



Funded by the  
European Union



Palacký University  
Olomouc

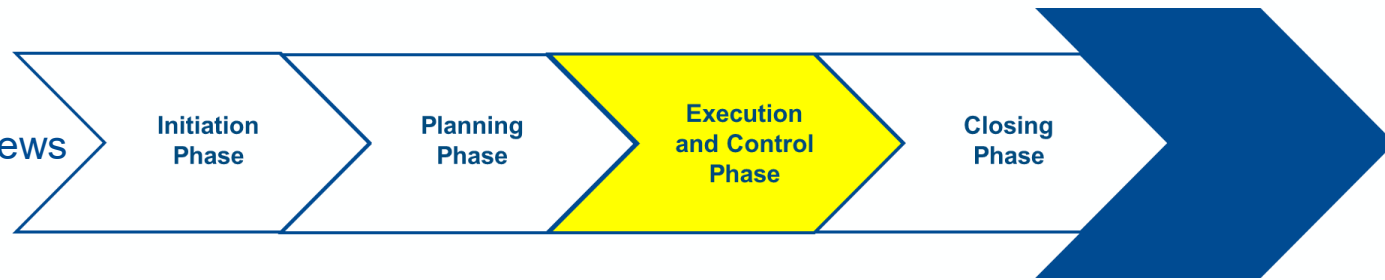


## Module 3: Horizon Europe Project Life Cycle – Execution, Control and Closing Phases

Giles Brandon (Intelligentsia Consultants), Project Management Training, Thursday 12th June 2025

## 1. Execution and Control Phase

- i. Kick-Off Meeting Checklist
- ii. Regular Online Project Meetings - Action Item List Reviews
- iii. Deliverables, Milestones, Publications
- iv. Knowledge Management
- v. Dissemination, Communication and Exploitation
- vi. Periodic Reviews: Occurrence, Purpose and Reporting
- vii. Periodic Reviews: Part B
- viii. Periodic Reviews: Financial Reporting
- ix. Periodic Reviews: Project Review Meeting
- x. Budget Flexibility
- xi. Grant Amendments: Reasons for Making an Amendment
- xii. Grant Amendments: Withdrawing a Consortium Partner
- xiii. Grant Amendments: Extending the Project Duration

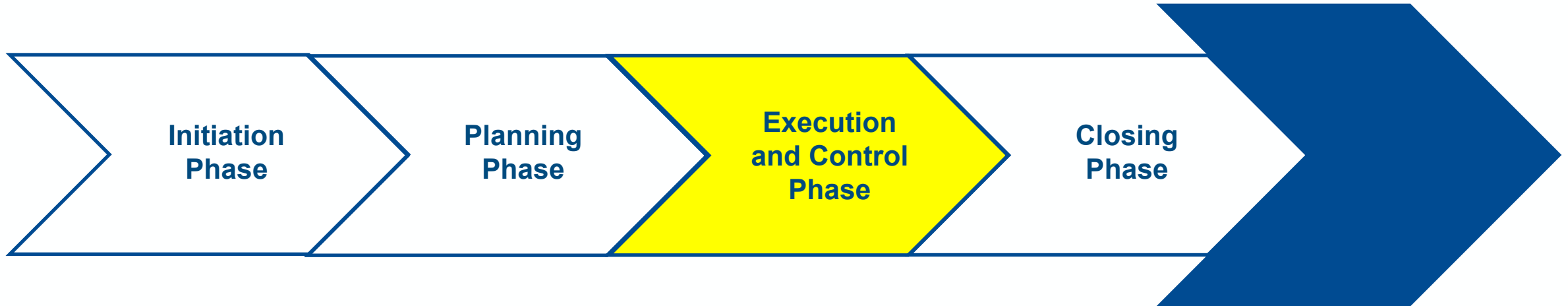


## 2. Closing Phase

- i. Main Activities



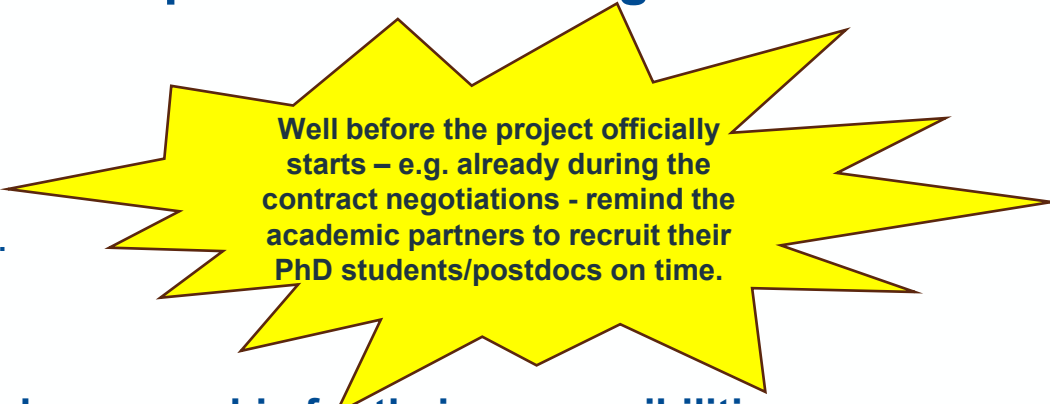
# 1. Execution and Control Phase



## A checklist of items/issues to review during a Horizon Europe kick-off meeting:

### 1. Project Overview & Objectives

- Review project goals, expected impacts, and key deliverables.
- Align partners on the scope, timelines, and intended outcomes.

A yellow starburst callout with a black outline, containing text in blue. It points towards the first section of the checklist.

Well before the project officially starts – e.g. already during the contract negotiations - remind the academic partners to recruit their PhD students/postdocs on time.

### 2. Consortium Roles and Responsibilities

- Clarify each partner's contributions. **Important that partners take ownership for their responsibilities.**
- Clarify communication channels. Clarify decision-making processes described in consortium agreement.

### 3. Work Packages and Milestones

- Each WP leader to present their WP and tasks. **Important that each WP leaders takes ownership for their WP.**
- Discuss concrete work activities for the first 6-12 months (relating to deliverables, milestones, ...).

### 4. Financial & Administrative Rules

- Review funding allocation, eligible costs, and reporting requirements.
- Ensure understanding of the Grant Agreement and Consortium Agreement.

## 6. Risk Management and Contingency Planning

- Review list of critical risks and proposed mitigation measures in the grant agreement.
- Establish a monitoring process to resolve issues.

## 7. Ethics, Data Management and Open Science

- Discuss ethical compliance and data protection measures.
- Review open-access requirements and dissemination plans.



## 8. Communication and Dissemination Strategy

- Review the project's communication, dissemination and exploitation plan in the grant agreement.
- Identify concrete activities for the first six months (events, social media, etc).

## 9. Next Steps and Action Points

- Summarize key decisions and responsibilities.
- Set dates for the next meetings and reporting deadlines.

- I recommend having a weekly online meeting (same day/time) to review the project’s action item list:
  - Regular weekly meeting becomes a habit - partners don’t need to think what day/time it will be at.
  - Meeting will be typically about ½ - 1 hour in duration. However, it can be shorter or longer according to need.
  - Regularity helps to keep partners **focused on their tasks/actions** in the project.
  - Regularity helps ensure partners are made to feel accountable - amazing how partners often suddenly address their actions shortly before each meeting.
  - If you have a **Zoom business subscription**, use their **AI companion** to automatically write minutes and actions.
  - Book the weekly Zoom meeting into the email calendars of the consortium partners.

**WP2 Innovation Workshops**

Work package number	2		Lead beneficiary		TPF	
Work package title	Innovation Workshops					
Participant short name	INT	TC-CAS	MITA	LXI	LTC	ASTP
Person months per participant	2	2	2	3	2	-
Participant short name	TPF	IMT	IMSAS	NASU	-	-
Person months per participant	11	3	2	2	-	-
Start month	6		End Month		36	


  

Work Packages	Performance Indicators	Final Target	Current Total
WP2: Innovation Workshops	2.1 Number of innovation workshops on R&I priorities of Horizon Europe Pillar 2 Cluster 4	6	2
	2.2 Number of talented newcomers participating in innovation workshops	60+	26
	2.3 Number of NMP Top Innovators participating in innovation workshops	10+	2
	2.4 Number of trainings given on proposal preparation for Horizon Europe Pillar 2 Cluster 4	6	5
	2.5 Number of collaborative proposals involving talented newcomers submitted to Horizon Europe Pillar 2 Cluster 4 with the support of FIT-4-NMP	12+	8

WP/Task	Action Item	Responsible	Due Date
WP2/T2.1	<p><u>Innovation workshop (physical) with VTT in Espoo during 9-10 November (expected):</u> Calls selected for the workshop:</p> <ul style="list-style-type: none"> <li>• Sustainable, secure and competitive energy supply (HORIZON-CL5-2022-D3-03), published on Sep 06, deadline in January 2023</li> <li>• HORIZON-CL5-2023-D2-01-02: New processes for upcoming recycling feeds (Batt4EU Partnership), deadline in April 2023 (not officially published yet)</li> </ul> <p>Potential talented newcomers to participate (especially SMEs)?</p>	Lead partner: TPF Support: All	30/9/22
WP2/T2.1	Potential to hold innovation workshop at	Lead partner: TPF	30/9/22

- Create a standardised deliverable template for partners to use




QUANTUM RESERVOIR COMPUTING  
FOR EFFICIENT SIGNAL PROCESSING

---


**Project Deliverable**  
DX.X <Deliverable title>

Lead beneficiary: \_\_\_\_\_  
 Author(s): \_\_\_\_\_  
 Contributor(s): \_\_\_\_\_  
 Date of issue: \_\_\_\_\_  
 Dissemination level: \_\_\_\_\_

<https://www.qrc-4-esp.eu>



Funded by the European Union




**DOCUMENT HISTORY**

Version and date	Changes

**DISCLAIMER**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Commission. Neither the European Union nor the granting authority can be held responsible for them.

