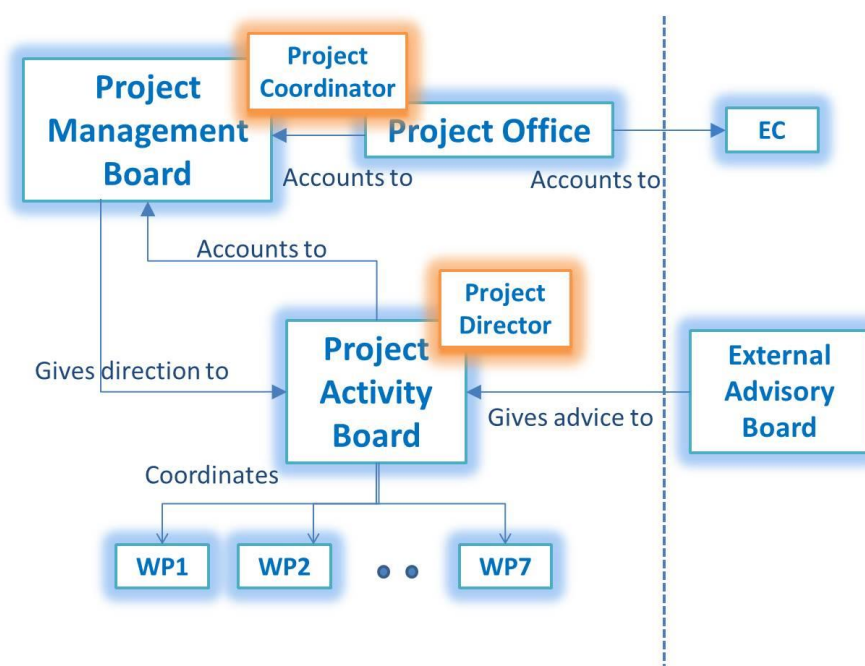


Figure 1 - NI4OS-Europe management/organisational structure

3.3. Description of the work

This activity deals with the management of the consortium. The aim of this WP is to ensure the consistency of the overall resources used and the work performed, control the progress of the work, organize the production of deliverables, meetings, and workshops, resolve any project internal conflicts, and act as an interface for reporting on project progress to the EC and to potential project sponsors. In order to successfully manage the project, a stable management structure is used, with a clear set of roles and responsibilities of all actors; as well as clear set of procedures for information flow, deliverables production, risk management, conflict resolution and other key management aspects. Specific attention is paid to the quality assurance of all produced deliverables, assuring they comply with quality criteria and guidelines. The lead beneficiary of the project management workpackage is National Infrastructures for Research and Technology S.A. (GRNET), which also holds the role of Project Coordinator. Athena Research & Innovation Center in Information & Knowledge Technologies (ATHENA) holds the role of Project Director, while University of Montenegro (UOM) the responsibility for performing quality assurance and assessment of deliverables. According to these roles, GRNET has been assigned 30.50 PMs for the coordination of this workpackage and all related subtasks apart from T1.6 (UoM with 1.50 PMs), while ATHENA has been assigned 8.50 PMs for the Project Director role.

- **T1.1 - Organize meetings**

This task deals with the organization of the kick-off meeting, regular coordination (management/technical) meetings, review preparation meetings, project reviews/audits, conference calls, etc. The Project Management Board (PMB) meets 2 (1 face-to-face, 1 virtual) times a year at the request of the Coordinator (unless otherwise stated, these meetings are ordinary meetings and discuss the full range of project management issues) or at any other time when necessary at the request of one of the Beneficiaries (extraordinary meetings). The Activity Management Board (AMB) meets 4 times a year face-to-face and once monthly electronically. A calendar with the dates for the ordinary meetings is agreed yearly at the kick off meeting for the first year or at the last ordinary meeting of a project year. Ordinary meetings are hosted in rotation among the Beneficiaries. The Beneficiaries hosting the meeting selects the location and is responsible of all organizational items. Details about the meeting need to be provided to the Coordinating Beneficiary at least one month before the planned date, in order to elaborate the convention. Due to the limited travel budget, the project tries to bring together the participants regularly using electronic means i.e. conferencing facility over the internet. During the COVID-19 pandemic outbreak, international traveling restrictions were applied and therefore face-to-face meetings have been postponed in order to follow the public health measures.

- **T1.2 - Establish and maintain project management information system**

This task deals with the preparation and maintenance of the project handbook/notebook, including the project definition (project concept, description of work, project objectives, project results), beneficiaries coordinates, staff coordinates, work breakdown structure, responsibility matrix, deliverables schedule and workplans, activity definitions and planned effort per participant/activity/month.

- **T1.3 - Establish and maintain “grant agreement” relationships**

This task deals with the preparation of any third-party agreements, preparation and signing of Non-Disclosure Agreements (NDAs), preparation of any necessary grant agreement amendments, etc.

