ELABORATOR

Deliverable 1.1

Project Management Plan

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Contributor(s)	Alexandros Liazos (ICCS), Vasilis Sourlas (ICCS), Anna Antonakopoulou (ICCS), Jason Sioutis (ICCS), Angelos Amditis (ICCS)
Reviewer(s)	Vangelis Angelakis (LIU), Theo Tryfonas (UBRIS)
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1.0	01/09/2023	Vasilis Sourlas, ICCS	Final version for submission

Project Executive Summary

ELABORATOR stands for 'The European Living Lab on designing sustainable urban mobility towards climate neutral cities'. The EU-funded project uses a holistic approach for planning, designing, implementing and deploying specific innovations and interventions towards safe, inclusive and sustainable urban mobility. These interventions consist of smart enforcement tools, space redesign and dynamic allocation, shared services, and integration of active and green modes of transportation.

They will be specifically co-designed and co-created with a broad array of local stakeholders including relevant authorities and user groups who will be identified as "vulnerable to exclusion" (V2E). Interventions will be demonstrated in a number of cities across Europe, starting with six Lighthouse cities and six Follower cities with three principal aims:

I. to collect, assess and analyse user needs and requirements towards a safe and inclusive mobility and climate neutral cities;
II. to collect and share rich information sets made of real data, traces from dedicated toolkits, users' and stakeholders' opinions among the cities, so as to increase the take up of the innovations via a twinning approach;
III. to generate detailed guidelines, policies, future roadmap and built capacity for service providers, planning authorities and urban designers for the optimum integration of such inclusive and safe mobility interventions into Sustainable Urban Mobility Plans (SUMPs).

ELABORATOR Lighthouse cities

- Milan (Italy)
- Copenhagen (Denmark)
- Helsinki (Finland)
- Issy-les-Moulineaux (France)
- Zaragoza (Spain)
- Trikala (Greece)

ELABORATOR Follower cities

- Lund (Sweden)
- Liberec (Czech Republic)
- Velenje (Slovenia)
- Split (Croatia)
- Krusevac (Serbia)
- Ioannina (Greece)

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Project Partners

Organisation	Country	Abbreviation
INSTITUTE OF COMMUNICATION AND COMPUTER SYSTEMS	EL	**ICCS**
POLIS AISBL	EL	**POLIS**
EVROPSKI INSTITUT ZA OCENJEVANJE CEST	SI	**EURORAP**
INTERNATIONAL ROAD ASSESSMENT PROGRAMME	UK	**IRAP**
UNIVERSITY OF BRISTOL	UK	**UBRIS**
MULTICRITERI-MCRIT AIE	ES	**MCRIT**
INSTITUT D'ARQUITECTURA AVANCADA DE CATALUNYA	ES	**IAAC**
COMUNE DI MILANO	IT	**CDM**
STEFANO BOERI ARCHITETTI SRL	IT	**SBA**
THINGS SRL	IT	**THIN**
AGENZIA MOBILITA' AMBIENTE E TERRITORIO SRL	AMAT	**AMAT**
KOBENHAVNS KOMMUNE	DK	**CPHK**
KOBENHAVNS UNIVERSITET	DK	**UCPH**
ANALYSE & TAL F.M.B.A	DK	**A&T**
FORUM VIRIUM HELSINKI OY	FI	**FVH**
TEKNOLOGIAN TUTKIMUSKESKUS VTT OY	FI	**VTT**
SOCIETE D'ECONOMIE MIXTE ISSY - MEDIA (SEM ISSY MEDIA)	FR	**ISSY**
COLAS	FR	**COLAS**
IFP ENERGIES NOUVELLES	FR	**IFPEN**
URBAN RADAR	FR	**URAD**
AYUNTAMIENTO DE ZARAGOZA	ES	**AYZG**

FUNDACION CIRCE CENTRO DE INVESTIGACION DE RECURSOS Y CONSUMOS ENERGETICOS	ES	**CIRCE**
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GRAD SPLIT	HR	**SPLIT**
SVEUCILISTE U ZAGREBU FAKULTET PROMETNIH ZNANOSTI	HR	**FPZ**
CITY ADMINISTRATION OF THE CITY OF KRUSEVAC	RS	**KRUS**
MUNICIPALITY OF IOANNINA	EL	**IOANN**
PLATOMO GMBH	DE	**PLAT**

List of abbreviations and acronyms

Acronym	Meaning
CA	Consortium Agreement
CCAM	Cooperative, Connected and Automated Mobility
DMPO	Data Management and Protection Officer
DoA	Description of Action
EEAB	External Expert Advisory Board
EC	European Commission
FMEA	Failure Mode and Effects Analysis
GA	General Assembly
GDPR	General Data Protection Regulation
GRA	Grant Agreement
NDA	Non-disclosure Agreement
PC	Project Coordinator
PU	Public
SUMP	Sustainable Urban Mobility Plans
TM	Technical Manager
TMT	Technical Management Team
V2E	Vulnerable to Exclusion
VRU	Vulnerable Road User
WP	Work Package
WPL	Work Package Leader

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Deliverable executive summary

The main objective of ELABORATOR is to provide a holistic approach in regards of planning, designing and deploying innovative interventions towards a safer, more inclusive and more sustainable urban mobility; urban space shall be properly redesigned, while shared, green and dynamic modes of transport will be the epicentre of these innovations. Participatory planning is one of the most important goals of this project; vulnerable user groups will help local authorities and relevant stakeholders in this new form of urban planning, while a total of 12 cities (6 Lighthouse cities and 6 Follower cities) across Europe will demonstrate these novel interventions. User needs and requirements will be analysed, leading to valuable information being appropriately visualised, as well as to discussions targeted to the lived experiences of citizens their movements in the city, which shall lead to creation of detailed and useful guidelines and policies. These guidelines will be incorporated into the Sustainable Urban Mobility Plans (SUMPs) of the cities involved.