This document contains information which is proprietary to the QRC-4-ESP consortium. Neither this document nor the information contained herein shall be used, duplicated or communicated by any means to any third party, in whole or parts, except with the prior written consent of the QRC-4-ESP coordinator or partner on behalf of the project consortium.



Deliverable DX.X <Deliverable title>

2

**Table of Contents**

1. Executive Summary.....4
2. Introduction.....4
3. Section 3 title.....4
- 3.1 Sub-section 3 title.....4



**Send an email reminder at least 2-3 months before the deliverable's due date to the responsible partner.**



Deliverable DX.X <Deliverable title>

3

- **Have a quality-control schedule to review draft deliverables, i.e., allocate partners to review each other's deliverables.**

Deliv. No.	Deliverable name	WP No.	Lead Beneficiary	Type	Diss. level	EC Due date	Deliv. Production deadline	Partner Deliv. Reviewers	Deliv. Review deadline
D7.7	SIFIS-Home Website	7	CEN	Websites, patents filling, etc.	PU	M4	15/01/2021	POL, RIO	22/01/2021
D8.1	Management & Quality Plan.	8	IC	ORDP	PU	M4	15/01/2021	CNR, RISE	22/01/2021
D1.1	Initial Architecture Requirements Report	1	FSEC	Report	PU	M6	01/03/2021	SEN, INT	15/03/2021
D2.1	Report on Security and Privacy Metrics.	2	POL	Report	PU	M6	01/03/2021	RISE, MIND	15/03/2021
D3.1	Analyses and feedback on architecture requirements and goals	3	RISE	Report	PU	M8	30/04/2021	POL, CEN	15/05/2021
D4.1	Analyses and feedback on architecture requirements and goals	4	CNR	Report	PU	M8	30/04/2021	FSEC, ERI	15/05/2021
D1.2	Final Architecture Requirements Report	1	FSEC	Report	PU	M12	01/09/2021	RIO, RISE	15/09/2021
D1.3	Initial Component, Architecture, and Intercommunication Design	1	FSEC	Report	PU	M12	18/08/2021	POL, ERI	08/09/2021
D2.2	Preliminary Developer guidelines.	2	POL	Report	PU	M12	18/08/2021	CEN, FSEC	08/09/2021
D2.6	Initial Report on Legal and Ethical Aspects.	2	POL	Report	PU	M18	01/03/2022	CEN, RIO	15/03/2022
D3.2	Preliminary report on Network and System Security Solutions	3	RISE	Report	PU	M18	15/02/2022	CNR, MIND	08/03/2022
D4.2	Initial Design and Development of Privacy Aware Analytics for Secure Services	4	CNR	Report	PU	M18	15/02/2022	RISE, ERI	08/03/2022

- Deliverables are submitted to SyGMa (System for Grant Management) via the EC's Funding and Tenders Portal

SyGMa - System for Grant Management — Mozilla Firefox

https://ec.europa.eu/research/participants/grants-app/reporting/DLV-101129663

110%

nbrangil (EXTERNAL)

Grant Management Project Continuous Report

101129663 (QRC-4-ESP) HORIZON-...  
 Call: HORIZON-EIC-2023-PATHFINDEROPEN-01  
 Topic: HORIZON-EIC-2023-PATHFINDEROPEN-01

Project Summary ✓ Researchers involved in the project ✓ Deliverables i Milestones i Critical Risks ✓ Publications i Results ✓ Disseminat... activities ✓ Communic... Activities ✓ Standards ✓ Intellectual property rights (IPR) ✓ Datasets ✓ Impact ✓ Impact Continuation ✓ Other Results ✓

### Deliverables and Other Reports

For each Deliverable, a single file (max 52MB) can be uploaded

Add actual delivery dates (or new due date for late deliverables, together with an explanation for the delay). In the Comments, please indicate if the deliverable was achieved as planned or not.

The labels used mean:  
 Public – fully open  
 Sensitive – limited under the conditions of the Grant Agreement  
 EU classified – RESTREINT-UE/EU-RESTRICTED, CONFIDENTIEL-UE/EU-CONFIDENTIAL, SECRET-UE/EU-SECRET under Decision 2015/444. For items classified under other rules (e.g. national or international organization), please select the equivalent EU classification level.

Show Filters Clear Filters

Work Pack	Deliverab	Delivera	Deliverable Name	Description	Lead B	Type	Dissemina	Due Date	New Due Date (if	Delivery Date	Approval Date	Status
WP5	D5.1	D15	Project logo, website and social media accounts	A project logo and website will be prepared and...	INT	R	PU	29 Feb 2024		28 Feb 2024		Submitted
WP5	D5.2	D16	Data management plan	A detailed FAIR (findable, accessible, interope...	INT	DMP	SEN	30 Jun 2024		15 May 2024		Submitted
WP5	D5.3	D17	Dissemination and communication plan - initial version	A report documenting the Dissemination and Comm...	INT	R	PU	30 Jun 2024		14 May 2024		Submitted
WP5	D5.4	D18	Exploitation plan - initial version	A report documenting the Exploitation Plan over...	INT	R	SEN	30 Jun 2024		13 Jun 2024		Submitted
WP1	D1.1	D1	Quantitative model of superconducting QR	A mathematical description of a quantum reservo...	Lboro	R	PU	31 Oct 2024		30 Oct 2024		Submitted
WP1	D1.2	D2	Quantitative model of defect-based QR	A mathematical description of a quantum reservo...	Lboro	R	PU	31 Dec 2024		12 Dec 2024		Submitted
WP2	D2.1	D5	Fabricated, optimised and tested 5-qubit QR	A 5-qubit superconducting QR will be designed a...	IPHT	DEM	PU	31 Dec 2024		28 Nov 2024		Submitted
WP3	D3.1	D9	Report on point defect quantum systems in the presence of	A range of point defect-based structures will b...	LIU	R	PU	31 Dec 2024		12 Dec 2024		Submitted
WP4	D4.1	D12	Software implementation of neural network for QRC	A numerical model of a neural network for the p...	JM	DEM	PU	31 Dec 2024		28 Dec 2024		Submitted
WP6	D6.1	D22	RP1 Technical/scientific review meeting documents	RP1 Technical/scientific review meeting documents.	IPHT	R	SEN	31 Jan 2025	28 Feb 2025	28 Feb 2025		Submitted
WP2	D2.2	D6	Fabricated, optimised and tested 10-qubit QR	A 10-qubit superconducting QR will be designed ...	IPHT	DEM	PU	30 Jun 2025				Pending
WP1	D1.3	D3	Updated model of superconducting QR incorporating experir	The superconducting QR model (D1.1) will be upd...	Lboro	R	PU	31 Aug 2025				Pending

- **Public deliverables** in Horizon Europe projects are available for download from the **EC's CORDIS project database**.
  - Chance to learn how other projects write their deliverables.
- This can be especially helpful to **understand how to produce deliverables required in all Horizon Europe projects**:
  - Project Website and Promotion Materials.
  - Data Management Plan.
  - Dissemination, Communication and Execution Plan.



**CORDIS - EU research results**

Home | Thematic Packs | Projects & Results | Videos & Podcasts | News | Datalab | Search

Home > Projects & Results > Horizon Europe > Twinning to build an industrial ecosystem around the core principles of Industry4.0 and the Digital Twin



## Twinning to build an industrial ecosystem around the core principles of Industry4.0 and the Digital Twin

Fact Sheet | Reporting | **Results**

CORDIS provides links to public deliverables and publications of HORIZON projects.

Links to deliverables and publications from FP7 projects, as well as links to some specific result types such as dataset and software, are dynamically retrieved from [OpenAIRE](#).

### Deliverables

Documents, reports (6)

- [Handbook for R&I project management and administration](#) | [Handbook for R&I project management and administration I \(M18\)](#)
- [Gender equality report](#) | [Gender equality report I](#)
- [Digital twins best practice atlas report](#) | [Digital twins best practice atlas report I](#)
- [Dissemination, Exploitation and Communication \(DEC\) Plan](#) | [Dissemination, Exploitation and Communication \(DEC\) Plan I \(M6\)](#)
- [Reports on the progress of knowledge-transfer activities \(shadowing activities, workshops, expert visits\)](#) | [Reports on the progress of knowledge-transfer activities \(shadowing activities, workshops, expert visits\) I \(M18\)](#)
- [Data management plan](#) | [Data management plan I](#)

Searching for OpenAIRE data...