- **T1.4 - Prepare 3-monthly, yearly and final progress reports**

This task coordinates the preparation of interim (quarterly) and periodic progress reports covering the status of project achievements, Activity progress (including any deviations and corrective actions taken), use and dissemination of project results, monitoring of milestones, ongoing tasks and resource consumption.

- **T1.5 - Prepare cost statements and transfer interim payments - GRNET**

This task deals with the cost statement preparation and the transferring of pre-financing to beneficiaries as per EC grant agreement and project consortium agreement guidelines.

- **T1.6 - Assess the project deliverables and conformance to requirements - UoM**

This task ensures that all produced project deliverables and reports comply with pre-agreed quality criteria, project templates and guidelines.

3.4. Deliverables

3.4.1. List of WP1 deliverables

Deliverable Number	Deliverable Title	Lead beneficiary	Type	Dissemination level	Due Date (in months)
D1.1	Project management information system and "grant agreement" relationships	1 - GRNET SA	R	CO	1
D1.2	First 3-Monthly progress report	1 - GRNET SA	R	CO	3
D1.3	Second 3-Monthly progress report	1 - GRNET SA	R	CO	6
D1.4	Third 3-Monthly progress report	1 - GRNET SA	R	CO	9
D1.5	Fourth 3-Monthly progress report	1 - GRNET SA	R	CO	12
D1.6	Fifth 3-Monthly progress report	1 - GRNET SA	R	CO	15
D1.7	Sixth 3-Monthly progress report	1 - GRNET SA	R	CO	18
D1.8	Seventh 3-Monthly progress report	1 - GRNET SA	R	CO	21
D1.9	Eighth 3-Monthly progress report	1 - GRNET SA	R	CO	24
D1.10	Ninth 3-Monthly progress report	1 - GRNET SA	R	CO	27
D1.11	Tenth 3-Monthly progress report	1 - GRNET SA	R	CO	30
D1.12	Eleventh 3-Monthly progress report	1 - GRNET SA	R	CO	33
D1.13	Twelfth 3-Monthly progress report	1 - GRNET SA	R	CO	36
D1.14	Data Management plan	2 - ATHENA RC	DEM	PU	6
D1.15	Thirteenth 3-M progress report	1 - GRNET SA	R	CO	39
D1.16	Fourteenth 3-M progress report	1 - GRNET SA	R	CO	42
D1.17	First report on cumulative expenditure incurred	1 - GRNET SA	R	CO	16
D1.18	Second report on cumulative expenditure incurred	1 - GRNET SA	R	CO	28
D1.19	Third report on cumulative expenditure incurred	1 - GRNET SA	R	CO	40

Figure 2 – List of WP1 deliverables

3.4.2. Description of deliverables

- D1.1: This deliverable is be the basic project notebook that is used through-out the project as the core management tool.

3.4.2.1 *NI4OS-Europe project notebook*

The project notebook is a living excel document with worksheets, where the NI4OS-Europe consortium maintains all the administrative and management information of the project. The purpose of this document is to keep up-to-date the baseline of the project, facilitating reporting as well as keeping the coordinates of all project participants to speed up communication. Some of the worksheets remain unchanged during the project (like the administrative overview), some are updated as the project evolves. Examples of worksheets follow: Committees (PMB and AMB contacts), work breakdown structure and responsibility table, pert diagram and GANNT chart.

Project Management Board (PMB)			
Company	Primary Member	Substitute	e-mail address
GRNET	Ognjen Prnjat	Evangelia Athanasaki	oprnjat@grnet.gr, eathan@grnet.gr
ATHENA	Eleni Toli	Ilektra Sifakaki	elto@di.uoa.gr, esifacaki@di.uoa.gr
CYI	Andreas Athenodorou	Chrysovalantis Constantinou	a.athenodorou@cyi.ac.cy, ch.constantinou@cyi.ac.cy
UCY	Sylvia Koukounidou	Alexia Louka	koukounidou.v@ucy.ac.cy, louka.alexia@ucy.ac.cy
IICT-BAS	Aneta Karaivanova	Todor Gurov	anet@parallel.bas.bg, gurov@bas.bg
SRCE	Draženko Celjak	Dobriša Dobrenić	drazenko.celjak@srce.hr, dobrisa.dobrenic@srce.hr
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ICI Bucuresti	Victor Vevera	Dragoș Barbu	victor.vevera@ici.ro, dragos.barbu@ici.ro
UEFISCDI	Alina Irimia	Mihaela Cucu	alina.irimia@uefiscdi.ro; mihaela.cucu@uefiscdi.ro
ARNES	Damjan Harisch	Tomi Dolenc	damjan.harisch@arnes.si, tomi.dolenc@arnes.si
UMUKM	Dunja Legat	Brina Klemenčič	dunja.legat@um.si, brina.klemencic@um.si
IPB	Antun Balaz	Dusan Vudragovic	antun.balaz@ipb.ac.rs, dusan.vudragovic@ipb.ac.rs
UOB	Slavko Gajin	Branko Marović	slavko.gajin@rcub.bg.ac.rs, branko.marovic@rcub.bg.ac.rs
RASH	Arjan Xhelaj	Andi Malaj	arjanxhelaj@rash.al; amalaj@rash.al
UNI BL	Mihajlo Savic	Ognjen Calic	mihajlo.savic@etf.unibl.org, ognjen.calic@etf.unibl.org
UKIM	Anastas Mishev	Sonja Filiposka	anastas.mishev@finki.ukim.mk, sonja.filiposka@finki.ukim.mk
UOM	Bozo Krstajic	Enis Kocan	bozok@ac.me, enisk@ucg.ac.me
RENAM	Peter Bogatencov	Nicolai Iliuha	bogatencov@renam.md, nick@renam.md
IIAP-NAS-RA	Hrachya Astsatryan	Wahi Narsisian	hrach@sci.am, wahi@sci.am

