



## D1.1 Project Handbook Version 1.0

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## Change Log

Version	Author	Description of Change
V0.1	Elena Markocic	Initial draft
V0.2	<i>Judit Gimenez</i>	<i>Second version and comments</i>
V0.3	Elena Markocic	Document prepared for internal review
V0.4	<i>Leonel Sousa</i>	<i>Internal Reviewer</i>
V0.5	Elena Markocic	Document revised following the internal review
V1.0	Elena Markocic	Document formatted for submission

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## Executive Summary

The purpose of the Project Handbook is to provide an overview of the internal management procedures of the POP3 project in order to ensure efficient project execution and high quality project deliverables.

It describes the project governance structure, project management procedures and tools, and reporting procedures, including roles and responsibilities, and monitoring of project progress.

The planning of the management process contributes to the management objectives of the project and indirectly influences the technical implementation of the project by ensuring an efficient working environment.

To benefit from the previous experiences of POP and POP2 projects, this document is based in the project handbook from POP2.

## 1 Introduction

The POP3 Project Handbook provides project Beneficiaries with the information needed to facilitate the day-to-day management of the project. The goal is to define and provide the mechanisms to promote that the objectives are met, and all deliverables are delivered on time, on budget and to the expected quality criteria, in line with the project management objectives defined in the POP3 Description of Action (DoA).

In particular, this document covers the following areas:

- Governance structure with defined roles and responsibilities.
- Project management procedures and tools, including internal communication, progress monitoring, quality control and risk management.
- Reporting procedures.

The Project Handbook will be regularly updated throughout the life cycle of the project (as a parallel document used for internal monitoring). The latest version of the document will be available in the POP3 wiki repository.

## 2 Governance structure

The governance structure of the POP3 project consists of the following key components that are the levels of a hierarchy (Figure 1):

- Project Coordinator (CO), Technical Manager (TM) and Project Manager (PM) (POP3 Coordinating Team)
- General Assembly (GA)