**Project Information**

**Twin4Twin**  
Grant agreement ID: 101079180

DOI  
[10.3030/101079180](#)

EC signature date  
19 July 2022

Start date  
1 January 2023

End date  
31 December 2025

Funded under  
Widening participation and spreading excellence

Total cost  
€ 1 499 500,00

**EU contribution**  
€ 1 499 500,00

Investment in EU policy priorities

Digital agenda	<input type="radio"/>	Clean air	<input type="radio"/>
Artificial Intelligence	<input checked="" type="radio"/>	Climate action	<input type="radio"/>
Biodiversity	<input type="radio"/>		

Coordinated by  
CORE KENTRO KAINOTOMIAS AMKE

- Milestone completion is recorded in SyGMa (System for Grant Management)

SyGMa - System for Grant Management — Mozilla Firefox  
 https://ec.europa.eu/research/participants/grants-app/reporting/DLV-101129663

Grant Management | Project Continuous Report | nbrangil (EXTERNAL) | HOW TO

101129663 (QRC-4-ESP)	HORIZON-...	Project Summary	Researchers involved in the project	Deliverables	Milestones	Critical Risks	Publications	Results	Disseminat... activities	Communic... Activities	Standards	Intellectual property rights (IPR)	Datasets	Impact	Impact Continuation	Other Results
Call: HORIZON-EIC-2023-PATHFINDEROPEN-01		✓	✓	i	i	✓	i	✓	✓	✓	✓	✓	✓	✓	✓	✓
Topic: HORIZON-EIC-2023-PATHFINDEROPEN-01																

Milestones SAVE

Mile	Milestone Name	Work Package No	Lead Beneficiary	Means of Verification	Due Date	New Due Date (if delay)	Delivery Date (actual)	Achieved
1	Held Kick-Off Meeting (KOM)	WP6	Lboro	KOM minutes and ε	31 Jan 2024		30 Jan 2024	✓
2	Defined QR quantitative model based on superconducting qubits	WP1	Lboro	Deliverable 1.1. Li	31 Oct 2024		25 Oct 2024	✓
3	Defined QR quantitative model based on defect qubits	WP1	Lboro	Deliverable 1.2. Li	31 Dec 2024		12 Dec 2024	✓
4	Fabricated, optimised and tested 5-qubit QR	WP2	IPHT	Deliverable 2.1. Li	31 Dec 2024		28 Nov 2024	✓
5	Implemented neural network in software	WP4	JM	Deliverable 4.1. Li	31 Dec 2024		17 Dec 2024	✓
6	Fabricated, optimised & tested 25-qubit QR	WP2	IPHT	Deliverable 2.3. Li	31 Dec 2025			☐
7	Optimised design for prototype superconducting QR	WP2	IPHT	Deliverable 2.4. Li	30 Apr 2026			☐
8	Optimised design for prototype defect-based QR	WP3	LIU	Deliverable 3.3. Li	30 Apr 2026			☐
9	Created integrated QRC demonstrator	WP4	JM	Deliverable 4.2. Li	30 Jun 2026			☐
10	Completed QRC testing and benchmarking	WP4	JM	Deliverable 4.3. Li	31 Dec 2026			☐

- **Essential to acknowledge Horizon Europe funding in journal articles and conference papers (also European flag) based on research results from a Horizon Europe project.**
- **Check the grant agreement (Article 17.2) and with the EC project officer to know what formal statement to use (the wording may change over time).**
- **Currently, the formal statement can be:**

*“The research presented in this paper was funded by the European Union under Horizon Europe for the SUSNANO project (Grant Agreement 101059266).” or*

*“We acknowledge the support of the European Union under Horizon Europe for the SUSNANO project (Grant Agreement 101059266).”*

- Project related publications (e.g, journal articles, conference papers, ...) are recorded in SyGMA

SyGMA - System for Grant Management — Mozilla Firefox  
 https://ec.europa.eu/research/participants/grants-app/reporting/DLV-101129663

Grant Management | Project Continuous Report | nbrangil (EXTERNAL) | HOW TO

101129663 (QRC-4-ESP)	HORIZON...	Project Summary	Researchers involved in the project	Deliverables	Milestones	Critical Risks	Publications	Results	Disseminat... activities	Communic... Activities	Standards	Intellectual property rights (IPR)	Datasets	Impact	Impact Continuation	Other Results
Call: HORIZON-EIC-2023-PATHFINDEROPEN-01 Topic: HORIZON-EIC-2023-PATHFINDEROPEN-01		✓	✓	i	i	✓	i	✓	✓	✓	✓	✓	✓	✓	✓	✓

**Publications** SAVE

Project publications (1 publications)






Show/Hide Filters | Clear Filters

Type	Title	Authors	Title of the Journal or equivalent	Number	Peer-reviewed	Was the publication available in open access through the repository at the time of publication	Type of PID (repository)	PID (publisher version of record)	PID of deposited publication	Actions
1	Article in journal	Hysteresis and self-oscillatio	Finlay Potter, Alexandre Zagr	Physical Review A	110	True	True	DOI	https://doi.org/10.1103/Phy	✖

Export to Excel | Add Publication

- **Prepare a data management plan according to the EC's template (often an obligatory deliverable).**
  - Define categories of data to be collected, generated, used and processed.
  - 1. Public Research Data, 2. Confidential Research Data, 3. Project deliverables, 4. Promotional materials and templates, 5. Official documents, 6. Basic personal data of project team members, and 7. Meeting data.)
  
- **Set up a Cloud Storage and File Sharing facility to share data, files and deliverables between partners.**
  - MS Teams, MS Sharepoint, Dropbox, Google drive, ...
  - Organise folders according to WPs, Meetings, etc.



Name
 WP1 - Preparatory Research Project
 WP2 - Short-term staff exchanges and trainings for experienced researchers
 WP3 - Research internships and trainings for early-stage researchers
 WP4 - Research Management and Administration Skill Development
 WP5 - Dissemination, Exploitation, Communication and Outreach
 WP6 - Project Management

Project Results	Dissemination, Comm. & Exploitation Measures	Target Audiences					KPIs	Period 1
		Industry (SMEs & MNEs)	Academia (PROs & HEIs)	EU Initiatives	Policy Makers	General Public		
Project website	Publish project summary, regular news and event updates	■	■	■	■	■	2500+ visitors 30+ news	818 unique visitors (1223 sessions), 14 news
Project leaflet and poster	Distribute during conferences (e.g., <a href="#">EQTC</a> , etc.), workshops, summer schools and outreach	■	■	■	■	■	300+ leaflets 30+ posters	90 leaflets, 62 posters
Project press-releases	Supply press-releases to science channels e.g., <a href="#">Alpha Galileo</a>	■	■	■	■	■	3+ press releases	1 press release (235 views)
Social media	Publish news on Twitter/LinkedIn	■	■	■	■	■	20+ Tweets	20 Tweets
Short project film	Publish film on YouTube and project website	■	■	■	■	■	1+ video 1000+ views	1 video, 90 views
Industry workshops	Hold workshops with industry to facilitate QRC adoption	■		■			1+ / year	2
Summer Schools / Lecture Courses	Run summer schools & lectures for young researchers on QRC		■				1+ / year	1
Open days / Research Nights	Promote and explain QRC during open-day events					■	2+ / year	5
School visits	Promote QRC during school visits					■	2+ / year	-
Scientific results concerning QRC	Publish results in international open journals (e.g., <a href="#">Nature</a> , etc.)	■	■	■			9+ journal papers	1
Scientific results concerning QRC	Present results at international conferences (e.g., <a href="#">EQTC</a> , etc.)	■	■	■			9+ conf. papers	11

Dissem. and Comm. Activity	Title of the activity	Audience Category
Organisation of a Conference	Hosted the conference Defects in solids for quantum technologies (DSQT 2024), Budapest, Hungary, 10-14 June 2024 (Dr. Viktor Ivády).	Academia
	Co-organised a special session at the 10th International Conference on Antennas and Electromagnetic Systems (AES 2024), Rome, Italy, 25-28 June 2024. <ul style="list-style-type: none"> <li>SP8. "Superconducting and high-frequency neuromorphic devices" (Prof. Sergey Saveliev)</li> </ul>	Academia + Industry
	Co-organised a special session at the 14 <sup>th</sup> International Conference on Metamaterials, Photonic Crystals and Plasmonics (META 2024), Toyama, Japan, 16 – 19 July 2024. <ul style="list-style-type: none"> <li>SP15. "Quantum metamaterials for artificial intelligence" (Dr. Alexandre Zagoskin and Prof. Sergey Saveliev)</li> </ul>	Academia + Industry
	Co-organised a special session at the 23 <sup>rd</sup> International Conference on Machine Learning and Applications (ICMLA 2024), Miami, USA, 18-20 December 2024. <ul style="list-style-type: none"> <li>Quantum Machine Learning: The Fusion of ML and Quantum Computing Workshop, (Prof. Sergey Saveliev)</li> </ul>	Academia + Industry
Organisation of a Workshop	Co-hosted a workshop entitled "Neuromorphic Technology: A Giant Leap for AI" as part of an AI UK Fringe event, 26-28 March 2024 (Prof. Sergey Saveliev, Dr. Alexander Balanov)	Academia + Industry
	Organised a mini-workshop on (Quantum) Reservoir Computing, Montpellier, France, September 2024 (Dr. Emmanuel Rousseau)	Academia
Participation to a Conference	Presented papers at the 10th International Conference on Antennas and Electromagnetic Systems (AES 2024), Rome, Italy, 25-28 June 2024: <ul style="list-style-type: none"> <li>Quantum Analogues of Dissipative Circuit Elements, Alexandre Zagoskin, Sergei Saveliev, Alexander Balanov, Charlie Huggins</li> <li>Artificial Neuron Circuit with a Two-Level Quantum Memristor, Finlay Potter, Alexandre Zagoskin, Sergey Saveliev, Alexander G. Balanov</li> </ul>	Academia + Industry
	Gave invited talk "Superconducting systems for quantum and neuromorphic AI and reservoir computing", 10th International Conference on Antennas and Electromagnetic Systems (AES 2024), Rome, Italy, 25-28 June 2024 (Prof. Sergey Saveliev)	Academia + Industry
	Presented project poster to Frontiers of Quantum and Mesoscopic Thermodynamics (FQMT), Prague, Czech Republic, 21-27 July 2024: <ul style="list-style-type: none"> <li>Quantum reservoir computing on random regular graphs, Moein N. Ivaki, Achilleas Lazarides, and Tapio Ala-Nissila.</li> </ul>	Academia + Industry
	Presented poster at Quantum Thermodynamics meets Quantum Computation, 7–10 Oct 2024, Palazzo del Castelletto, Rome <a href="https://indico.sns.it/event/72">https://indico.sns.it/event/72</a> Dr Moein Najafi Ivaki, Aalto University	Academia + Industry
	Presented talk on Quantum Dynamical Emulation at Quantum Thermodynamics meets Quantum Computation, 7–10 Oct 2024, Palazzo del Castelletto, Rome <a href="https://indico.sns.it/event/72">https://indico.sns.it/event/72</a> <ul style="list-style-type: none"> <li>Quantum Dynamical Emulation, Dr Gerard McCaul, Loughborough University</li> </ul>	Academia + Industry
Participation to an Event other than a Conference, Workshop or Summer School	Was a panel speaker for Workshop: Developing AI policies to support effective research management, Digital Universities UK, Exeter, UK, 16 April 2024 (Prof. Sergey Saveliev)	Academia
	Visited and gave seminars about quantum reservoir computing at RIKEN (National Research and Development Agency) and Shibaura Institute of Technology, Toyosu, Tokyo, July - August 2024 (Dr. Alexandre Zagoskin)	Academia
Outreach events	Gave a talk on Quantum technologies (far) above and beyond quantum computing, Pint of Science, Loughborough University festival, UK, 14 May 2024 (Dr. Alexandre Zagoskin)	General Public