GRENA	Ramaz Kvatadze	Tamara Gvenetadze	ramaz@grena.ge, tamara@grena.ge
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Table 1 – PMB members

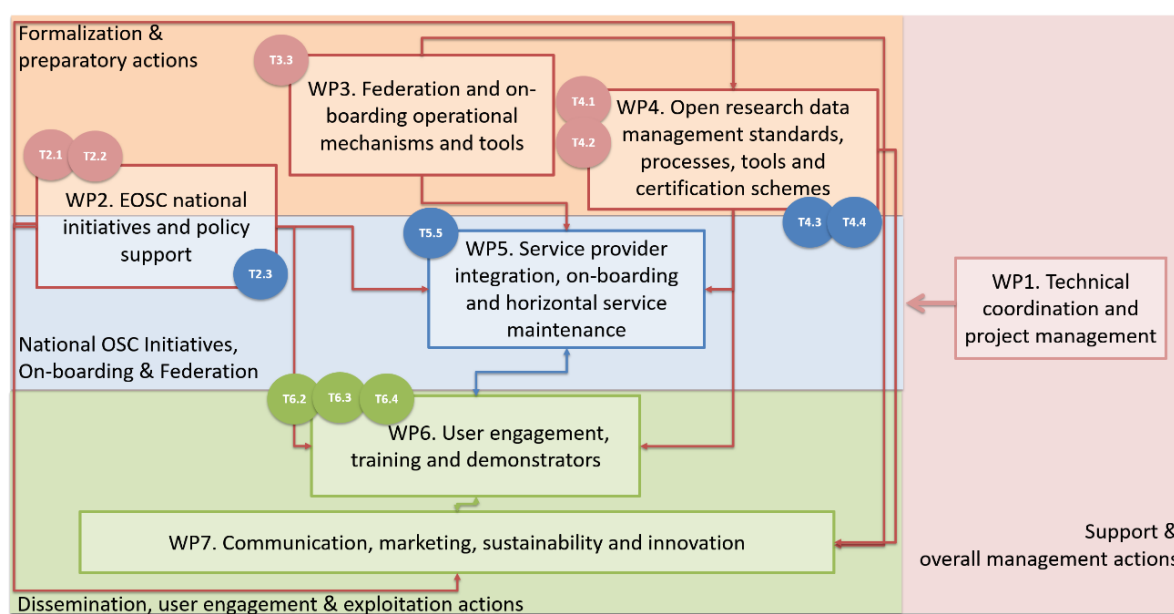
Activity Management Board (AMB)			
Workpackage	Name	Company	e-mail address
WP1	Evangelia Athanasaki	GRNET	eathan@grnet.gr
WP2	Eleni Toli	ATHENA RC	elto@di.uoa.gr
WP3	Anastas Mishev	UKIM	anastas.mishev@finki.ukim.mk
WP4	Branko Marović	UOB	branko.marovic@rcub.bg.ac.rs
WP5	Dusan Vudragovic	IPB	dusan.vudragovic@ipb.ac.rs
WP6	Andreas Athenodorou	CYI	a.athenodorou@cyi.ac.cy
WP7	Judit Fazekas-Paragh	DE	jparagh@lib.unideb.hu