- Work Package Leaders (WPLs)
- Task Leaders (TLs)
- Partners

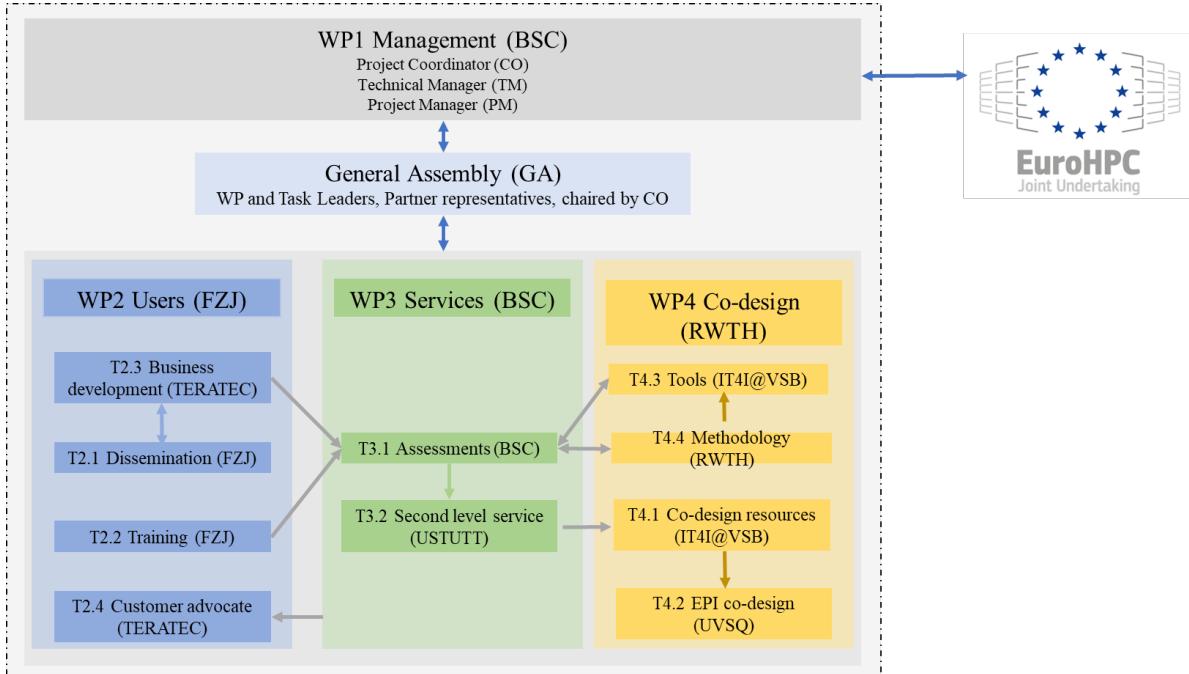


Figure 1: POP3 Governance structure

## 2.1 Project Coordination

The Barcelona Supercomputing Centre will act as coordinator of the POP3 project. This role is shared by the **POP3 Coordinating Team**: the Project Coordinator (CO), Jesus Labarta, the Technical Manager (TM), Judit Gimenez, and the Project Manager (PM), Elena Markocic, from the BSC Project Management Office.

The **Project Coordinator (CO)** will drive the overall strategic agenda of the project and will ensure that the objectives of the project are met on time and within budget. The CO, together with the Technical Manager, will chair the regular General Assembly (GA) of all partners.

The **Technical Manager (TM)** ensures that the scientific and technical objectives described in the project's DoA are met. The TM defines the high-level technical strategy and leads the project team to implement this strategy. The TM will also ensure that the project maintains its relevance to the HORIZON-EUROHPC-JU-2023-COE-01 call (and corresponding Work Programme) and its strategic objectives. Furthermore, the TM coordinates the technical presentations of the project progress to the Funding Agency and ensures appropriate involvement and visibility of the project members. The TM is supported by the Project Manager (PM) who is responsible for the day-to-day

running of the project. The TM works closely with the PM to provide clear and accurate periodic reports.

The **Project Manager (PM)** is responsible for the day-to-day management of the project. The PM will ensure the timely achievement of project objectives and deliverables by continuously monitoring project progress against the plan described in the Grant Agreement. The PM will identify and track issues and propose appropriate corrective actions (i.e. reallocation of resources, creation of task forces, etc.) that may require a formal decision by the General Assembly. The PM is also responsible for calling and organizing General Assembly meetings and reviews, and for compiling and distributing minutes and actions. The PM defines the procedures for change control (proposed changes to the Plan of Action), risk management, quality assurance, and IPR management.

The PM is also responsible for the administrative and financial management of the project, including the internal monitoring of the use of resources on a 6-monthly basis, the provision of periodic reports and financial statements, and ensuring the efficient distribution of EU funds. The PM will also act as the official point of contact between EuroHPC and the Beneficiaries.

## 2.2 General Assembly (GA)

The General Assembly is the formal decision-making body and has the highest level of authority in the project. It is chaired by the CO and TM, and consists of Work Package Leaders (WPLs), Task Leaders (TLs) – except for WP1 - and one representative from each remaining partner (Table 1). The GA is formally responsible for the successful completion of the project.

The GA makes decisions by consensus whenever possible. If this is not possible, the GA puts decisions to a vote, decisions are achieved by a simple majority. In the event of a tie, the CO has the casting vote.

The GA holds monthly teleconferences to review project progress on a regular basis and has broad authority to make decisions on day-to-day implementation issues. It is also responsible for resource allocation, review/approval of periodic reports and deliverables, preparation of project reviews and coordination of exploitation plans. The GA meets twice a year preferably in face-to-face meetings, with the venue rotating among the partners.

Table 1: Members of the POP3 General Assembly

Partner	GA Member	Role
BSC	Jesus Labarta	Project Coordinator
	Judit Jimenez	Technical Manager
	Elena Markocic	Project Management, WP1
	Marta Garcia	WP3, T3.1
FZJ	Bernd Mohr	WP2, T2.1
	Brian Wylie	T2.2
RWTH	Christian Terboven	WP4
	Joachim Jenke	T4.4

IT4I@VSB	Radim Vavrik	T4.1
	Ondrej Vysocky	T4.3
INESC ID	Leonel Sousa	
TERATEC	Samir Ben Chaabane	T2.3, T2.4
UVSQ	William Jalby	T4.2
USTUTT	Jose Gracia	T3.2