The challenges this project sets, as far as it may concern the number of partners involved their diversity, along with the nature of the project on itself, call for a carefully designed project management plan.

This document fulfils the requirement of deliverable D1.1 – *Project Management Plan* – of ELABORATOR within WP1. Deliverable D1.1 draws the organisational structure and the management procedures that will be employed in the project, in order to ensure that the workflow is smooth, the timelines are respected, and channels of internal communication are direct and open. The plan described in this document has a direct connection with the task T1.1 – *Administrative and financial coordination* and with part of the task T1.2 –*Technical and innovation coordination*.

Deliverable D1.1 is structured as follows:

- Chapter 1 – Introduction – outlines the concept and approach of the ELABORATOR project, highlighting the purpose of this deliverable as a plan for project coordination, intended for consortium members and the European Commission.
- Chapter 2 – Project overview – briefly describes the project's concept and approach, and describes the consortium mix, the project work plan, including work packages as well as the main deliverables and milestones.
- Chapter 3 – Project management – describes the management structure covering both operational and strategic management. The responsibilities of the Coordinator, the Technical Management Team and all the involved parties, as well as the management processes, are highlighted. The latter processes are related to progress reporting and results evaluation, planning and implementation of changes, project administration and contract management, and project meeting procedures. Finally, the chapter outlines the management procedures that relate with conflict resolution, resource use and payment rules, as well as those related to risk management.
- Chapter 4 – Project coordination and communication tools – outlines the tools that are used for controlling and monitoring the whole project as well as for communication purposes among the consortium members.
- Chapter 5 - contains some concluding remarks.

This deliverable draws, in its majority, data from the ELABORATOR Grant and Consortium Agreements, which, together with this deliverable will serve as a central reference for all project coordination issues.

1 Introduction

1.1 Purpose of the deliverable

The first deliverable of the whole project, Deliverable D1.1, under the name *Project Management Plan*, defines and briefly describes the managerial tools needed for the completion of the first Task and more specifically, its subtask T1.1 - Administrative and Financial Coordination. It outlines which are the governance bodies and their role within the project, describes the relevant meetings, as well as a series of internal rules and procedures, including the ones related to risk management, supplementing the Grant Agreement (GRA) and the Consortium Agreement (CA).

Deliverable D1.1 is complemented by D1.2 and D1.3, that describe Quality management plan (a documentation of quality policies, procedures and criteria of the project), and Innovation management plan (fully reported within D1.8), respectively. On their behalf, D1.4, D1.5, D1.6, D1.7 and D1.9, referring to the Data management plan of the ELABORATOR project. D1.5, in particular, deals with the data domain protocols used in transport research. The aforementioned deliverables provide a clear strategic plan for the whole project, organizing, fine tuning and scheduling the appropriate tasks, in terms of both operations and technical coordination.

1.2 Intended audience

According to the Grant Agreement of ELABORATOR, the dissemination level of D1.1 is defined as 'public' (PU). This means that the whole deliverable and its components are available to members of the consortium, the European Commission (EC) Services and those external to the project. The authors of this deliverable document intend that the latter is utilized, after its completion, as an internal guideline for each one of ELABORATOR beneficiaries, referred to above, and primarily to the General Assembly, the Technical Management Team and the External Advisory board.

2 Project Overview

2.1 ELABORATOR concept and approach

The ELABORATOR project opts to provide a holistic and novel participatory approach, both in terms of planning and designing and in terms of implementing, deploying and evaluating urban interventions towards safer, and more inclusive, sustainable and affordable mobility. A shared, green and inclusive transport is the societal goal of this project, and 12 European cities (6 Lighthouse cities and 6 Follower ones) will demonstrate novelties proposed within the scope of ELABORATOR.

The pursued contributions could be concluded at the following non-exhaustive list:

- Cooperation between local authorities, stakeholders and representative groups of Vulnerable Road Users (VRU).
- New ways of data collection, assessment and analysis regarding user needs and requirements opting for safer and more inclusive mobility.
- Usage of twinning approach and dedicated toolkits to collect and share real datasets help citizens of the involved cities better assimilate the proposed innovations.
- Create appropriate guidelines, plans and policies to help all relevant stakeholders, urban planners, service providers and users integrate the proposed novelties and interventions into Sustainable Urban Mobility Plans (SUMPs) software integrity, trust and truthfulness of CCAM data, their exchange and their processing.