Table 2 – AMB members

Work breakdown structure and responsibility matrix			
ID	Description	Leader	Partner
WP1	Management	Evangelia Athanasaki	GRNET
Task - T1.1	Organize meetings	Nana Anastasopoulou	GRNET
Task - T1.2	Establish and maintain project management information system	Nana Anastasopoulou	GRNET
Task - T1.3	Establish and maintain "grant agreement" relationships	Evangelia Athanasaki	GRNET
Task - T1.4	Prepare 3-monthly, yearly and final progress reports	Nana Anastasopoulou	GRNET
Task - T1.5	Prepare cost statements and transfer interim payments	Evangelia Athanasaki	GRNET
Task - T1.6	Assess the project deliverables and conformance to requirements	Milutin Radonjic	UoM
WP2	EOSC national initiatives and policy support	Eleni Toli	ATHENA
Task - T2.1	Stakeholder analysis & mapping	Biljana Kosanović	UOB
Task - T2.2	National OSC initiatives models	Christos Liatas	ATHENA
Task - T2.3	Set-up of national OSC initiatives	Eleni Toli	ATHENA

Task - T2.4	Business models	Biljana Kosanović	UOB
Task - T2.5	EOSC governance liaison	Natalia Manola	ATHENA
Task - T2.6	Other regions liaison	Ognjen Prnjat	GRNET
WP3	Federation and on-boarding operational mechanisms and tools	Anastas Mishev	UKIM
Task - T3.1	Harmonization of best practices for on-boarding of service providers	Anastas Mishev	UKIM
Task - T3.2	Technical recommendations for HPC centres' on-boarding	Emanouil Atanassov	IICT
Task - T3.4	Pre-production environment and integration tools	Dusan Vudragovic	IPB
WP4	ORDM standards, processes, tools and certification schemes	Branko Marović	UOB
Task - T4.1	Developing rewards and incentives mechanisms for ORDM and FAIR	Bojan Macan	RBI
Task - T4.2	Policies and Guidelines for incorporation and implementation of FAIR data practices	Branko Marović	UOB
Task - T4.3	Open and FAIR data in practice: tools for RDM following the data lifecycle	Elli Papadopoulou	ATHENA
Task - T4.4	Certification schemes for a free flow of data	Panoraia Spiliopoulou?	ATHENA
WP5	Service provider integration, on-boarding and service maintenance	Dusan Vudragovic	IPB
Task - T5.1	Detailed analysis of provider landscape	Boro Jakimovski	UKIM
Task - T5.2	Support to generic service providers	Petar Jovanovic	IPB
Task - T5.3	Support to thematic service providers	Andreas Gavrielides	CYI
Task - T5.4	Support to integration of national repositories	Brina Klemenčič	UMUKM
Task - T5.5	Horizontal service delivery and platform provisioning	Dusan Vudragovic	IPB
WP6	User engagement, training and demonstrators		CYI
Task - T6.1	Definition of demonstrators	Andreas Gavrielides	CYI
Task - T6.2	Execution of demonstrators	Andreas Gavrielides	CYI
Task - T6.3	EOSC service uptake and FAIR uptake in communities	Vasiliki (Sylvia)	UCY
Task - T6.4	Training	Sonja Filiposka	UKIM
Task - T6.5	Open call support	Evangelia Athanasaki	GRNET
WP7	Communication, marketing, sustainability and innovation	Judit Fazekas-Paragh	UD

Task - T7.1	Develop and maintain the communication platform	Dimitra Kotsokali	GRNET
Task - T7.2	Dissemination events	Aneta Karaivanova	IICT
Task - T7.3	Marketing	Todor Gurov	IICT
Task - T7.4	Innovation management and sustainability	Judit Fazekas-Paragh	UD

Table 3 - Work breakdown structure and responsibility matrix**Figure 3 – Pert Diagram**