**Use an Excel file to track details of the different D, C and E activities done by partners. Regularly remind partners to update the file.**



Dissem. and Comm. Activity	Title of the activity	Audience Category
Participation to a Workshop	Gave invited talk "Memristive circuits and reservoir computing", IoP Memristor workshop, London, 26 January 2024. (Prof. Sergey Saveliev)	Academia
	Held quantum reservoir computing and quantum technology related workshop during QRC-4-ESP kick-off meeting, Loughborough University, UK, 1 February 2024	Academia + Industry
	Gave presentations at AI UK Fringe event, 26-28 March 2024: <ul style="list-style-type: none"> <li>Quantum Reservoir Computing, Research and New EU projects (Dr. Alexandre Zagoskin)</li> <li>Spiking neurons based on diffusive memristors (Prof. Sergey Saveliev)</li> <li>Artificial Neuron with a Quantum Memristor (Dr. Alexander Balanov)</li> </ul>	Academia + Industry
	Gave invited talk " Building artificial brain with memristive neurons", Workshop on Stable Neuromorphic Computations, 29 – 30 April 2024, King's College London (Prof. Sergey Saveliev)	Academia + Industry
Scientific and peer-reviewed publication	Paper published in Physical Review A: <ul style="list-style-type: none"> <li><i>Hysteresis and Self-Oscillations in an Artificial Memristive Quantum Neuron</i>, Finlay Potter, Alexandre Zagoskin, Sergey Saveliev, Alexander G. Balanov</li> </ul>	Academia
	Paper submitted to Nature Communications (under review): <ul style="list-style-type: none"> <li><i>A Coherence-Protection Scheme for Quantum Sensors Based on Ultra-Shallow Single Nitrogen-Vacancy Centers in Diamond</i>, Anton Pershin, András Tárkányi, Vladimir Verkhovlyuk, Viktor Ivády, Adam Gali</li> </ul>	Academia
Training	Teaching Bachelor and Master Students on related related QRC aspects during 2024-2026 (Dr. Gregor Oelsner)	Academia
	LIU and ELTE organized series of training seminars with other quantum defect groups at Wigner Research Institute, Hungary during Feb – Dec 2024	Academia
Social Media	Published regular project updates in the QRC-4-ESP LinkedIn Group: <a href="https://www.linkedin.com/groups/14393078">https://www.linkedin.com/groups/14393078</a>	Academia + Industry + EU Initiatives + General Public
	Published regular project updates on the QRC-4-ESP X (Twitter) page: <a href="https://twitter.com/qrc_4_esp">https://twitter.com/qrc_4_esp</a>	Academia + Industry + EU Initiatives + General Public
	Published regular project updates on Dr. Alexandre Zagoskin's personal LinkedIn page: <a href="https://www.linkedin.com/in/alexandre-zagoskin-b332b520">https://www.linkedin.com/in/alexandre-zagoskin-b332b520</a>	Academia + Industry + Public
	Published regular project updates on Prof. Tapio Ala-Nissila's personal Twitter/X account: <a href="https://twitter.com/tapio_ala">https://twitter.com/tapio_ala</a>	Academia + Industry + Public
	Published regular project updates on Dr. Juan S. Toterogongora's personal Twitter/X account: <a href="https://twitter.com/jstotero">https://twitter.com/jstotero</a>	Academia + Industry + Public
Website	Published regular project updates on the QRC-4-ESP website: <a href="https://www.qrc-4-esp.eu">https://www.qrc-4-esp.eu</a>	Academia + Industry + EU Initiatives + Policy Makers + Public
	Published news of hosting project events on IPHT website: <a href="https://www.leibniz-ipht.de">https://www.leibniz-ipht.de</a>	Academia + Industry + EU Initiatives + Policy Makers + Public
	Published news of hosting project events on Aalto website: <a href="https://www.aalto.fi">https://www.aalto.fi</a>	Academia + Industry + Public
Press release	Published press release focused on project kick-off: <a href="https://www.qrc-4-esp.eu/post/groundbreaking-qrc-4-esp-project-launched">https://www.qrc-4-esp.eu/post/groundbreaking-qrc-4-esp-project-launched</a> <a href="https://www.aalto.fi/en/news/groundbreaking-qrc-4-esp-project-launched">https://www.aalto.fi/en/news/groundbreaking-qrc-4-esp-project-launched</a>	Academia + Industry + EU Initiatives + Policy Makers + General Public

- **Occurrence:** Horizon Europe projects of 2-3 years duration are divided into two periods (Period 1 and Period 2). Projects of longer duration have additional periods (Period 3, ...).
- **Assess Project Progress:** Purpose is to evaluate whether the project is meeting its objectives, milestones, and deliverables as planned.
- **Ensure Compliance:** Purpose is to verify adherence to Horizon Europe funding rules, ethical guidelines, and contractual obligations.
- **Monitor Budget & Resources:** Purpose is to review financial expenditures and resource allocation to ensure efficient use of funds.
- **Identify Risks & Challenges:** Purpose is to detect potential risks, delays, or deviations and proposes corrective actions if needed.
- **Facilitate Communication:** Purpose is to provide an opportunity for beneficiaries and the European Commission to discuss findings, feedback, and future steps.

- **Technical Report (Part A)**

- Online forms to be completed in SyGMA: project summary, critical risks, milestones, publications, dissemination activities, etc.

- **Technical Report (Part B)**

- Technical Report also referred to as the Periodic Management Report.
- Technical Report provides a comprehensive overview on project progress: project objectives, achievements, deviations, and impact, including scientific and innovation-related progress.
- Technical Report provides explanations of work performed for each WP, use of resources, risk management, and compliance with EC requirements, supported by deliverables & milestones.

- **Financial Report**

- Important distinction between financial statements for **lump sum funded projects** and **actual cost funded projects**.
- **Lump sum funded projects:** Financial Statement confirms the % completion of WPs rather than detailing actual incurred costs, thereby simplifying financial reporting.
- **Actual cost funded projects:** Financial Statement provides a breakdown of actual incurred costs, including personnel, travel, equipment, and subcontracting, ensuring they align with the project's budget and Horizon Europe rules.



H2020-NMBP-TO-IND-2020-singlestage-#958255

Periodic Technical Report - Part B  
Period covered: 01/01/21 – 30/06/22

With respect to networking events in the underrepresented regions, the FIT-4-NMP consortium can be counted upon to organise well-attended and well-animated regional events with a broad cross section of local NMP actors. For example, together with the Society for New Materials and Technology, IMSAS organised in 2019 an industry-academia workshop in Bratislava involving 70 participants from 23 companies, 2 universities and the Slovak Academy of Sciences. Similarly, during the [H2020 R4-LINKS2UA](#) project, NASU organised in 2017 a successful brokerage event on Advanced Materials in Kyiv with members of the National Technology Platform on Advanced Materials as well as EEN-Ukraine. With the support of FIT-4-NMP, the consortium partners will be able to organise workshops and brokerage events across underrepresented regions with the participation of key experts from NMP Top Innovators.