2.2 Project work plan

In total, ELABORATOR will be carried on for 3.5 years (42 months). Its start date being the 1st of June 2023 (M1), thus, it is anticipated to end on 30th of November 2026 (M42). The project plan is arranged as of below:

Table 1: ELABORATOR Work Packages

WP No.	WP title	Lead partner	Start Month	End Month
WP1	Project management	ICCS	1	42
WP2	Methodology, indicators and tools towards co-creating urban mobility interventions	CIRCE	1	16
WP3	Discovery and definition of intervention	LIU	1	28
WP4	Mobility intervention data sharing and cross-benchmarking	UBRIS	4	39
WP5	Lighthouse cities solutions implementation	VTT	16	39
WP6	Follower cities solutions implementation and capacity building in Observer cities	EIRA	19	39
WP7	Evaluation and impact assessment	IRAP	19	42
WP8	Outreach, dissemination and exploitation	POLIS	1	42

Work packages WP2-WP7 constitute the core of the project and are the most technical and specific ones to help achieve its goals. On the contrary, WP1 and WP8 comprise the support actions and procedures needed to successfully complete the project in an efficient and effective way. The following figure (Figure 1) outlines the project's workflow as well as the interactions and co-dependencies between the WPs.

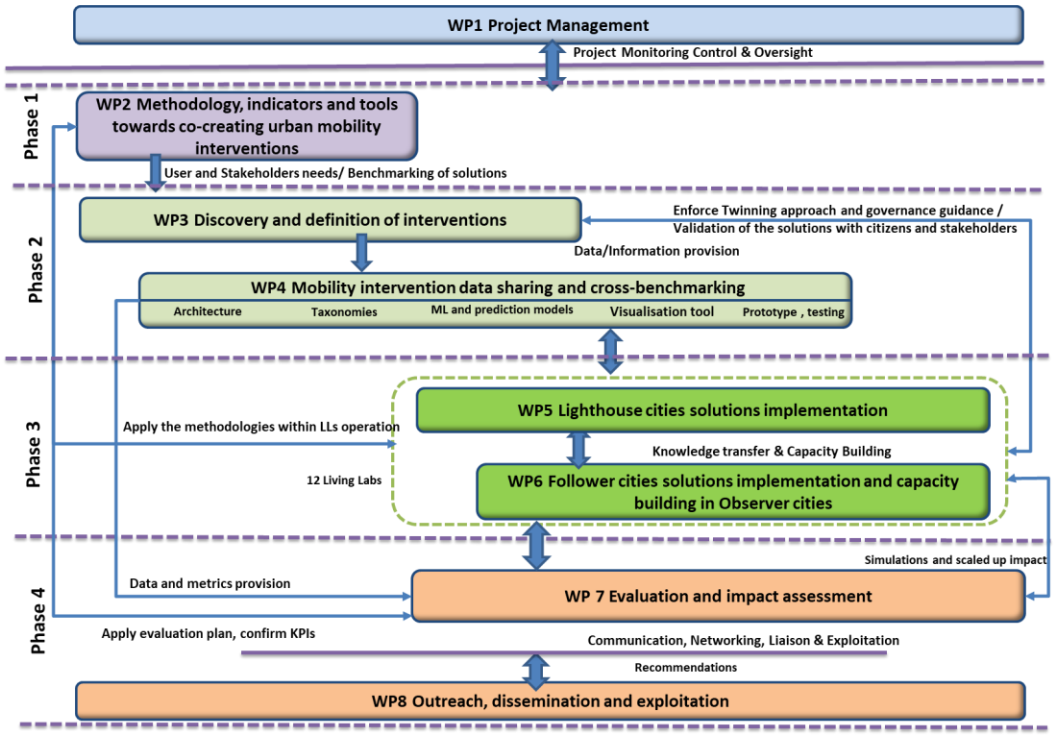

Figure 1: ELABORATOR project workflow

2.3 Gantt Chart

The project's work plan is broken down into tasks and displayed against the project timeline in a Gantt chart as per the Grant Agreement (**Error! Reference source not found.**). The horizontal grey bars depict the duration of each task and show when the activity begins and ends. For each WP and task, milestones and deliverables are indicated in the month in which they are due by means of orange and yellow rectangles respectively.