## 2.3 Work Package Leaders (WPLs) and Task Leaders (TL)

Work Package Leaders and Tasks Leaders are responsible for the scientific and technical work of their respective work packages and tasks. Work Package Leaders' main role is to offer an umbrella to promote interactions between the work package tasks. Except for WP1, the activities are planned and controlled in the scope of each Task, as well as the preparation of deliverables and the collation of contributions from other partners involved in the Task for internal and external reporting. They will meet regularly via teleconference or face-to-face as part of the GA and will arrange additional technical meetings as required. They are expected to bring critical issues to the attention of the GA and to assist the TM in coordinating cross-work package relationships within the relevant activity area. They must actively participate in regular project-related meetings and prepare technical and status presentations as required.

Each WPL and TL is appointed at the beginning of the project by the organisation responsible for that Work Package or Task (see Table 2).

**Table 2. POP3 Work Package and Task Leaders**

WPs and Tasks	Partner	Leader
<b>WP1</b>	BSC	Elena Markocic
<b>WP2</b>	FZJ	Bernd Mohr
T2.1	FZJ	Bernd Mohr
T2.2	FZJ	Brian Wylie
T2.3	TERATEC	Samir Ben Chaabane
T2.4	TERATEC	Samir Ben Chaabane
<b>WP3</b>	BSC	Marta Garcia
T3.1	BSC	Marta Garcia
T3.2	USTUTT	Jose Gracia
<b>WP4</b>	RWTH	Christian Terboven
T4.1	IT4I@VSB	Radim Vavrik
T4.2	UVSQ	William Jalby
T4.3	IT4I@VSB	Ondrej Vysocky
T4.4	RWTH	Joachim Jenke

## 2.4 Partners

The POP3 consortium consists of eight partners from five EU Member States (Table 3).

Table 3: POP3 Partners

Partner	Short name	Country
BARCELONA SUPERCOMPUTING CENTER - CENTRO NACIONAL DE SUPERCOMPUTACION	BSC	ES
FORSCHUNGSZENTRUM JULICH GMBH	FZJ	DE
RHEINISCH-WESTFAELISCHE TECHNISCHE HOCHSCHULE AACHEN	RWTH	DE
VYSOKA SKOLA BANSKA - TECHNICKA UNIVERZITA OSTRAVA	IT4I@VSB	CZ
INSTITUTO DE ENGENHARIA DE SISTEMAS E COMPUTADORES, INVESTIGACAO E DESENVOLVIMENTO EM LISBOA	INESC ID	PT
TERATEC	TERATEC	FR
UNIVERSITE DE VERSAILLES SAINT-QUENTIN-EN-YVELINES	UVSQ	FR
UNIVERSITAET STUTTGART	USTUTT	DE

The partners' responsibilities are the following.

- Execute and deliver the agreed work in accordance with the DoA.
- Proactively report any unforeseen variances to the TLs, WPLs and PM.
- Coordinate their staff's contributions to the project.
- Report financial and technical work on time.
- Notify the consortium of any changes in the partner's contact details.

## 3 Project Management procedures and tools

The project management procedures and tools describe the internal communication and quality control, progress monitoring, risk, and IPR management processes.

### 3.1 Internal Communication

Several internal tools have been set up to support collaboration between all partners and to encourage participation in the decision-making process. These internal collaboration tools include face-to-face and online meetings, the POP3 wiki to facilitate the exchange of project documentation and news, and a set of distribution mailing lists. Procedures for dealing with potential conflicts of interest and emergencies are also defined.

#### 3.1.1 Meetings

The POP3 project has several types of meetings:

- face-to-face meetings;
- online meetings;
- review meetings.

To encourage active participation in the collection of meeting minutes from all participants, a collaborative tool (Etherpad) is used in each meeting.

### **3.1.1.1 Face-to-face meetings**

There will be consortium meetings at least twice a year. Ideally these meetings will be face-to-face but if needed they may be implemented as online meetings. The project partners will take turns to host the meetings. The host partner of a meeting is responsible for organising the meeting, the location and the facilities. All information about the face-to-face meetings will be available on the POP3 Wiki.

Further information on the meetings (e.g. voting, veto rights) is described in section 6 of the POP3 Consortium Agreement.