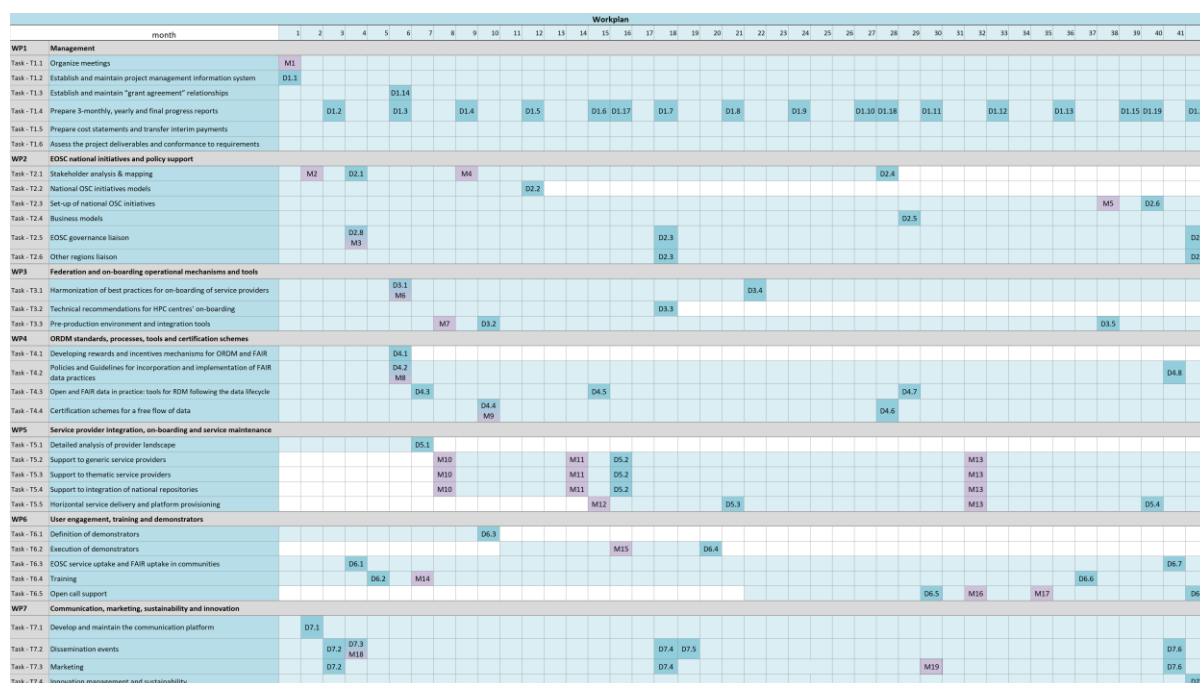


Figure 4 – Project workplan (GANTT chart)

- D1.2 – D1.13, D1.15 – D1.16: These deliverables provide quarterly the project progress.
- D1.14: Data Management plan. This deliverable provides the data management plan.
- D1.17 – D1.19: These deliverables report the cumulative expenditures that the consortium incurred from the start of the action.

4. General structure and procedures

4.1. Quality of the management of the project

The Coordinating Beneficiary GRNET is ISO certified in Project Management, has extensive experience in managing projects of the size and complexity of NI4OS-Europe, and has established cooperation relationships with the majority of the beneficiaries: various MoUs signed, VI-SEEM, HP-SEE, 3 phases of the SEE-GRID and 2 phases of the SEEREN project, SEERA-EI project for cooperation between programme managers and policy makers, as well as a number of pan-EU initiatives.

For NI4OS-Europe a management structure is proposed, which seeks to build upon our established best practices and also to be of a sufficient scale to manage such project. The overall management structure is built on the basis of the experience gained in similar EC projects and the structure has been designed to deal with the typical project management challenges and problems associated with a diverse collection of participants.

The main focus is the need to ensure that the management of NI4OS-Europe provides the environment to deliver dependable quality production services. This is essential for the effective exploitation of the results throughout the different European Open Science Cloud Initiatives (EOSC) communities interested in the project and its overall success. In this respect the coordinating beneficiary employs experienced Project Coordinator and an experienced Project Office.

The management structure of the project is in accordance with the management plan described below, while at the same time respects the articles of the Grant Agreement signed with the EC and the Consortium Agreement that signed among the beneficiaries.

4.2. Governance structure

Project Management Board (PMB)

PMB is the ultimate project authority, with collective responsibility for the project as a whole and for long-term strategic decisions within the project. Its main responsibilities are: to manage and direct the project, to confirm that the overall resources used are consistent with the work performed, to ensure the right basis for the successful implementation of results, and to ensure that agreements within the consortium conform to obligations of the Grant Agreement with the Commission. The Project Management Board is chaired by the Project Coordinator and includes the Project Director, Project Communication Coordinator and the Project Innovation Manager/Coordinator (all 4 non-voting members). Each beneficiary has 1 voting right. WP Leaders can participate by invitation, without voting rights. Members of the PMB representing each of the beneficiaries are responsible for representing the interests of their organisations and of their associated collaborators and have the authority to make management and strategic decisions on behalf of those.

Project Coordinator (PC)

PC has operational responsibility for the project and its day-to-day management. She/he is the focal point for all management activities in the project, to whom the consortium delegates the responsibility of being the official interface between the project and the Commission, facilitated by the Project Office. All general communications to and from the beneficiaries with the Commission shall be through the Project Coordinator. The main responsibilities of the Project Coordinator are: to perform overall project management, to coordinate the Project Office and chair the PMB, to ensure that the overall project work program is maintained, to detect main deviations in time and budget, to resolve any deviation through regular contacts with the beneficiaries, to be the channel for submitting all documents and for general liaison with the Commission for all project matters, both administrative and technical, assisted by the members of the project (s)he considers necessary, to coordinate the preparation, maintenance and distribution of control reports, including records of costs, resources and time scales associated with the project, to organise management meetings, and internal and external reviews of the project, to coordinate together with Project Director external liaisons with stakeholders in areas like dissemination, policy, cooperation and strategy matters. The Project Coordinator is assisted by a Project Office. Project Coordinator is Dr. Ognjen Prnjat from GRNET.