ELABORATOR		Year 1												Year 2												Year 3												Year 4					
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
WP1	**Project management**	MS1		MS2															MS3												MS4												MS5 MS6
T1.1	Administrative and financial coordination			D1.1																																						
T1.2	Technical and innovation coordination						D1.3																																				D1.8
T1.3	Research data management and ethical considerations						D1.4						D1.5												D1.6						D1.7												D1.9
T1.4	Quality assurance and risk management			D1.2																																						
WP2	**Methodology, indicators and tools towards co-creating urban mobility interventions**												MS2																													
T2.1	Inclusivity towards sustainability									D2.1																																
T2.2	Evaluation methodology and plan												D2.2																													
T2.3	Participatory methods to capture mobility needs and future expectations from citizens and stakeholders												D2.3																													
T2.4	ELABORATOR Technological Toolkits for active citizens participation																D2.4																									
WP3	**Discovery and definition of interventions**																								MS8																	
T3.1	Discovery of stakeholders, needs, practises and data												D3.1						D3.2																							
T3.2	ELABORATOR twinning: Cross-case methodology for co-creation towards effective uptake of interventions																		D3.3																							
T3.3	Interventions definition and solutions' twinning towards uptake																		D3.4						D3.5 D3.6																	
T3.4	Multi-stakeholder governance in LLs: principles and mechanisms																												D3.7													
WP4	**Mobility intervention data sharing and cross-benchmarking**																														MS9			MS10								
T4.1	Mobility intervention and data unification framework																		D4.1																							
T4.2	Secure, trusted and privacy-preserving intervention data platform																														D4.2											
T4.3	Machine-learning based analytic and prediction models																																						D4.3			
T4.4	Data visualisation tool																																						D4.4			
WP5	**Lighthouse cities solutions implementations**																																	MS12						MS13		
T5.1	Implementation of interventions at Lighthouse cities																				D5.1															D5.2					
T5.2	Demonstration activities at Lighthouse cities																																						D5.3			
T5.3	Validation of interventions with stakeholders and users and via simulations at Lighthouse cities																																						D5.4			
WP6	**Follower cities solutions implementation and capacity building in Observer cities**																				MS11													MS12						MS13		
T6.1	Implementation of interventions at Follower cities																								D6.1											D6.3					
T6.2	Demonstration activities at Follower cities																																						D6.4			
T6.3	Capacity building in Observer cities communities																														D6.2								D6.5			
T6.4	Validation of interventions with stakeholders and users and via simulations at Follower cities																																						D6.6			
WP7	**Evaluation and impact assessment**																									MS14														MS15			MS16
T7.1	Environmental impact assessment																																										
T7.2	Social impact assessment																																										D7.1
T7.3	Safety impact assessment and long-term safety benefits																																									
T7.4	Evaluation and assessment activities in each city																																									
WP8	**Outreach, dissemination and exploitation**						MS17																																				MS18
T8.1	Dissemination and communication strategy, tools and events			D8.1			D8.2												D8.3						D8.4																	D8.6
T8.2	Liaison activities, upscale in Europe, and collaborative agreements with international actions																																									D8.7
T8.3	Exploitation strategy																								D8.5																	D8.8
T8.4	EU policies and regulations																																									D8.9

Figure 2: ELABORATOR Gantt Chart

2.4 Project deliverables

The project has scheduled an extensive list of deliverables, in order to capture all project activities and technical progress. The List of deliverables along with their dissemination level are depicted in Table 2.

Table 2: ELABORATOR deliverables

Deliverable No.	Deliverable Name	WP	Lead	Type	Diss. Level	Delivery Date
D1.1	Project management plan	1	ICCS	R	PU	M03
D1.2	Quality management plan	1	UBRIS	R	PU	M03
D1.3	Innovation management plan	1	UCPH	R	PU	M06
D1.4	Data management plan – version I	1	LIU	DMP	PU	M06
D1.5	Data domain protocol for transport research	1	LIU	R	PU	M12
D1.6	Data management plan – version II	1	LIU	DMP	PU	M18
D1.7	Data management plan – version III	1	LIU	DMP	PU	M30
D1.8	Innovation management report	1	UCPH	R	PU	M42
D1.9	Data management plan final version	1	LIU	DMP	PU	M42
D2.1	Inclusion plan	2	URB	R	PU	M09
D2.2	Evaluation plan	2	THIN	R	PU	M12
D2.3	The ELABORATOR co-creation playbook	2	LIU	R	PU	M12
D2.4	ELABORATOR technological toolkits for co-creation	2	CIRCE	OTHER	PU	M16
D3.1	Feasibility and action plans for the ELABORATOR interventions – version I	3	THIN	R	PU	M12
D3.2	Feasibility and action plans for the ELABORATOR interventions – version II	3	THIN	R	PU	M18

D3.3	Elaborator twinning: Guidelines and templates towards the cross-case co-creation process	3	LIU	R	PU	M18
D3.4	Technical definitions of the Lighthouse cities interventions – version I	3	MCRIT	R	PU	M18
D3.5	Technical definitions of the Lighthouse cities interventions – version II	3	MCRIT	R	PU	M24
D3.6	Twinning inception, replication plans and technical definitions of the Follower cities interventions	3	EIRA	R	PU	M24
D3.7	The Elaborator framework of principles and mechanisms to operationalize multi-stakeholder governance in LLs	3	LIU	R	PU	M28
D4.1	Mobility intervention data framework	4	UCPH	R	PU	M18
D4.2	Intervention shared data platform	4	SENS	OTHER	PU	M30
D4.3	Machine-learning based analytic and prediction models	4	UBRIS	OTHER	PU	M39
D4.4	Data visualization tool	4	IAAC	OTHER	PU	M39
D5.1	Lighthouse cities implementation initial report	5	VTT	R	PU	M21
D5.2	Lighthouse cities implementation final report	5	VTT	R	PU	M36
D5.3	Demo methodology and activities at Lighthouse cities	5	MCRIT	R	PU	M39
D5.4	Lighthouse cities interventions validation	5	ICCS	R	PU	M39
D6.1	Follower cities initial implementation report	6	FPZ	R	PU	M24
D6.2	Knowledge exchange and initial lessons learnt report	6	THIN	R	PU	M30
D6.3	Follower cities final implementation report	6	CVUT	R	PU	M36