The POP3 Kick-off meeting (KOM) was held on 22-23 January 2024 at the BSC premises in Barcelona, to establish the basics of the project and initial tasks. The presentations and minutes of the meeting are available on the Wiki repository.

### **3.1.1.2 Online meetings**

Monthly online meetings will be organised by the Coordinating Team to regularly review the progress of the Work Packages and Tasks. Additionally, the WPLs and TLs will organise specific meetings. Schedule, agenda, and access links will be sent to all invited participants before the event and all documents will be available on the POP3 wiki.

### **3.1.1.3 Review meetings**

According to the Grant Agreement, the tentative schedule for the project reviews set up by EuroHPC is M18 and M36 in Luxembourg.

## **3.1.2 Public Project Website**

The POP3 project will use the same website created for POP and POP2 (<http://pop-coe.eu/>). The website presents the project, news, consortium partners and their services, contact information, privacy policy, service request form for potential customers, and target customers with success stories. The POP website is hosted by BSC, but the partner responsible for its maintenance is FZJ as part of the activities in T2.1 (Dissemination).

## **3.1.3 POP3 Wiki**

Following the successful model of the POP and POP2 Wikis, a new wiki repository is being set up to facilitate the exchange of project documentation and news among partners. The coordinating team will be responsible for user

management. The Project Manager will provide access to all partners for updating project progresses and share documents.

### 3.1.4 Mailing Lists

The following project mailing lists have been set up to facilitate internal communication between the various bodies of the POP3 project:

The overall mailing list of the project: [pop3\\_all@bsc.es](mailto:pop3_all@bsc.es)

For each Work Package: [pop3\\_wpx@bsc.es](mailto:pop3_wpx@bsc.es)

For each task: [pop3\\_tx-y@bsc.es](mailto:pop3_tx-y@bsc.es)

For the General Assembly: [pop3\\_ga@bsc.es](mailto:pop3_ga@bsc.es)

An up-to-date list of subscribers is available on the POP3 Wiki. Requests to add new members to the mailing lists should be sent to the Project Manager.

### 3.1.5 Conflicts of Interest

The willingness to avoid conflicts of interest and to act in good faith is essential to the POP3 project. If partners identify conflicts of interest that cannot be resolved through bilateral communication, they should immediately bring the issues to the attention of the Coordinating Team. The Coordinating Team will in turn bring the issue to the General Assembly for discussion and, if necessary, a vote.

### 3.1.6 Emergency Procedure

Any event that may jeopardise the overall completion of the project should be reported immediately to the Coordinating Team. The Coordinating Team will endeavour to resolve the problem as quickly as possible, calling an emergency General Assembly meeting if necessary to determine the next steps.

## 3.2 Quality Control and Assurance

A quality assurance process will ensure accurate documentation, reporting and justification of the work being carried out. An internal peer-review process is set up to assure the project deliverables meet the minimum quality standards before submitting them to EuroHPC as official outcomes of the project.

### 3.2.1 Key Performance Indicators

There are nineteen Key Performance Indicators (KPIs) identified in the POP3 project (see Table 4).

Table 4: POP3 Key Performance Indicators

WP	Task	KPI	Objective
WP2	2.1	Number of events (@workshops exhibits...)	10

		Number of blog articles	72
		Number of videos	18
		Number of tweets	>150
		Number of newsletters	12
	2.2	Number of training events	12
		Trained people	100
	2.3	Number of SMEs	12
	2.4	Number of customer questionnaires received	80%
	WP3	Completed services	120
		Completed services for CoE codes	82
		Percentage of suggested enhancements to CoE codes embraced for implementation.	75%
		Percentage of CoE codes implementing POP3 recommendations showcasing realized performance enhancements	75%
		Customer satisfaction	>90%
WP4	4.1	Number of kernels	10
		Number of published technical pages	26
	4.2	Kernels evaluated on EPI platforms	8
	4.3	EuroHPC platforms with tools deployed	8
	4.4	Flagship codes supported by methodology	90%

This POP3 project management and quality procedures have a direct and indirect impact on the KPIs. It contributes to the achievement of the operational objectives. It contributes indirectly to providing a working environment that ensures efficient collaboration and focus attention on technical work.