Project Office

The Project Office is coordinated by the Project Coordinator. The key person of the Project Office is the Project Financial Manager who supports the Project Coordinator in coordination of financial and administrative issues. The Project Office also receives assistance from the coordinator's legal advisor during the project negotiation and execution.

Project Financial Manager (FM)

The main responsibility of the FM is to ensure that the financial flow within the project is carried out efficiently, by helping the Project Coordinator detect main deviations in budget and take care of the proper utilization of the project resources, by advising all project partners for financial matters and checking the eligibility of costs, by being the channel for submitting documents and for liaison with the Commission for all project financial matters, by carrying out the production, maintenance and distribution of control reports, including records of costs, resources and time scales associated with the project and by maintaining and making available the library of the project documentation and publicity material.

Activity Management Board (AMB)

The AMB is composed of WP leaders, is chaired by Project Director; the Project Coordinator is ex-officio member. Its main goals and functions are: to assume the responsibility of the technical direction of the project, to coordinate the internal review of Commission deliverables, to maintain the technical coherence of the project, to control the progress of all work packages, to solve any technical conflicts between tasks, to make all decisions related to technical matters, to organise working sessions, and to control the progress of all technical activities.

Project Director (PD)

The responsibilities of the PD include: chairing of the Activity Management Board, coordinating the technical work of the project, keeping up with the technical objectives, controlling the progress of all technical activities, coordinating the technical issues of Commission reviews, coordinating the production of project deliverables, coordinating together with the Project Coordinator external liaisons with stakeholders in areas like dissemination, policy, cooperation and strategy matters. Project Director is Eleni Toli from ATHENA RC.

Project Communication Coordinator (CC)

The CC is nominated among the members of the PMB, with main responsibilities to develop, together with the Project Coordinator, the communication strategy of the project, coordinate the dissemination and communication work of the project, promote widespread use of the project outcomes and make sure appropriate tools and mechanisms are used, so the project message reaches the targeted communities.

Project Innovation Manager/Coordinator (IC)

The IC is nominated among the members of the PMB and has the following responsibilities: react to project internal and external innovation opportunities, keep track of innovative project developments, develop and implement, together with the Project Communication Coordinator, a strategy for the dissemination and marketing of these innovative developments within scientific and technical circles, policy-makers, as well as the widest possible audience, and assess potential market opportunities for innovative developments.

Project Quality Assurance Coordinator (QC)

The QC is nominated among the members of the PMB and has as main responsibilities to assure the quality of the project work, implement and perform the appropriate quality control on project deliverables, and perform quality monitoring and control by following the project's Key Performance Indicators.

WP Leaders

The WP Leader shall be nominated by the respective beneficiaries that lead each project work package as per Annex 1 to the Grant Agreement. The responsibilities of the WP Leader shall include managing all project activities in his/her project work package, ensuring that the project schedule in his/her project work package is maintained, notifying the Project Coordinator and the Project Director of any discrepancy, ensuring that the objectives and results of the activities within his/her project work package are achieved and that the project deliverables for the Commission related to his/her project work package are available according to the programme, arranging technical reviews of specific milestones as required by the Project Coordinator/Project Director or the Commission, ensuring technical liaison for the work in his/her project work package with the Project Director, supplying the Project Coordinator/Financial Manager (in a specific section within its own periodic control reports) with all the information related to the project work package led, outlining progress within the project work package and problems and actual or expected delays, and supplying the information required for the reports for the Commission.

Task Leaders

The Task Leader shall be nominated by the respective WP Leader. The Task Leader has similar responsibilities as the WP Leader but at a project task level instead of project WP level and is reporting to the WP Leader.

External Advisory Board

EAB gives direction to the Activity Management Board by advising on plans to increase the impact of the project outputs. This includes input on service provisioning and engagement priorities. The EAB is chosen early on in the project to include representatives of large pan-European collaborative infrastructures, user communities, industry, and policy makers.

The main tool that is used to maintain the project management information system is the project notebook, as described in Section 3.4.2.1.

The parties shall use templates for the following type of documents: Meeting Agendas, Meeting Minutes, Presentations, Documents Cover page, Reports (including project deliverables), 3-monthly progress reports, Regular reports, Final report, Cost statements. The coordinator shall prepare and distribute the templates to the beneficiaries.

The project also makes full use of a comprehensive project management portal to ensure a constant, high-quality information flow to all beneficiaries. This portal acts as a repository for all relevant documents, distribution lists, electronic bulletin boards and meeting information. It is operated by the Project Office and kept separate from the overall project portal. The main dissemination, support and training portal are open to a much wider community. A secure site is used to exchange documents among beneficiaries, and plays the role of the project documents repository.