D6.4	Demo methodology and activities at Follower Cities	6	ICCS	R	PU	M39
D6.5	Knowledge exchange and final lessons learnt report	6	THIN	R	PU	M39
D6.6	Follower cities interventions validation	6	CVUT	R	PU	M39
D7.1	Environmental, social and safety evaluation and impact assessment	7	IRAP	R	PU	M42
D8.1	Brand identity and guidelines	8	POLIS	DEC	PU	M3
D8.2	Dissemination and communication strategy, plan and tools – version I	8	POLIS	R	PU	M6
D8.3	Handbook of ELABORATOR FAIR data	8	POLIS	R	PU	M18
D8.4	Dissemination and communication strategy, plan and tools – version II	8	POLIS	R	PU	M24
D8.5	Exploitation plan	8	MCRIT	R	SEN	M24
D8.6	Report on the dissemination activities	8	POLIS	R	PU	M42
D8.7	Report on liaison activities and international cooperation	8	POLIS	R	PU	M42
D8.8	Exploitation report	8	MCRIT	R	SEN	M42
D8.9	EU policies and regulations recommendations	8	EIRA	R	PU	M42

2.5 Key milestones

In order to keep track of the overall project progress and ensure an effective monitoring plan, a list of milestones has been set, as shown in Table 3.

Table 3: ELABORATOR milestones

MS no.	Milestone name	WP	Leader	Due	Means of verification
MS1	Project kick-off	1	ICCS	M01	Minutes of the kick-off meeting
MS2	Risk and quality procedures established	1	UBRIS	M03	All documentation and procedures finalized by the TMT and adopted by WP leaders. D1.1/2 and D2.2 submitted
MS3	First period progress report	1	ICCS	M18	Activity report and cost justification for the first year submitted
MS4	Second period progress report	1	ICCS	M30	Activity report and cost justification for the second year submitted
MS5	Third period progress report	1	ICCS	M42	Activity report and cost justification for the third year submitted
MS6	Project successfully completed	1	ICCS	M42	All activities are finished and reports are submitted
MS7	Co-creation playbook ready	2	LIU	M12	D2.3 submitted
MS8	Intervention in 12 cities defined	3	MCRIT	M24	D3.3 & D3.4 submitted
MS9	Shared data platform ready	4	SENS	M30	D4.2 submitted and shared data platform online
MS10	Desktop visualization tool improved and validated by the Community of Practice	4	UBRIS	M33	Desktop visualisation tool beta version delivered. Trainings and trials with the Community of Practice took place and their feedback delivered towards its final release in M39
MS11	Observers cities call finalized	6	THIN	M21	At least 10 Observer cities for activities
MS12	Launch of the demos in all cities	5, 6	VTT	M33	Public events organized in all cities to launch the demos

MS13	LL finalized at all cities	5, 6	MCRIT	M39	Demonstration activities finished (D5.2 & D6.3 submitted)
MS14	Baseline analysis conducted for 12 cities	7	THIN	M25	Interim report of baseline analysis regarding environmental, social and safety aspects based on the outputs of the delivered need-gap analysis included in D3.1.
MS15	Evaluation based on data collected in 12 cities	7	IRAP	M39	Results of environmental, social and safety evaluation of T7.1, T7.2, T7.3 delivered to T7.4.
MS16	Impact assessment completed	7	IRAP	M42	D7.1 submitted
MS17	Comm. And Dissem. Strategy	8	POLIS	M06	D8.1 & D8.2 submitted
MS18	Final event	8	ICCS	M42	The final event is successfully organized

3 Project management

3.1 Management structure and functions

3.1.1 Project management overview

Coordinating the ELABORATOR consortium, comprising of 38 partners, is a complex task that requires an efficient management structure and mechanisms along with decision-making processes, in order to:

- Establish a holistic and unified view of the overall approach, at every time point.
- Invigilate, monitor and successfully complete the objectives, without exceeding the agreed calendar and the budget while achieving a good quality of deliverables, both internally (within the consortium) and externally (i.e., the EC).
- Properly and timely identify, manage and mitigate the possible risks.
- Promote the efficient collaboration between all the involved entities and parties.

Within the ELABORATOR project, a cohesive structure that can contribute to coordination of partners working in different European countries, has been established, in order to:

- Ensure seamless and straightforward coordination of the consortium while fulfilling the EC contractual obligations through the **Project Coordinator (PC)**.
- Ease communication and coordination at the thematic levels of the WPs in **the Technical Management Team (TMT)**.
- Enable efficient and fair decisions about project resources and objectives by the TMT.
- Secure the alignment of the project activities with the industry and the EU political agenda with the help of an **External Expert Advisory Board (EEAB)**.

The organisational and managerial scheme of the project is elaborated in the sections below. The four most important actors have been assigned key tasks within the project and have undertaken the cross-WP coordination of horizontal issues; these are the *Technical & Innovation Manager* (a.k.a. the *Technical Manager – TM* role), the *Risk & Quality Manager*, the *Data Manager & Protection Officer* and the *Communication Manager*.

On the tip of the pyramid stands the Project Coordinator (PC), that monitors the whole project's progress, as well as the progress of each WP and each manager individually. The PC also leads the meetings, setting their agendas, and discussions, and deciding about the possible solutions. The following bodies support the success of the ELABORATOR project coordination, alongside with TMT:

- The External Experts Advisory Board (EEAB), enhancing the project alignment with the current research, societal and industry needs.
- The ELABORATOR project effective connection and communication with other related projects on a bilateral basis; information exchanges and discussions related to planning and coordination are held between members and parties of the relatable projects. A strong connection is anticipated with all the other projects funded under the same call, namely AMIGOS and REALLOCATE.