#### Overview of the project objectives per WP

Objective	Period 1 Achievement
<b>WP1 – Mapping (WP Leader: INT)</b>	
• Objective 1.1: Identify and prioritise underrepresented regions in the H2020 NMBP programme.	Completed
• Objective 1.2: Identify talented newcomers from the prioritised underrepresented regions.	On-going
• Objective 1.3: Identify NMP hotspots.	Completed
• Objective 1.4: Identify NMP groups and NMP Top Innovators.	Completed
• Objective 1.5: Map talented newcomers to NMP groups and NMP Top Innovators.	Completed
<b>WP2 – Innovation Workshops (WP Leader: TPF)</b>	
• Objective 2.1: Organise innovation workshops on selected R&I Priorities from Horizon Europe Pillar 2 Cluster 4	On-going
• Objective 2.2: Deliver training and hands-on support to write proposals for Horizon Europe Pillar 2 Cluster 4	On-going
<b>WP3 – Training (WP Leader: ASTP)</b>	
• Objective 3.1: Deliver technology-transfer training courses in underrepresented regions.	On-going
• Objective 3.2: Deliver training and hands-on support to prepare proposals for other EC calls.	On-going
• Objective 3.3: Deliver training and hands-on support to use European networking portals.	On-going
<b>WP4 – Surveying (WP Leader: MITA)</b>	
• Objective 4.1: Survey the challenges limiting the participation of newcomers in NMP projects.	Completed
• Objective 4.2: Identify best practices and formulate policy measures.	Completed
• Objective 4.3: Communicate best practices and policy measures to relevant stakeholders.	On-going
<b>WP5 – Promotion and Dissemination (WP Leader: IMT)</b>	
• Objective 5.1: Promote talented newcomers at EC networking events.	On-going
• Objective 5.2: Promote talented newcomers at networking events in the underrepresented regions.	On-going
• Objective 5.3: Implement and maintain an internet presence.	On-going
• Objective 5.4: Disseminate the project's promotion materials, public reports and training materials.	On-going
<b>WP6 – Project Management (WP Leader: INT)</b>	
• Objective 6.1: Coordinate the project	On-going
• Objective 6.2: Manage administrative matters	On-going

Version: 1.0

Page 5 of 49

H2020-NMBP-TO-IND-2020-singlestage-#958255

Periodic Technical Report - Part B  
Period covered: 01/01/21 – 30/06/22

## 1.2 Explanation of the work carried per WP

### 1.2.1 WP1: Mapping

#### Objectives (Copied from Annex I - Description of Action)

- Objective 1.1: Identify and prioritise underrepresented regions in the H2020 NMBP programme;
- Objective 1.2: Identify talented newcomers from the prioritised underrepresented regions;
- Objective 1.3: Identify NMP hotspots;
- Objective 1.4: Identify NMP groups and NMP Top Innovators;
- Objective 1.5: Map talented newcomers to NMP groups and NMP Top Innovators.

#### Main Achievements

- Identified and making contactable 155 talented newcomers (including 59 SMEs) from 26 countries and 49 regions via the [FIT-4-NMP register](#);
- Identified over 150 NMP Top Innovators from across Europe and displayed and made them contactable via the [FIT-4-NMP interactive map](#);
- Prepared and published the [Report on Underrepresented Regions and Talented Newcomers in H2020 Research](#) (deliverable D1.1), which has been viewed 159 times and downloaded 14 times from the FIT-4-NMP website;
- Prepared and published the [Report on Europe's Leading Research and Innovation Organisations in Nanotechnologies, Advanced Materials and New Manufacturing Processes \(NMP\)](#) (deliverable D1.2), which has been viewed 260 times and downloaded 31 times from the FIT-4-NMP website.

#### Status with respect to Performance Indicators

Work Package	Performance Indicators	Final Target	Period 1 Total
WP1: Mapping	1.1 Number of talented newcomers identified from underrepresented regions	120+	155
	1.2 Number of SMEs among the talented newcomers	60+	59
	1.3 Number of NMP hotspots identified across Europe	30+	100+
	1.4 Number of NMP Top Innovators identified from Europe	20+	150+
	1.5 Report on underrepresented regions and talented newcomers	1	1
	1.6 Report on NMP hotspots, NMP groups and NMP Top Innovators	1	1
	1.7 Number of EU platforms (e.g. Innovation Radar and European Cluster Collaboration) to which the Report on NMP hotspots, NMP groups and NMP Top Innovators is promoted	5+	8

#### Progress per Task

##### Task T1.1: Identify and prioritise underrepresented regions in the H2020 NMBP programme (MI-M6/INT)

A multi-level analysis was performed to identify regions underrepresented in H2020 NMP research but still having untapped innovation potential. Firstly, H2020 Dashboard open data on H2020 NMP project participations and eCORDA confidential data on H2020 NMP proposals were analysed at national and regional levels. This analysis revealed that:

- Low-participating regions exist in all EU-15, EU-13 and Associated Countries (AC);
- Considerable disparity exists between the EU-13 and EU-15 countries with respect to application frequency, success rate, and share of newcomers;
- Significant differences exist between the performances of the high-income associated countries (Switzerland, Norway, Iceland and Israel) and upper-middle-income and low-middle-income countries (ones included in the H2020 Widening list).

Based on these findings, the FIT-4-NMP team developed a pragmatic approach – combining policy considerations and data-driven considerations – to prepare a priority list of regions underrepresented in H2020 NMP research. Consequently, an in-depth analysis was performed on the (i) regions' positioning in the H2020 NMP programme, (ii) regions' achievements in NMP research and (iii) regions' strategic interest in NMP

Version: 1.0

Page 6 of 49

## Contribution per partner to WP1

Version: 1.0

Page 10 of 49

H2020-NMBP-TO-IND-2020-singlestage-#958255

Periodic Technical Report - Part B  
Period covered: 01/01/21 – 30/06/22

Partner	Contribution
INT	INT led the data collection and analysis of regional participation in H2020 NMP research as well as led the development of the methodology for prioritising underrepresented regions. Concerning the identification and engagement of talented newcomers, INT coordinated the consortium partners' activities plus took care of underrepresented regions in Turkey and UK. Also, INT identified European initiatives supporting NMP and coordinated the partners' activities with defining NMP domains/subdomains and identifying top innovators. INT prepared the Microsoft Power BI maps to visualise the locations of underrepresented regions and top innovators. Finally, INT led the writing of deliverables D1.1, D1.2 and D1.3.
TC-CAS	TC-CAS's main involvement has been in identifying and later approaching talented newcomers from underrepresented regions to offer them participation in FIT-4-NMP's activities. TC-CAS has dealt with underrepresented regions in the Czech Republic, Denmark, Portugal and Albania. The respondents from those countries have been added to the FIT-4-NMP register. Furthermore, TC-CAS conducted extensive searches of the PATSTAT database for EPO and PCT patent applications to help identify Top Innovators (Task 1.4).
MITA	MITA has identified and contacted talented newcomers in Lithuania to offer them FIT-4-NMP's services. Respondents have been added to the FIT-4-NMP register.
LXI	LXI's main involvement has been in identifying and later approaching talented newcomers from underrepresented regions to offer them participation in FIT-4-NMP's activities, as a first step towards a deeper involvement in NMP-related projects under Horizon Europe. LXI has dealt with underrepresented regions in Hungary, Italy, Luxembourg and Serbia. The respondents from those countries have been added to the FIT-4-NMP register.
LTC	LTC identified and invited potential talented newcomers from the underrepresented regions to register for FIT-4-NMP services. The regions were Cyprus, Estonia, Ireland (IE06), Latvia and Tunisia. LTC communicated with responsive entities and entered their data in the FIT-4-NMP register of talented newcomers.
TPF	TPF was involved in the identification of underrepresented regions and talented newcomers. The identified talented newcomers from underrepresented regions in Greece, Poland, Spain and Sweden were invited to participate in FIT-4-NMP activities. TPF led Task T1.4 Identify NMP Groups and NMP Top Innovators as well as Task T1.5 Map talented newcomers to NMP groups and NMP Top Innovators and make recommendations for other WPs.
IMT	IMT identified and contacted potential talented newcomers from underrepresented regions in Romania, Bosnia and Herzegovina, Germany, Malta, with the aim to engage them in the FIT-4-NMP support activities. IMT regularly updated the information in the FIT-4-NMP talented newcomer register, based on the information provided in the Newcomer Identification Forms. (Task 1.2). IMT also contributed to the identification of NMP domains (Task 1.4).
IMSAS	IMSAS identified and contacted talented newcomers from underrepresented regions in Slovakia, Croatia, Slovenia and North Macedonia. The talented newcomers who responded were added to the FIT-4-NMP talented newcomer register. Also, as part of Task 1.4, IMSAS analysed extensively the Web of Science database for manufacturing technologies, advanced materials, circular industries, low carbon and clean industry, in order to identify NMP domains/sub-domains and NMP Top Innovators.
NASU	NASU took part in the analysis of potential talented newcomers from underrepresented regions. NASU was responsible for contacting and obtaining completed newcomer identification forms (NIF) from talented newcomers in underrepresented regions in Ukraine (29 respondents), Bulgaria (0 respondents), Moldova (3 respondents), Georgia (1 respondent) and Armenia (3 respondents).