The KPIs will be considered throughout the life of the project. The actual status will be monitored based on the 6-monthly internal reporting and the pre-defined milestones of the project.

### 3.3 Progress Monitoring

POP3 progress will be monitored through a set of milestones and 6-monthly internal reporting.

#### 3.3.1 Milestones (MS)

Nineteen milestones are defined in the POP3 (see Table 5) to control the actual progress of the project.

**Table 5: POP3 Milestones**

No	Milestone Name	WP no.	Lead	Means of verification	Due date
1	Collaboration agreement has been signed	WP1	BSC	Document available, signed by all parties	M01
2	Users 1	WP2	FZJ	32 blog articles, 7 webinars, 4 trainings, 4 SMEs	M12

3	Customer Advocacy 1	WP2	TERATEC	70% customer questionnaires received	M12
4	Services 1	WP3	BSC	36 services completed, 90% customer satisfaction	M12
5	Co-design 1	WP4	UVSQ	3 kernels created; 7 Technical pages, 2 kernels evaluated	M12
6	Tools 1	WP4	IT4I@VSB	4 Tools validated in EuroHPC systems	M12
7	Methodology 1	WP4	RWTH	75% Supporting flagship codes	M12
8	Users 2	WP2	TERATEC	64 blog articles, 14 webinars, 8 trainings, 8 SMEs	M24
9	Customer Advocacy 2	WP2	TERATEC	80% customer questionnaires received	M24
10	Services 2	WP3	USTUTT	80 services completed, 90% customer satisfaction	M24
11	Co-design 2	WP4	INESC ID	6 Kernels created; 15 Technical pages, 5 kernels evaluated	M24
12	Tools 2	WP4	FZJ	6 Tools validated in EuroHPC systems	M24
13	Methodology 2	WP4	USTUTT	85% Supporting flagship codes	M24
14	Users 3	WP2	FZJ	96 blog articles, 20 webinars, 12 trainings, 12 SMEs	M36
15	Customer Advocacy 3	WP2	TERATEC	80% customer questionnaires received	M36
16	Services 3	WP3	BSC	120 services completed, 90% customer satisfaction	M36
17	Co-design 3	WP4	UVSQ	10 Kernels created; 26 Technical pages, 8 kernels evaluated	M36
18	Tools 3	WP4	IT4I@VSB	8 Tools validated in EuroHPC systems	M36
19	Methodology 3	WP4	RWTH	90% Supporting flagship codes	M36

### 3.3.2 Risk Management

Ten potential risks were identified and associated mitigation actions were proposed for the different work packages (see Table 6).

**Table 6: POP3 potential risks and mitigation measures**

Risk number	Description of risk	WP Number	Proposed risk-mitigation measures
1	One of the partners leaves the consortium (L/L)	WP1	Most of the roles are covered by several partners. If one partner leaves the project, the Coordinator would reassign their tasks to other partners with similar technical expertise to avoid impact on the project goals.
2	Not enough users apply for POP services (L/M)	WP2, WP3	Low impact because already agreed with CoEs more than 65% assessments. Increase business development activities, e.g. increase cooperation with current users, using them as promotional channels, or increase cooperation with NCCs, to find customers in their nations.
3	Some studies take more time than initially planned	WP3	Prioritize studies that can progress quickly to maintain the throughput.

	(L/M)		
4	Limitation in vendor-proprietary tools to perform assessments (L/L)	WP3	Use or extend open source tool.
5	Restrictions to publish code kernels of specific codes (L/L)	WP4	Focus on Open Source codes. Focus on capturing the behavioural aspect of the real application code, instead of isolating the kernel.
6	POP tools not supporting a given hardware platform (L/L)	WP4	Use a vendor specific tool while the tool is being developed to support the platform.
7	Availability dates of EPI hardware/software components (M/L)	WP4	Use emulators and Software Development Vehicles (SDVs) available to continue the codesign process.
8	Limitation in performing energy efficiency analysis and optimization on HPC systems due to limited support from the administrator's side (M/M)	WP4	Migrate energy efficiency analysis to clusters available to the consortium that provide the necessary capabilities (i.e. EuroHPC systems of IT4I or CINECA).
9	Not finding the targeted number of specialists (L,L)	WP3	Partners have specialists. In case it some partner have a lower number rebalance the workload to the partners with enough specialists and/or redistribute the work non-linear along the duration of the project.
10	Delay in recruitment or key personnel leaving (M,M)	WP2, WP3, WP1, WP4	Partners already have personnel with required experience and the recruitment will start as soon as possible. If a key person leaves, the consortium will select the best candidate to substitute it.