In terms of the *General Assembly (GA),* all project beneficiaries are represented and, thus, each of them can vote any decision that can relate to changes in the project plans or any decision submitted by the *TMT*, in case of a lack of consensus. The PC is the TMT and GA meetings chairman, and is the unique point of contact with the *EC*. There are two levels of management functions within the project:

- The operational level: The PC and the TMT (leaded by the Technical Manager – TM) are the bodies that carry out the day-to-day planning, steering, and controlling of the work progress from WPs and involved cities; they also monitor the overall quality of results and the risk management.
- The strategic level: The GA approves the PC and TMT decisions and, if necessary, proceeds to appropriate alterations regarding the project plans or the consortium. The EEAB supports the procedure by offering non-binding recommendations on project functions and activities.

The following sections present in detail the different bodies.

3.1.2 Operational bodies

3.1.2.1 Project coordinator (PC – ICCS)

As stated both in the Grant Agreement (GRA) and the Consortium Agreement (CA), ICCS is nominated as the project Coordinator (PC) for the ELABORATOR project. The primary Coordinator Contact, Dr. Angelos Amditis, ICCS Research Director and I-SENSE Group Director, who has a wide experience in project and technical coordination in the past 20 years, will be representing the Institute. Mr. Jason (Iasonas) Sioutis, as the Deputy PC, is responsible for the successful day-to-day project coordination. The aforementioned persons are jointly responsible for the successful and smooth completion of the entire project, and their coordination must be subject both to EC rules and to the Grant Agreement (GRA) and the Consortium Agreement (CA) of the HORIZON EUROPE Programme terms. In more detail, the responsibilities of the PC include, amongst others, the following:

- Oversee the efficient project implementation.
- Ensure the proper execution and implementation of GA decisions.
- Monitor the Parties' compliance with their obligations under the Consortium Agreement and the Grant Agreement.
- Keep the address list of Members and other contact persons updated and available
- Collect, review (in order to verify consistency) and submit reports, other deliverables (including financial statements and related certifications) and specific requested documents to the Granting Authority.
- Transmit documents and information connected with the Project to any other Parties concerned.
- Administer the financial contribution of the Granting Authority and fulfilling the financial tasks described in CA.
- Provide, upon request, the Parties with official copies or originals of documents that are in the sole possession of the Coordinator when such copies or originals are necessary for the Parties to present claims.

3.1.2.2 Technical and Innovation Manager (TM - UCPH)

As it is the case in other EU-funded projects, the leader of the task T1.2 (Technical and innovation coordination), namely UCPH, and more specifically Prof Hans Skov-Petersen, is designated as the Technical Manager (TM) of the project. Along with the requirements of task T1.2, the TM is also responsible for:

- the coordination of all technical activities carried out within ELABORATOR
- ensuring the technical activities' compliance with Grant Agreement, along with project progress and optimal use of resources.
- ensuring that the proposed solutions as well as the tests conducted by ELABORATOR cities (Lighthouse and Follower) are technically sound and viable.

The TM is highly supported in its technical coordination task by the PC. More specifically, the tasks that a TM shall contribute to are the following:

1. monitor the activities of all WPs holding regular teleconferences;
2. monitor and guarantee timely execution of all project tasks in compliance with the project Gantt chart;
3. carefully monitor the deployment plans at the ELABORATOR cities, raise issues during the TMT calls and propose solutions to solve the issues;
4. moderate technical decisions and manage conflicting choices for technical developments;
5. generate close working cooperation between the Work Package Leaders (WPLs); refine or reorganise any activity if necessary;
6. in collaboration with the PC, organise and hold regular TMT meetings for productive interaction among all the leaders;
7. monitor and control the deliverables content in terms of technical consistency and completeness.

In regards of innovation management, the role of the TM is related to

- Having constant awareness of the project status with respect to the identified innovative outcomes,
- Examining in what extent this is fulfilled within the project tasks,
- Updating activities with respect to potential new innovations, driven by ever-changing needs of the market and society,
- Identifying the readiness to generate new innovation pathways potentially exceeding the project objectives.

3.1.2.3 Technical Management Team (TMT)

The TMT is collectively responsible for the operational management and the efficient fulfilment of the project, acting as a link between the WPLs and the GA, being accountable to the latter. By holding meetings in a regular basis, the TMT should identify potential problems and delays early enough to proactively prevent conflicts and cascading problems. All members of the TMT will meet at least physically during the GA/Plenary meetings, during which progress, issues and challenges will be discussed by the respective leaders, at WP/task level. The primary aim of these regular updates is to ensure that all WPs are progressing with their technical tasks, in order to achieve their objectives on time. In case that the need for a deeper technical session is identified, the matter is passed on to the TMT.

The TMT consists of the following parties:

- The Work Package Leaders (WPLs): Each WP has a clearly identified leader (the Grant Agreement defines each WP leader namely a representative from ICCS, CIRCE, LIU, UBRIS, VTT, EIRA, IRAP, POLIS), who is held responsible for coordinating the work within the WP, in cooperation with the TMT, and for setting WP objectives and milestones. The WPLs are also responsible for monitoring progress of tasks within their dedicated WP, as well as for inter-WP bonds. Each task has a leader too, also clearly identified within the Grant Agreement, who reports to the respective WPL, and assists him in planning, managing and fulfilling their tasks. The WPLs report to the TMT and PC. This structure fits ELABORATOR complexity and ensures flexibility as decisions are made at the appropriate level with a well-defined succession of responsibility. After the first few months, a number of WPs will be simultaneously active and, thus, frequent exchange of information and results is foreseen.