H2020-NMBP-TO-IND-2020-singlestage -#958255

Periodic Technical Report - Part B  
Period covered: 01/01/21 – 30/06/22

COSTS

Beneficiaries	TYPE of EXPENDITURE (as defined by participants)	BUDGET *)	ACTUAL COSTS (EUR)			Pct. spent	Remaining Budget (EUR)
			Period 1		Period 2		
			a1	b1	e1		
<b>INT</b>		<b>24</b>	<b>17.71</b>	<b>17.71</b>	<b>74%</b>	<b>6.29</b>	
<b>Total Person-months</b>		<b>180000</b>	<b>140674.96</b>	<b>140674.96</b>	<b>78%</b>	<b>39325.04</b>	
Personnel costs		180000	140674.96	140674.96	78%	39325.04	
Subcontracting		0	0	0	0%	0	
Major cost item 'x'		0	0	0	0%	0	
Major cost item 'y'		0	0	0	0%	0	
Remaining direct costs		27500	5738.88	5738.88	21%	21061.12	
Total Direct Costs		207500	146413.84	146413.84	70%	61386.16	
Personnel costs/ pm		7500	7943.25	7943.25			
<b>TC-CAS</b>		<b>19</b>	<b>9.89</b>	<b>9.89</b>	<b>52%</b>	<b>9.11</b>	
<b>Total Person-months</b>		<b>72200</b>	<b>41219.83</b>	<b>41219.83</b>	<b>57%</b>	<b>30980.17</b>	
Personnel costs		72200	41219.83	41219.83	57%	30980.17	
Subcontracting		0	0	0	0%	0	
Major cost item 'x'		0	0	0	0%	0	
Major cost item 'y'		0	0	0	0%	0	
Remaining direct costs		30400	1331.23	1331.23	4%	29068.77	
Total Direct Costs		102600	42551.06	42551.06	41%	60048.94	
Personnel costs/ pm		3800	4167.83	4167.83			
<b>MITA</b>		<b>26</b>	<b>11.50</b>	<b>11.50</b>	<b>44%</b>	<b>14.50</b>	
<b>Total Person-months</b>		<b>65000</b>	<b>28145.87</b>	<b>28145.87</b>	<b>43%</b>	<b>36854.13</b>	
Personnel costs		65000	28145.87	28145.87	43%	36854.13	
Subcontracting		0	0	0	0%	0	
Major cost item 'x'		0	0	0	0%	0	
Major cost item 'y'		0	0	0	0%	0	
Remaining direct costs		29000	0	0.00	0%	29000.00	
Total Direct Costs		94000	28145.87	28145.87	30%	65854.13	
Personnel costs/ pm		2500	2447.47	2447.47			
<b>LXI</b>		<b>9.4</b>	<b>3.31</b>	<b>3.31</b>	<b>35%</b>	<b>6.09</b>	
<b>Total Person-months</b>		<b>90000</b>	<b>23791.22</b>	<b>23791.22</b>	<b>26%</b>	<b>66208.78</b>	
Personnel costs		90000	23791.22	23791.22	26%	66208.78	
Subcontracting		0	0	0	0%	0	
Major cost item 'x'		0	0	0	0%	0	
Major cost item 'y'		0	0	0	0%	0	
Remaining direct costs		26200	983.00	983.00	4%	25217	
Total Direct Costs		116200	24774.22	24774.22	21%	91425.78	
Personnel costs/ pm		9574.47	7194.25	7194.25			
<b>LTC</b>		<b>19</b>	<b>12.38</b>	<b>12.38</b>	<b>65%</b>	<b>6.62</b>	
<b>Total Person-months</b>		<b>57000</b>	<b>38998.48</b>	<b>38998.48</b>	<b>68%</b>	<b>18001.52</b>	
Personnel costs		57000	38998.48	38998.48	68%	18001.52	
Subcontracting		0	0	0	0%	0	
Major cost item 'x'		0	0	0	0%	0	
Major cost item 'y'		0	0	0	0%	0	
Remaining direct costs		27600	0	0.00	0%	27600.00	
Total Direct Costs		84600	38998.48	38998.48	46%	45601.52	
Personnel costs/ pm		3000	3150.12	3150.12			
<b>ASTP</b>		<b>5</b>	<b>2.33</b>	<b>2.33</b>	<b>47%</b>	<b>2.67</b>	
<b>Total Person-months</b>		<b>37500</b>	<b>16219.00</b>	<b>16219</b>	<b>43%</b>	<b>21281</b>	
Personnel costs		37500	16219.00	16219	43%	21281	
Subcontracting		39506	2750.00	2750	7%	36756	
Major cost item 'x'		0	0	0	0%	0	
Major cost item 'y'		0	0	0	0%	0	
Remaining direct costs		25496	11504	11504.00	45%	13992.00	
Total Direct Costs		102501	30473.00	30473.00	30%	72028.00	
Personnel costs/ pm		7500	6960.94	6960.94			
<b>TPF</b>		<b>22</b>	<b>8.25</b>	<b>8.25</b>	<b>38%</b>	<b>13.75</b>	
<b>Total Person-months</b>							

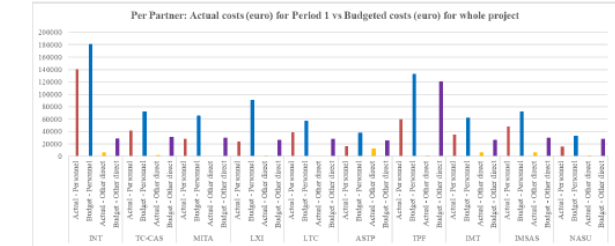
Version: 1.0

Page 44 of 49

H2020-NMBP-TO-IND-2020-singlestage -#958255

Periodic Technical Report - Part B  
Period covered: 01/01/21 – 30/06/22

Beneficiaries	TYPE of EXPENDITURE (as defined by participants)	BUDGET *)	ACTUAL COSTS (EUR)			Pct. spent	Remaining Budget (EUR)
			Period 1		Period 2		
			a1	b1	e1		
<b>INT</b>		<b>24</b>	<b>17.71</b>	<b>17.71</b>	<b>74%</b>	<b>6.29</b>	
<b>Total Person-months</b>		<b>180000</b>	<b>140674.96</b>	<b>140674.96</b>	<b>78%</b>	<b>39325.04</b>	
Personnel costs		180000	140674.96	140674.96	78%	39325.04	
Subcontracting		0	0	0	0%	0	
Major cost item 'x'		0	0	0	0%	0	
Major cost item 'y'		0	0	0	0%	0	
Remaining direct costs		27500	5738.88	5738.88	21%	21061.12	
Total Direct Costs		207500	146413.84	146413.84	70%	61386.16	
Personnel costs/ pm		7500	7943.25	7943.25			
<b>TC-CAS</b>		<b>19</b>	<b>9.89</b>	<b>9.89</b>	<b>52%</b>	<b>9.11</b>	
<b>Total Person-months</b>		<b>72200</b>	<b>41219.83</b>	<b>41219.83</b>	<b>57%</b>	<b>30980.17</b>	
Personnel costs		72200	41219.83	41219.83	57%	30980.17	
Subcontracting		0	0	0	0%	0	
Major cost item 'x'		0	0	0	0%	0	
Major cost item 'y'		0	0	0	0%	0	
Remaining direct costs		30400	1331.23	1331.23	4%	29068.77	
Total Direct Costs		102600	42551.06	42551.06	41%	60048.94	
Personnel costs/ pm		3800	4167.83	4167.83			
<b>MITA</b>		<b>26</b>	<b>11.50</b>	<b>11.50</b>	<b>44%</b>	<b>14.50</b>	
<b>Total Person-months</b>		<b>65000</b>	<b>28145.87</b>	<b>28145.87</b>	<b>43%</b>	<b>36854.13</b>	
Personnel costs		65000	28145.87	28145.87	43%	36854.13	
Subcontracting		0	0	0	0%	0	
Major cost item 'x'		0	0	0	0%	0	
Major cost item 'y'		0	0	0	0%	0	
Remaining direct costs		29000	0	0.00	0%	29000.00	
Total Direct Costs		94000	28145.87	28145.87	30%	65854.13	
Personnel costs/ pm		2500	2447.47	2447.47			
<b>LXI</b>		<b>9.4</b>	<b>3.31</b>	<b>3.31</b>	<b>35%</b>	<b>6.09</b>	
<b>Total Person-months</b>		<b>90000</b>	<b>23791.22</b>	<b>23791.22</b>	<b>26%</b>	<b>66208.78</b>	
Personnel costs		90000	23791.22	23791.22	26%	66208.78	
Subcontracting		0	0	0	0%	0	
Major cost item 'x'		0	0	0	0%	0	
Major cost item 'y'		0	0	0	0%	0	
Remaining direct costs		26200	983.00	983.00	4%	25217	
Total Direct Costs		116200	24774.22	24774.22	21%	91425.78	
Personnel costs/ pm		9574.47	7194.25	7194.25			
<b>LTC</b>		<b>19</b>	<b>12.38</b>	<b>12.38</b>	<b>65%</b>	<b>6.62</b>	
<b>Total Person-months</b>		<b>57000</b>	<b>38998.48</b>	<b>38998.48</b>	<b>68%</b>	<b>18001.52</b>	
Personnel costs		57000	38998.48	38998.48	68%	18001.52	
Subcontracting		0	0	0	0%	0	
Major cost item 'x'		0	0	0	0%	0	
Major cost item 'y'		0	0	0	0%	0	
Remaining direct costs		27600	0	0.00	0%	27600.00	
Total Direct Costs		84600	38998.48	38998.48	46%	45601.52	
Personnel costs/ pm		3000	3150.12	3150.12			
<b>ASTP</b>		<b>5</b>	<b>2.33</b>	<b>2.33</b>	<b>47%</b>	<b>2.67</b>	
<b>Total Person-months</b>		<b>37500</b>	<b>16219.00</b>	<b>16219</b>	<b>43%</b>	<b>21281</b>	
Personnel costs		37500	16219.00	16219	43%	21281	
Subcontracting		39506	2750.00	2750	7%	36756	
Major cost item 'x'		0	0	0	0%	0	
Major cost item 'y'		0	0	0	0%	0	
Remaining direct costs		25496	11504	11504.00	45%	13992.00	
Total Direct Costs		102501	30473.00	30473.00	30%	72028.00	
Personnel costs/ pm		7500	6960.94	6960.94			
<b>TPF</b>		<b>22</b>	<b>8.25</b>	<b>8.25</b>	<b>38%</b>	<b>13.75</b>	
<b>Total Person-months</b>							



Actual other direct costs were low during Period 1 due to reduced travel as a result of Covid-19 restrictions.