All risks have been classified as low (L) and medium (M) probability. These risks will be continuously monitored by the POP3 coordinating team to be able to implement the proposed risk mitigation measures if necessary.

### 3.3.3 Internal Reporting

The coordinating team will monitor the progress of the work in monthly teleconferences and the use of resources on a six-monthly basis, to ensure that problems and deviations are identified as early as possible in the project lifecycle and that systematic corrective action or contingency plans are implemented as necessary.

Each partner will report to the coordinating team within 30 days of the end of the relevant period: the spent effort and budget, the status of milestones and deliverables, and the completion of tasks within their respective WP.

Templates for internal reporting will be provided by the Coordinating Team and will be made available on the wiki repository.

### 3.3.4 Reporting Calendar

Figure 2 shows the schedule of project deliverables and milestones in accordance with the project Grant Agreement. The schedule will also be available on the POP3 wiki calendar.

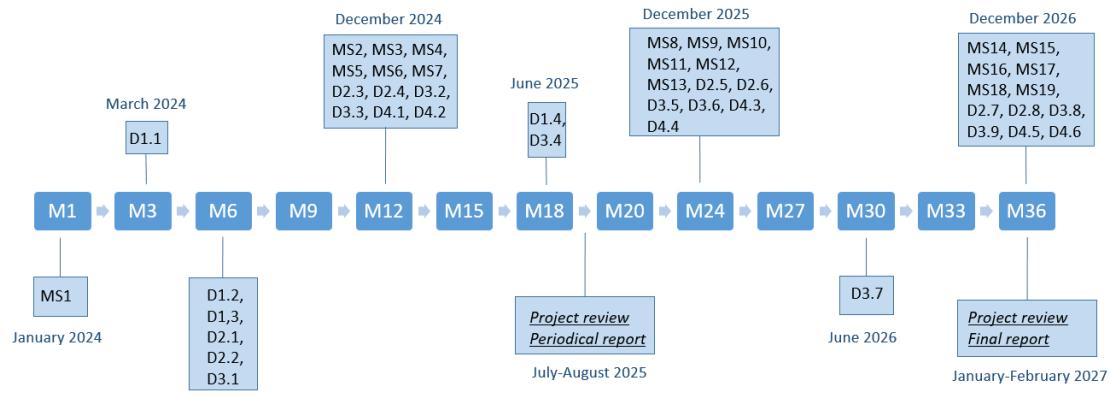


Figure 2. POP3 due dates and reporting periods

### 3.3.5 Deliverable Preparation and Review

Project deliverables to EuroHPC (Table 7) are the result of the technical progress of the work packages. The Deliverable Template, including a general deliverable structure and formatting guidelines, is available on the wiki repository.

Table 7. POP3 Deliverables

Deliverable	Title	WP no.	Lead	Type	Diss. Level	Due date
D1.1	Project Handbook	WP1	BSC	R	SEN	M03
D1.2	Data Management Plan	WP1	BSC	DMP	PU	M06
D1.3	Collaboration plan with the other Centers of Excellence	WP1	BSC	R	PU	M06
D1.4	First update of the Collaboration plan	WP1	BSC	R	PU	M18
D1.5	Final update of the Collaboration plan	WP1	BSC	R	PU	M36
D2.1	Customer feedback methodology	WP2	TERATEC	R	PU	M06
D2.2	Dissemination, Business and Exploitation Plan	WP2	FZJ	R	PU	M06
D2.3	First Dissemination and Business Report	WP2	FZJ	R	PU	M12
D2.4	First Customer Feedback Methodology	WP2	TERATEC	R	PU	M12
D2.5	Second Dissemination and Business Report	WP2	TERATEC	R	PU	M24