- The Technical & Innovation Manager (UCPH), who leads also the innovation activities of T1.2, will ensure that the project coordination is favourable towards innovation, and that the necessary actions to facilitate the innovations exploitation after the project ends, is taken.
- The Data Management & Protection Officer (LIU), who leads the Data Management Plan of task (T1.3), is responsible for the coordination of management, sharing and preservation of research data, as well as the validation of scientific publications related to the project and the source code developed or used during the project, subject to Open Access and FAIR data principles. According to the GRA, the Data Management and Protection Officer (DMPO) raises potential issues and proposes solutions for dealing adequately with data privacy and data protection regulations, and will serve as a bond with the TMT members in what relates to data management, while identifying and defining which data could or could not be shared, discussing confidentiality issues and, in general, acting subject to the GDPR.
- The Risk and Quality Manager (UBRIS), is the leader of the Quality Assurance and Risk Management Task (T1.4), will ensure high quality of deliverables and outcomes of the overall project targets. A Risk and Quality Manager will be appointed to be part of the TMT from UBRIS. This manager also supports project coordination in achieving the milestones by monitoring the production of deliverables and by executing the risk management process, trying to mitigate the potential threats.
- The Communication Manager (POLIS), who leads the Outreach, dissemination and exploitation WP (WP8) and the Dissemination and communication strategy, tools and events task (T8.1), is responsible of ensuring the good coordination of the scientific outreach of the project, developing appropriate communication and promotion materials, and liaising with relevant R&D projects and acts.

The main roles of the TMT are the following:

1. Communicate regularly to monitor WP progress and to discuss potential issues.
2. Hold teleconferences, chaired by the PC on a regular, as well as on a need basis, to:
    - Constantly evaluate the status and progress of all the project activities and results.
    - Discuss issues, work into finding solutions and reaching a consensus; adapt the project plan as necessary, if needed.
    - Discover and discuss possible needs for changing resources allocation.
    - Identify the risks and apply mitigation measures.
    - Discuss the dates of the GA and prepare the agenda of discussions, presentations, or other activities.
    - Prepare the review meeting with the EC as well as the presentations.
    - Prepare the meetings with the EEAB.
    - Discuss feedback from the EC or the EEAB meetings and propose corrective actions, if needed.
    - Support the dissemination and outreach activities.
3. All members of the TMT shall attend the important coordination meetings of the project, particularly the ones chaired by the EC.
4. As necessary, the TMT may create and instruct task forces, particularly to efficiently solve cross-WP issues.
5. Act as intermediary in cases of conflicts between technical partners that cannot be resolved at the WP level.
6. Assess and approve calls for extraordinary GA meetings (beyond the required meetings).

The CA defines that TMT members are the following:

- One representative of the PC (ICCS)
- One representative of TM (UCPH)
- One representative of each of the 8 WP leaders (WPL)

ICCS, as the coordinator, must be in lead of each of the TMT meetings.

3.1.3 Strategic bodies

In addition to the TMT, the ELABORATOR project relies on some strategic bodies that will have a supplementary role to guarantee transparency, accountability and expert topical knowledge; these are the General Assembly (GA) and the External Expert Advisory Board (EEAB).

3.1.3.1 General Assembly (GA)

The GA is the ultimate decision-making and conflict resolution body of the project. It is held responsible for the overall strategic orientation, as well as that the latter is being respected by every party involved. The PC will chair this body, and one representative of each party shall attend it. Indicatively, its tasks include:

1. Evaluation of project progress, status and allocations of resources.
2. Alterations made into Grant Agreement & technical annex to be submitted for EC approval.
3. Changes to the work programme and its timing (Gantt Chart).
4. Modifications to the Consortium Agreement notably to Background Included, additions to list of Third Parties for simplified transfer, etc.
5. Evolution and composition of the Consortium, such as conditions for party entry and withdrawal, identification of breach by a party or defaulting party.
6. Agreeing on external opportunities.
7. Ensuring the leverage effect of the project and achievement of expected impacts.

The GA is, thus, the highest-level decision-making body that represents all Consortium parties of ELABORATOR. Upon recommendations from the TMT and the PC, the GA makes the final decisions on the overall policy of the Consortium, on proposals for modifications or extensions of the Grant Agreement or of the project's objectives. A two-thirds voting is the voting method used to reach decisions (2 out of 3 should vote in favour of a decision).

The PC chairs the GA, which will meet at least once a year, to report and discuss progress. Attendance at the GA is mandatory and requires at least one representative of each beneficiary to be present at the meetings. If a representative cannot attend a GA meeting, they should give power to another representative from the same organization. The GA meetings follow a written agenda.

3.1.3.2 External Expert Advisory Board (EEAB)

The EEAB, a body whose members are determined by the TMT, will act as an external reviewer and recommend (in a non-binding way) good practices to provide assistance in the decisions made by the GA. A non-disclosure agreement amongst all parties and EEAB members should be signed. One of its main concerns is the project alignment with market and stakeholder needs and its development according to industry standards. The added value of the EEAB will be to offer insights from different links of the value chain, helping the Consortium overview the project more externally.