Email and cloud dropbox-like storage are used for transmitting word-processor files, spreadsheet files, binary and source code with: internal control reports, contributions to periodic review reports, project deliverables, small software modules, working papers, and informal communications.

The WP Leader is responsible to see that the project deliverables are drafted according to the agreed template and procedure and for that purpose nominates a person to act as the Deliverable Editor. The Deliverable Editor is responsible to circulate the Table of Contents (ToC) and assign responsibilities in due time and to finally outline the final draft of the project deliverable for approval at least 15 working days before the deadline. The first 5 days are for comments and the final version should be finished 5 working days before the project deliverable is to be submitted to the Commission. Each beneficiary has the duty to review each project deliverable and a right to oppose (veto) even if that beneficiary has not contributed directly to the project deliverable. Two working days before the final deadline, the Deliverable Editor should send the final version in electronic format to the AMB and the WP Leader. The coordinator is to deliver all the project deliverables to the Commission.

4.3. Consortium body

NI4OS-Europe consortium consists of 22 beneficiaries, representing Bulgaria, Croatia, Cyprus, Greece, Hungary, Romania, Slovenia (EU member states) and non-member states from Western Balkans and European Neighborhood - Albania, Armenia, Bosnia and Herzegovina, Former Yugoslav Republic of Macedonia, Georgia, Moldova, Montenegro, Serbia. The partnership benefits from the complementarity of e-Infrastructure partners and open access-oriented partners, to cover the whole stack and value chain of Open Science service provisioning.

4.3.1. Operational procedures for the consortium bodies

1. The beneficiaries shall establish, within thirty days after the start date of the Grant Agreement, the Project Management Board composed of one duly authorized representative of each of them. After having informed the other beneficiaries in writing, each beneficiary shall have the right to replace its representative and/or to appoint a proxy although it shall use all reasonable endeavors to maintain the continuity of its representation. Each representative shall have a deputy. All representatives shall participate in a cooperative manner in the meetings.
2. The PMB shall meet 2 (1 face-to-face, 1 virtual) times a year at the request of PC (unless otherwise stated, these meetings are ordinary meetings of the PMB and discuss the full range of project management issues) or at any other time when necessary at the request of one of the beneficiaries (extraordinary meetings). The AMB meets monthly online and 4 times a year face-to-face. The AMB has extraordinary meetings when deemed necessary. Due to the limited travel budget, the project tries to bring together the participants regularly using electronic means i.e. teleconferencing facility. A calendar with the dates for the ordinary meetings shall be agreed yearly at the kickoff meeting for the first year or at the last ordinary meeting of a project year. Ordinary meetings shall be hosted in rotatory turns among the beneficiaries. The beneficiaries hosting the meeting select the location and are responsible of all organizational items. Details about the meeting shall be provided to the coordinator at least one month before the planned date. Extraordinary meetings do not count towards the rotatory clause of ordinary meetings. The PMB shall decide by majority vote on the hosting of extraordinary meetings.
3. Meetings shall be convened by the chairman with at least fifteen (15) calendar days prior notice with an agenda. Modifications of the Agenda and inclusion of new items can be suggested to the coordinator at least three (3) days in advance and must be discussed at the beginning of the meeting. The Agenda for extraordinary meetings is elaborated by the convening beneficiary and circulated by the coordinator along with the invitation to the meeting.
4. Minutes of the PMB meetings shall be transmitted to the representatives of the beneficiaries within two weeks after each meeting is held. The minutes shall be

considered as accepted by the other beneficiaries if, within fifteen (15) calendar days from receipt, no beneficiary has objected in a traceable form to the coordinator. Minutes of other meetings (non-Project Management Board) should follow the same process and be prepared by the meeting chairman (WP Leader/Task Leader).

5. The PMB is the ultimate project authority, with collective responsibility for the project as a whole and for long-term strategic decisions within the project. The PMB main responsibilities are:
- i. Making proposals to the beneficiaries for the review and/or amendment of the terms of the Grant Agreement, including description of the action and estimated budget for the action of the Grant Agreement to be agreed by the Funding Authority.
 - ii. Changes to the Consortium Plan.
 - iii. Modifications to estimated budget for the action.
 - iv. Additions to accession forms.
 - v. Additions to model for the financial statements.
 - vi. Agreeing on press releases and (without prejudice to section "Dissemination" of CA) joint publications by the parties with regard to the project.
 - vii. Assisting the coordinator to prepare reports on the whole project and in particular verifying that a project publication complies with the requirements referred to in the Grant Agreement Article "Information on EU funding — Obligation and right to use the EU emblem".
 - viii. Without prejudice to section "Dissemination" of CA, agreeing on procedures and policies in accordance with the Grant Agreement Articles "Protection of results", "Exploitation of results", "Dissemination of results – Open Access – Visibility of EU funding" for dissemination of results from the project which is not to be Used by the parties.
 - ix. Making proposals to the beneficiaries (other than the defaulting beneficiary) to service of notices on a defaulting beneficiary in accordance with sections "Breach" and "Liability towards each other" of CA and to assign the defaulting beneficiary's tasks to specific entity(ies) preferably chosen from the remaining beneficiaries and acceptable to the Commission, which agree to be bound by the terms of this Agreement.
 - x. Evolution of the consortium:
 - Entry of a new party to the consortium and approval of the settlement on the conditions of the accession of such a new party.
 - Withdrawal of a party from the consortium and the approval of the settlement on the conditions of the withdrawal.
 - Identification of a breach by a party of its obligations under this Agreement or the Grant Agreement - Declaration of a party to be a defaulting party - Remedies to be performed by a defaulting party.
 - Termination of a defaulting party's participation in the consortium and measures relating thereto.
 - Proposal to the Funding Authority for a change of the coordinator.
 - Proposal to the Funding Authority for suspension of all or part of the project.