D2.6	Second Customer Feedback Measurement	WP2	TERATEC	R	PU	M24
D2.7	Final Dissemination and Business Report	WP2	FZJ	R	PU	M36
D2.8	Final Customer Feedback Report	WP2	TERATEC	R	PU	M36
D3.1	First update on the assessed applications/codes	WP3	FZJ	R	PU	M06
D3.2	First report on assessments including the Second update on the assessed applications/codes	WP3	BSC	R	PU	M12
D3.3	First report on second level services	WP3	USTUTT	R	PU	M12
D3.4	Third update on the assessed applications/codes	WP3	RWTH	R	PU	M18
D3.5	Second report on assessments including the Forth update on the assessed applications/codes	WP3	USTUTT	R	PU	M24
D3.6	Second report on second level services	WP3	IT4I@VSB	R	PU	M24
D3.7	Fifth update on the assessed applications/codes	WP3	INESC ID	R	PU	M30
D3.8	Final report on assessments including the final update on the assessed applications/codes	WP3	BSC	R	PU	M36
D3.9	Final report on second level services	WP3	RWTH	R	PU	M36
D4.1	First report on methodology development and tool improvement	WP4	RWTH	R	PU	M12
D4.2	First report on codesign	WP4	UVSQ	R	PU	M12
D4.3	Second report on methodology development and tool improvement	WP4	FZJ	R	PU	M24
D4.4	Second report on co-design	WP4	INESC ID	R	PU	M24
D4.5	Final report on methodology development and tool improvement	WP4	IT4I@VSB	R	PU	M36
D4.6	Final report on codesign	WP4	UVSQ	R	PU	M36

The purpose of the deliverable review process is to ensure that the document has been reviewed against a well-defined set of criteria. Each Partner nominated internal reviewers for the deliverables according to schedule and availability.

### 3.3.5.1 Procedure and Timing

The following delivery review schedule is provided as a general guideline to assist in the internal review process. T is the contractual delivery date, and the number represents calendar days prior to that date:

- T – 20 days: the deliverable owner sends the deliverable to the internal reviewer,
- T – 12 days: the reviewer sends their comments to the owner (track changed document),
- T – 05 days: the deliverable owner sends the revised deliverable back to the reviewer,
- T – 02 day: the reviewer confirms the deliverable is accepted and the owner sends it to the Project Manager,
- T: the Project Manager submits the deliverable to EuroHPC.

To evaluate a deliverable, the reviewer must provide constructive suggestions for improvement in writing to the deliverable owner and the Project Manager. After receiving the suggestions for improvement, if the proposal is to reject the deliverable, the Project Manager will work with the deliverable owner to determine the schedule for completing the deliverable.

### 3.3.6 Reports to EuroHPC

There are two official reporting periods (M1-M18 and M19-M36).

### 3.3.7 Periodic Report

The Coordinating Team must submit a periodic report with the contributions of all beneficiaries within 60 days of the end of each reporting period: Month 18 and Month 36. Each periodic report consists of a technical and a financial part.

The Coordinating Team is responsible for approving the Financial Statements of each beneficiary and revising all information included in the Technical Report (Part A and Part B). Once all information is complete, the Project Manager will submit the Periodic Report to EuroHPC through the Grant Management portal.

#### 3.3.7.1 Technical report

The technical report consists of 2 parts:

- **PART A** is filled directly in the Grant Management portal, and it consists of the following sections (similar to the Project Continuous Report):
  - Project Summary
  - Researchers involved in the project
  - Deliverables
  - Milestones
  - Critical Risks
  - Publications

- Results
- Dissemination activities
- Communication activities
- Standards
- Intellectual property rights (IPR)
- Datasets
- Impact
- Other Results

○ **PART B** is the core part of the report and follows the template made available by the funding agency. It has to be uploaded to the Grant Management tool as a single document including:

- Details of the work carried out by all beneficiaries during the reporting period; and
- An overview of the progress towards the project objectives, justifying any difference between the work described in Annex I (DoA) and the work actually performed.

### 3.3.7.2 Financial Report

It consists of structured forms from the Grant Management system, including:

#### 1. Individual Financial Statements for each beneficiary

Beneficiaries and affiliated entities must declare all eligible costs, even if they exceed the amounts indicated in the estimated budget for actual, unit, and flat-rate costs. Amounts not declared in the individual financial statement will not be taken into account by the Funding Agency.