Version: 1.0

Page 45 of 49

H2020-NMBP-TO-IND-2020-singlestage -#958255

Periodic Technical Report - Part B  
Period covered: 01/01/21 – 30/06/22

Responses to the EC's questions in the suspension of payment letter dated 04/10/2022

1) EC's question to INT: Could you please explain the high deviation of the Direct personnel costs declared as actual costs?

INT's response: The high deviation in direct personnel costs is attributed to a combination of a) INT's higher efforts required for Period 1 than Period 2 and b) an increase in the actual average person-month costs compared to those originally foreseen in the grant agreement.

a) Although the total efforts planned for INT over the whole project are 24 person-months, 15 person-months were planned for Period 1 due to the tasks in WP1 and WP4 mainly falling in the first half of the project.

In WP1 (where INT is WP leader), INT led the data collection and analysis of regional participation in H2020 NMP research as well as led the development of the methodology for prioritising underrepresented regions. Concerning the identification and engagement of talented newcomers, INT coordinated the consortium partners' activities plus took care of underrepresented regions in Turkey and UK. Also, INT identified European initiatives supporting NMP and coordinated the partners' activities with defining NMP domains/subdomains and identifying top innovators. INT prepared the Microsoft Power BI maps to visualise the locations of underrepresented regions and top innovators. Finally, INT led the writing of deliverables D1.1, D1.2 and D1.3.

In WP4, INT had a small over-booking in efforts for WP4 compared to that planned (2.78 person-months versus 2 person-months). INT supported the survey development by sharing its previous experience of running similar surveys using the EUSurvey platform and reviewing the survey structure and content prepared by MITA. INT promoted extensively the survey to potential respondents and encouraged the consortium partners to do similar. INT contributed significantly to writing, editing and formatting deliverable D4.1 and INT reviewed and proofread deliverable D4.2. Finally, INT drafted the innovation policy event agenda and moderated the online event. INT's responsibility and effort for several WP4 activities went beyond what INT had anticipated at the stage of writing the FIT-4-NMP proposal.

Also, INT had a small over-booking in efforts for WP5 compared to that planned (2.33 person-months versus 1.5 person-months). INT led tasks T5.3 and T5.4. INT designed and maintained the project website and social media accounts, produced and disseminated the e-newsletters and news releases, tracked project performance on dissemination and communication activity according to the strategy, and interacted with the partners on issues related to dissemination and communication. INT took a leading role in the organisation of the FIT-4-NMP joint regional workshop for Ukrainian research community (5 May 2022). INT prepared D5.1. INT's responsibility and effort for several WP5 activities went beyond what INT had anticipated at the stage of writing the FIT-4-NMP proposal.

b) Furthermore, part of the deviation in the direct personnel costs was due to the 6% higher actual average person-month costs at INT compared to the grant agreement. This was due to the automatic salary indexations that occurred in Luxembourg in 2021 and 2022 due to inflation.

2) EC's question to LXI: The foreseen average personnel costs per month in the Annex I was lower than the one declared. Could you please explain it?

LXI's response: Mistakes were made with the initial accounting of personnel costs and person-months in the financial statement due to reporting the time of the wrong staff member on the project (a Senior Advisor who was promoted to Head of Team instead of a Junior Advisor). These mistakes have now been corrected in the financial statement and the declared average personnel costs per month (7194.25 euro/month) were in fact lower than the one foreseen (9574.47 euro/month). The reason for this deviation is due to LXI initially expecting the FIT-4-NMP project to be managed by a Senior Advisor. However, the Senior Advisor was promoted to the Head of Team shortly before the project started and, consequently, the project was mainly managed in Period 1 by a

Version: 1.0

Page 46 of 49

- **Financial reporting** needs to be done at the **end of each project period**.
  - Usually, projects have two periods (Period 1 and Period 2) but they can have more periods in the case of projects of longer duration e.g. > 4 years duration.
  - Financial reports (online financial statements) must be submitted by each beneficiary (consortium partner) within 60 days of the end of the project period.
- **Distinction between financial reporting for Lump Sum Grants and Actual Cost Grants (Reimbursement Grants)**

## Lump Sum Funding

- **Financial reporting** involves indicating the work packages that have been completed in an online form on the European Commission's Funding and Tender portal.
- **Interim payments** reimburse the **eligible lump sum contributions** claimed only for **completed work packages** implemented during the **respective reporting periods**.
- European Commission has said that **financial audits will not be conducted**, because actual costs are not reported in lump sum projects.
  - However, the dedicated Lump Sum Grant Agreement still includes the option of financial audits like any other project under Horizon Europe.
  - Lump sum beneficiaries are required to keep a so-called “adequate” level of records (presented officially in contrast to the ‘Actual costs’ model requirements).

## Actual Cost Funding

- **Financial reporting** is done by completing an online form on the European Commission's Funding and Tender portal.
- **Interim payments** reimburse the **eligible actual costs** claimed during the **respective reporting periods**.

Email the partners' project financial signatories (PFSIGN) as soon as the project ends to request them to complete and submit their financial statements at least two weeks before the official deadline.

Grant Management 236417 (236417 OHD - G...)

Project Periodic Report

Period No: 1 Duration (months): 18  
Reporting Period : [14 Aug 2020 - 13 Feb 2022]

**Financial Statement** SAVE

Financial Statement for period '1' - (14 Aug 2020 - 13 Feb 2022)

Eligible costs:

Category	Form of Funding	Total Amount
▼ Eligible costs (per budget category)		
▼ Direct costs		
▼ A. Personnel costs		
▼ (a1) A.1 Employees (or equivalent), A.2 Natural persons under direct contract, A.3 Seconded persons	actual	50.00 €
▼ (a2) A.1 Employees (or equivalent), A.2 Natural persons under direct contract, A.3 Seconded persons	unit (usual accounting practices)	0.00 €
▼ (a3) A.4 SME owners and natural person beneficiaries	unit	0.00 €
SME owner/Natural person costs		
▼ B. Subcontracting costs		
▼ (b) Subcontracting	actual	0.00 €
▼ C. Purchase costs		
▼ (c1) C.1 Travel and subsistence	actual	10.00 €
▼ (c2) C.2 Equipment	actual	5.00 €
▼ (c3) C.3 Other goods, works and services	actual	5.00 €
▼ D. Other cost categories		
▼ (d2) D.2 Internally invoiced goods and services	unit (usual accounting practices)	15.00 €
(d3) D.3 Transnational access to research infrastructure unit costs	unit	0.00 €
(d4) D.4 Virtual access to research infrastructure unit costs	unit	0.00 €
▼ Indirect costs		
▼ E. Indirect costs		
(e) E. Indirect costs (25% * (a1 + a2 + a3 + c1 + c2 + c3))	flat-rate	17.50 €
(f) Total costs (a1 + a2 + a3 + b + c1 + c2 + c3 + d2 + d3 + d4 + e)		102.50 €

Validate

**Important:**  
Remember to complete descriptions of costs where required.

- **Personnel costs:**

- Personnel costs (for each Person) = Daily Rate x Days Worked on the Project
  - Daily Rate = Actual Annual Personnel Costs for the Person / 215
- How to convert hours into person-months: Hours / 1720 / 12 (i.e. Hours / 143.33)
- Indicate the person-months booked to each work package during the period e.g. WP1 (8.4 person-months), WP2 (21.3 person-months), etc.

- **Subcontracting costs:** Indicate the name of the contractor, the service provided, the amount of the invoice, the date of the invoice, and reference the section in the Part B (Description of Action, DoA) of the Grant Agreement (GA) where the project would have subcontracting costs.

- **Purchase costs:**

- **Note:** Description only required if total purchase costs > 15% total personnel costs. The description is only required for the amount above the 15% limit. For example, if total purchase costs were 16,000 euro and total personnel costs were 100,000 euro, then description is only required for 1000 euro of purchase costs.
  - **Travel and subsistence costs:** Indicate the names of the expert(s), the destination, the dates of the trip, the purpose of the trip, and reference the work package/task to which the trip relates to.
  - **Equipment costs:** Indicate the name of the supplier, the name of the equipment, the amount of the invoice, the date of the invoice, indicate the amount of the depreciation over the reporting period, and reference the section in the Part B (DoA) of the GA where it is indicated that the project would have equipment costs.
  - **Other goods (e.g. research consumables):** Indicate the name of the supplier, the name of the goods, the amount of the invoice, the date of the invoice, and reference the section in the Part B (DoA) of the GA where the project would have other goods costs.
  - **Works and services (e.g. catering):** Indicate the name of the supplier, the name of the service, the amount of the invoice, and the date of the invoice, and reference the section in the Part B (DoA) of the GA where it is indicated that the project would have works and services costs.
- **Other cost categories (e.g. internally invoiced goods and services):** Indicate the name of the supplier, the service provided, the amount of the invoice, the date of the invoice, and reference the section in the Part B (DoA) of the GA where it is indicated that the project would have other cost categories.

2-3 months before the official end of the project, remind the partners with budgets > 430k euro to contract an accounting firm to audit their financial statement as soon as the project ends.

- **Certificate on the financial statements (CFS)** (i.e. audit certificate) is required at the end of the project for each beneficiary whose **total eligible costs (direct costs + indirect costs) > 430k euro.**
  - **CFS** must be issued by a qualified auditor using the **European Commission's template.**
  - Template consists of the "Terms of Reference" (model for the agreement between the beneficiary/affiliated entity and the auditing firm) and the model for the certificate itself. **See QR code to download the template.**
  - Auditor will indicate any irregularities and errors in their report. The EU Commission/funding agency is responsible for deciding on the consequences of the errors indicated by the auditor.
  - CFS must be uploaded to the European Commission's Funding and Tender portal.