- Proposal to the Funding Authority for termination of the project and this Agreement.
6. In the case of abolished tasks as a result of a decision of the Project Management Board, the tasks of the parties concerned shall be rearranged. Such rearrangement shall take into consideration the legitimate commitments taken prior to the decisions, which cannot be cancelled.
 7. In voting, each beneficiary shall have one vote. A quorum shall be a minimum of 2/3 of the beneficiaries. Where decisions are to be taken unanimously, all beneficiaries must be represented at the meeting. In case this quorum is not reached, the decision may be re-submitted to a vote at the next meeting without a quorum being required.
 8. In the case of section 5 (i) to (vii) and in other cases not referred to below, decisions shall be taken by the majority of the votes of the beneficiaries present or represented by proxy at a quorate meeting, provided always that any beneficiary whose scope of work, time for performance, costs or liabilities are changed or whose information is to be published, may veto such decisions.
 9. In the case of section 5(viii), decisions shall be taken unanimously by all of the beneficiaries. In the case of section 5(ix), the decision shall be taken unanimously by all of the non-defaulting beneficiaries.
 10. Any decision required to be taken by the PMB may be taken in accordance with the above (i) in meetings via teleconference and/or via email; (ii) in a meeting without prior notice and/or (iii) without a vote, if, in any such case, a consent in writing, setting forth the decision so taken, is signed by the representatives of the beneficiaries having not less than the minimum number of votes that would be necessary to take such decision at a meeting at which all beneficiaries entitled to vote on such decision were represented and voted, and provided the consent has been delivered for signature to all such beneficiaries' representatives.
 11. Veto rights
 - i. A party which can show that its own work, time for performance, costs, liabilities, intellectual property rights or other legitimate interests would be severely affected by a decision of the Project Management Board may exercise a veto with respect to the corresponding decision or relevant part of the decision
 - ii. When the decision is foreseen on the original agenda, a party may veto such a decision during the meeting only.
 - iii. When a decision has been taken on a new item added to the agenda before or during the meeting, a party may veto such decision during the meeting and within 15 days after the draft minutes of the meeting are sent.
 - iv. In case of exercise of veto, the parties shall make every effort to resolve the matter which occasioned the veto to the general satisfaction of all

- beneficiaries. The review process of the veto is arbitrated by the coordinator.
- v. A party may neither veto decisions relating to its identification to be in breach of its obligations nor to its identification as a defaulting party. The defaulting party may not veto decisions relating to its participation and termination in the consortium or the consequences of them.
 - vi. A party requesting to leave the consortium may not veto decisions relating thereto.

4.4. Project changes and conflict resolution, and identified risks

Unpredictable changes in the situation concerning a particular participant could, in some cases, jeopardise the achievement of the project goals (potential risks associated to the project are analysed below). Moreover, unpredictable conflicts may arise between the participants. In such cases, the actions needed to overcome the difficulties may be beyond the control of the PMB. Thus, a specific procedure for such emergency cases is followed. If in the execution of the project work plan, inconsistencies attributable to a specific participant represent a danger for the achievement of the project goals, and the PC has made every possible effort to solve problems, then the following measures are taken: the PC notifies the members of the PMB with all the necessary information and calls for a special PMB meeting, where the situation is presented and analysed and procedures for solving the problems are proposed. The PMB decides which corrective measures need to be taken. The participant concerned declares acceptance of the procedure and the corrective measures. If this will not be the case, the PMB declares the participant as "not-in-line" with the project execution. Any resulting change in the participant's role, any deviation from the project plan or any change in the consortium composition shall be communicated to the EC for approval.

5. Conclusions

The publication of this document aims to provide easily accessible information about the NI4OS-Europe project regarding its model and the governing rules. Sharing this inclusive governance structure provides a useful blueprint to similar projects.