Each partner and affiliated entity must certify that:

- the information provided is complete, reliable and true;
- the costs declared are eligible;
- the costs can be substantiated by adequate records and supporting documents which will be produced on request or in the context of checks, verifications, audits, and investigations; and
- all receipts for the last reporting period have been declared.

#### 2. Explanation of the use of resources: major costs, information about subcontracting and in-kind contributions provided by third parties

Justification of major costs and resources: the partners provide the Project Manager with an explanation of all major costs incurred, such as major equipment purchases, major travel costs, and major consumables, and justify their necessity for the project. This information will be collected on a 6-month basis through the reporting template, and the consolidated justification of major cost items will be submitted to EuroHPC.

Moreover, an explanation of any deviation from the costs forecasted in Annexes I and II of the Grant Agreement should be provided in Part B of the Periodic technical report.

### 3.3.8 Final Report

In addition to the periodic report for the last reporting period, the Project Coordinator must submit the final report within 60 days following the end of the project.

#### 3.3.8.1 Final technical report

This is a publishable summary of the entire project that has to be written in an understandable style for a non-specialist audience. It consists of the following sections:

- overview of the results and their exploitation and dissemination
- conclusions on the project
- socio-economic impact of the project
- an up-to-date link to the project website
- project logos, diagrams, photographs, and videos illustrating its work (if available)

The Coordinator must ensure that none of the material submitted for publication includes confidential or 'EU classified' information.

#### 3.3.8.2 Final financial report

1. **Final summary financial statement**, that is automatically created by the system (consolidating the data from all individual financial statements for all beneficiaries and affiliated entities, for all reporting periods) and that constitutes the **request for payment of the balance**
2. **Certificate on the financial statements – CFS** (drawn in accordance with Article 24.2 of the Grant Agreement) for each Partner if it requests a total contribution of **EUR 430,000 or more** (including the 25% flat-rate for indirect costs).

### 3.3.9 EuroHPC Reviews

EuroHPC carries out checks and reviews on the proper implementation of the action (including assessment of deliverables and reports). Reviews normally refer mainly to the technical implementation of the project (i.e. scientific and technological relevance), but may also cover financial and budgetary aspects or compliance with other obligations under the Grant Agreement. The POP3 reviews are tentatively scheduled for Month 18 and Month 36 in Luxembourg.

## 4 Intellectual Property Rights and Knowledge Management

The background of each partner has been included in the Annex 1 of the POP3 Consortium Agreement (CA). Each partner owns the results, as specified in Section 8 of the CA and according to the Article 16 of the Grant Agreement. In addition, the joint ownership of the results, transfer and dissemination are defined in the same section of the CA.

Throughout the project duration, the Partners should report any potential project-generated result to the Project Manager to facilitate any further exploitation opportunity once the project ends.

## Acronyms and Abbreviations

- CA – Consortium Agreement
- CFS - Certificate on the financial statements
- CO – Project Coordinator
- DoA – Description of Action (Annex 1 of the Grant Agreement)
- GA – General Assembly
- IPR – Intellectual Property Right
- KOM – Kick-Of-Meeting
- KPI – Key Performance Indicator
- M – Month
- MS – Milestones
- PM – Project Manager
- TL – Task Leader
- TM – Technical Manager
- WP – Work Package
- WPL – Work Package Leader

### POP3 Beneficiaries

- BSC: BARCELONA SUPERCOMPUTING CENTER - CENTRO NACIONAL DE SUPERCOMPUTACION
- FZJ: FORSCHUNGSZENTRUM JÜLICH GMBH
- RWTH: RHEINISCH-WESTFAELISCHE TECHNISCHE HOCHSCHULE AACHEN
- IT4I@VSB: TECHNICAL UNIVERSITY OF OSTRAVA
- INESC ID: INSTITUTO DE ENGENHARIA DE SISTEMAS E COMPUTADORES, INVESTIGACAO E DESENVOLVIMENTO EM LISBOA
- TERATEC: TERATEC
- UVSQ: UNIVERSITE DE VERSAILLES SAINT-QUENTIN-EN-YVELINES
- USTUTT: UNIVERSITY OF STUTTGART FOR ITS HIGH PERFORMANCE COMPUTING CENTER STUTTGART

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