- Usually required to present the project’s progress at a **Project Review Meeting** about two months after the end of a project period.
- Review done by EC project officer with the support of between 1-3 independent experts (a.k.a. reviewers).
- Project review meetings are done online – before Covid-19 they were often held in Brussels.
- EC Project Officer will usually ask you to propose an **Agenda** for a half-day (CSA) or full-day (RIA, IA) Project Review Meeting – see adjacent example for a CSA.
- Ensure WP leaders use **standardised slide presentation template**.
- Check **WP slides are consistent with Technical Report (Part B)**.
- Make sure the consortium holds a practice **dress-rehearsal of the review meeting** before the actual review – pretend to be the reviewers and ask the WP leaders challenging questions!




**FIT-4-NMP Midterm Review (Online)**  
**Monday 4<sup>th</sup> July 2022, 14:00-17:00 Brussels time.**  
 Zoom Weblink:  
<https://us06web.zoom.us/j/89908562202?pwd=UldKbjRvdm5hTUJocVY5ZnNxbFh3UT09>  
 Zoom Passcode: 931082

---

**Agenda**

	Start of Meeting
14:00	“Tour de Table” introduction to participants
14:10	Project Outline <i>Presenter: Intelligentsia Consultants</i>
14:20	WP1: Objectives, progress, achievements during Period 1, <i>Presenter: Intelligentsia Consultants</i> <i>(15-minute presentation + 5-minute discussion)</i>
14:40	WP2: Objectives, progress, achievements during Period 1, <i>Presenter: Technology Partners</i> <i>(15-minute presentation + 5-minute discussion)</i>
15:00	WP3: Objectives, progress, achievements during Period 1, <i>Presenters: ASTP + Intelligentsia Consultants + Technology Centre CAS</i> <i>(15-minute presentation + 5-minute discussion)</i>
15:20	WP4: Objectives, progress, achievements during Period 1, <i>Presenters: MITA + Technology Centre CAS</i> <i>(15-minute presentation + 5-minute discussion)</i>
15:40	WP5: Objectives, progress, achievements during Period 1, <i>Presenters: IMT + Intelligentsia Consultants</i> <i>(15-minute presentation + 5-minute discussion)</i>
16:00	WP6: Objectives, progress, achievements during Period 1, <i>Presenter: Intelligentsia Consultants</i> <i>(15-minute presentation + 5-minute discussion)</i>
16:20	Bilateral meeting <i>HADEA Project Officer + Reviewer</i>
16:40	Conclusions + First Feedback to Consortium <i>HADEA Project Officer + Reviewer</i>
16:55	Any other questions
	End of Meeting

- Consortium partners often ask me if they can **transfer budget between costs categories** e.g. transfer budget from travel costs to personnel costs.
- For Horizon Europe **actual cost funded projects**:
  - Yes, without a grant amendment provided **Article 5.5 of the Grant Agreement** is respected.
  - Note that one can make transfers between **budget categories** and between **partners**.
  - Note that **Article 5.4** refers to *estimated* budget.
- For Horizon Europe **lump sum funded projects**:
  - No, requires a grant amendment.
  - No real need to transfer between budget categories but possibly between partners.

#### 5.4 Estimated budget, budget categories and forms of funding

The estimated budget for the action is set out in Annex 2.

It contains the estimated eligible costs and contributions for the action, broken down by participant and budget category.

Annex 2 also shows the types of costs and contributions (forms of funding)<sup>9</sup> to be used for each budget category.

If unit costs or contributions are used, the details on the calculation will be explained in Annex 2a.

#### 5.5 Budget flexibility

The budget breakdown may be adjusted — without an amendment (see Article 39) — by transfers (between participants and budget categories), as long as this does not imply any substantive or important change to the description of the action in Annex 1.

However:

- changes to the budget category for volunteers (if used) always require an amendment
- changes to budget categories with lump sums costs or contributions (if used; including financing not linked to costs) always require an amendment
- changes to budget categories with higher funding rates or budget ceilings (if used) always require an amendment
- addition of amounts for subcontracts not provided for in Annex 1 either require an amendment or simplified approval in accordance with Article 6.2
- other changes require an amendment or simplified approval, if specifically provided for in Article 6.2
- flexibility caps: not applicable.

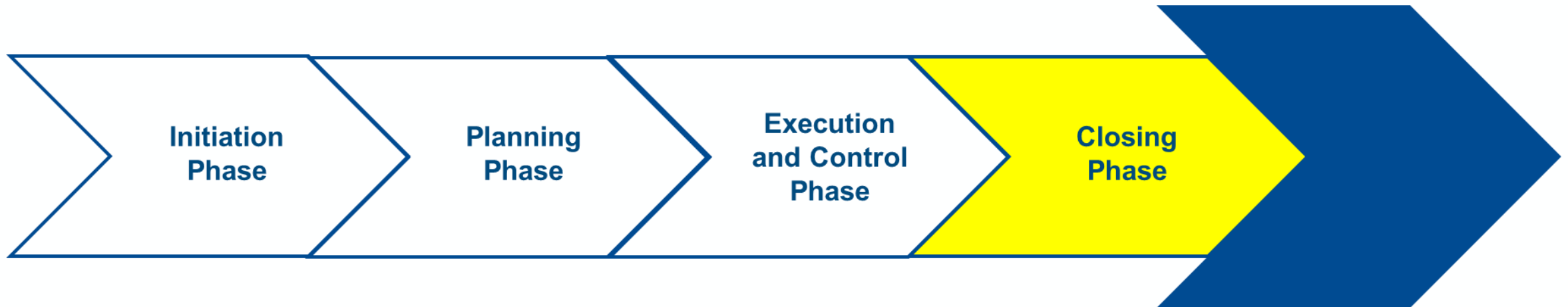
<sup>9</sup> See Article 125 EU Financial Regulation 2018/1046.

- **Change in Consortium Composition:** Withdrawing or Adding a beneficiary, affiliated entity, or associated partner.
- **Extension of Project Duration:** Requesting additional time due to unforeseen delays or force majeure.
- **Modification of Work Plan:** Updating deliverables, milestones, or tasks due to scientific or technical reasons.
- **Budget and Cost Reallocation:** Adjusting budget distribution between beneficiaries or cost categories.
- **Change of Legal or Financial Status:** Updating details if a beneficiary undergoes a legal name change, merges, or faces financial issues.

- **Initiate the Request in the Funding & Tenders Portal:** The Coordinator (or the withdrawing partner) submits a termination request through the Grant Management System on the Funding & Tenders Portal.
- **Provide Justification & Supporting Documents:** The request must include a clear reason for termination, potential impacts on the project, and relevant supporting documents (e.g., consortium agreement, justification letter).
- **Update the Grant Agreement & Work Plan:** The consortium must propose necessary amendments to redistribute the departing partner's remaining tasks and budget, ensuring project continuity.
- **Approval by the European Commission (EC):** The EC reviews the request, assessing risks and project viability before approving or rejecting the termination.
- **Formalisation of the Termination:** If approved, the grant agreement is amended, and the termination is officially recorded, including final cost claims and reporting for the withdrawing partner.

- **Initiate Amendment Request in the Funding & Tenders Portal:** The Project Coordinator submits a formal amendment request through the Grant Management System on the Funding & Tenders Portal.
- **Provide Justification:** A detailed explanation must be included, outlining the reasons for the extension (e.g., delays, unforeseen circumstances, technical challenges and the **risk of not passing project milestone(s)**) and its impact on project objectives.
- **Update the Grant Agreement & Work Plan:** The revised timeline must be reflected in the project's deliverables, milestones, and reporting schedule. **EC usually only allows a six-month extension.**
- **Consortium Agreement & Partner Approval:** If applicable, consortium partners must agree on the extension before submission.
- **European Commission (EC) Review & Approval:** The EC assesses the request, ensuring project feasibility and funding implications before approving or rejecting the amendment.
- **Formalisation of the Amendment:** If approved, the updated Grant Agreement is signed electronically, and the new project timeline is officially recorded.

## 2. Closing Phase



- **Final Reporting & Deliverables:**

- Submit the final technical and financial reports via SyGMA in the EC's Funding & Tenders Portal.
- Ensure all deliverables and milestones are completed and documented.

- **Financial Closure:**

- Submit final cost claims and justification of expenditures.
- Ensure compliance with eligibility rules and audit requirements.

- **Review and Assessment:**

- Participate in the final project review with the European Commission or external evaluators.
- Address any feedback or additional requests from the EC.

- **Dissemination and Exploitation:**

- Finalize and publish project results, datasets, and scientific publications.
- Ensure long-term sustainability and exploitation of project outcomes.

- **Intellectual Property and Data Management:**
  - Finalize agreements on intellectual property rights (IPR) and data sharing.
  - Ensure compliance with Open Science and FAIR data principles.
- **Archiving and Record Keeping:**
  - Maintain project records for at least five years (or as required by the EC).
  - Ensure availability of documents for potential audits or reviews.
- **Project Closure and Next Steps:**
  - Officially close the project in the Funding & Tenders Portal.
  - Plan follow-up initiatives, collaborations, or funding applications.
  - Write up a learning log on what went well, what didn't, and other advice for future projects.



Funded by the  
European Union



Palacký University  
Olomouc



**Thank You - End of Training Presentation!**

Giles Brandon (Intelligentsia Consultants)