The EEAB will have access to the project deliverables (with confidentiality agreements in place) and be available to answer specific questions from consortium members on their specialty topics. Board members are allowed to participate in General Assembly meetings upon invitation, but have not any voting rights. All recruited EEAB members will be approved by the GA and will be asked to sign a non-disclosure agreement (NDA). A travel budget will be managed by ICCS to cover the members' travel costs to participate in EEAB meetings, if needed.

3.2 Management processes and procedures

The project Management Plan puts in place certain project management procedures to ensure that the workflow is smooth and that the project delivers high-quality outputs within the defined scope and time. These processes and procedures are intended to facilitate risk and quality management and to ensure that the innovation and deployment objectives of the project are attained.

3.2.1 ELABORATOR administrative management processes

The following processes contribute to the efficient and dynamic management of the project:

- progress reporting and results assessment;
- planning and implementation of changes;
- project administration and contract management;
- project management tools and services.

3.2.1.1 Project administration and contract management

The conditions and procedures for a Grant Agreement amendment are set in Article 39 of the Grant Agreement. Requests for amendments to the Grant Agreement and significant project changes and deviations must be submitted in writing to the PC. The project beneficiary requesting the change must indicate to the PC the reasons for the proposed amendment and its consequences in terms of budget, work programme, etc. The PC must be informed as soon as a potential need for amendment to the Grant Agreement or a change to the project plan is identified. Examples of subjects for contract amendment include (non-exhaustive list):

- Partners joining or leaving the project.
- Re-allocation of budget.
- Incorporation of requirements from the EC.
- Extension of contract duration.
- Modification of DoA (Annex 1 to the Grant Agreement, Milestones, Deliverables' submission date, Partner tasks, etc.).

The amendment request must be approved by a GA vote. It will then be forwarded by the PC to the EC on behalf of the consortium.

The PC is responsible for updating the amendments in the Participant Portal.

3.2.1.2 Planning and implementation of changes

The PC must be informed in writing of any request for change to the DoA of the Grant Agreement. The communication must include the following information:

- The proposed change.
- Whether status of the contract must be changed.

- Justifications for the change.
- Impact of the changes on the project plan.

Minor changes such as slight adjustments or internal shift of resources will be dealt within the periodic reporting and do not require a Grant Agreement amendment. Such changes, however, must always be indicated to the PC and have the approval of the WPL involved.

3.2.1.3 Progress reporting and evaluation of results

ELABORATOR is bound by the Grant Agreement to provide periodic reports on its progress towards the project objectives. A Technical Report reflecting the progress within the reporting period M1-M18, a Technical Report reflecting the progress within the reporting period M19-M30 and a Final Report at the end of the project in M42 must be provided to the EC. To complement these reports, ELABORATOR will produce six Internal Reports.

Internal reports

These reports entitled project Coordination Internal Reports (numbered IR1.1 - IR1.6) will be produced every six months (M06, M12, M18, M24, M30, M36) to provide the status of each WP in terms of:

- Objectives of the period.
- Progress towards objectives in the period, including milestones and deliverables.
- Justification and impact of delays and objectives not achieved.
- The situation regarding personnel and other costs.
- Any changes or deviations in the use of project resources or organisation.

The Internal Reports will be used to detect any need for corrective actions and will also be the basis for preparing the EC periodic reports. A risk register will be presented to the EC as part of the periodic reporting process. Recommendations arising from project periodic reviews will also be added as items to be addressed in the following reporting period.

Except for these 6-monthly reports, the PC sends a monthly report in the form of an e-mail to the whole consortium, summarising the activities of the past month per WP, reminding the milestones and deliverables for the next six months, and setting an action plan for the next month. This activity will start in M04 of the project.

WPLs will be responsible for compiling the reports on work done by collecting status reports from their Task Leaders. When the timing overlaps with the official periodic report, the official report supersedes and serves as internal report as well.

Recommendations arising from project periodic reviews will also be added to be addressed in the following reporting period.

Interim and final periodic reports for the EC

The Grant Agreement obliges the PC to submit technical and financial reports to the EC. As with the Internal Reports, WP Leaders will work closely with Task Leaders to produce complete records of their activities and achievements towards objectives as well as the contribution of all the partners involved, as required by the Grant Agreement. These reports will also serve to justify Person Month costs reported by the beneficiaries. The reports will be sent to the PC for submission to the EC.

Information for all project activities (per WP) will be provided to the project Officer and EC experts (reviewers) before each project review, namely, even if there are no planned periodic reports available just before a review. The PC will provide reviewers the necessary reports of the project activities for the period under review at the latest two weeks

in advance of a review meeting. Reporting will also include information about any tasks whose work may not be reported in any deliverable during the period under review.

3.2.2 ELABORATOR management procedures

ELABORATOR has defined a set of procedures to support the coordination tasks and to ensure the above processes are efficiently executed. These procedures relate primarily to conflict resolution, resource management, and quality and risk assurance. Project meetings are the main tool for the coordination of work. The corresponding procedures for organising meetings are also described below.

3.2.2.1 Conflict resolution

Consensus will be pursued as the general principle in the decision-making processes of ELABORATOR. Decisions in the project will generally be taken at the lowest organisational level possible, i.e., starting with the Task Leaders. The TMT will be the preferred entity to solve most of the issues in a consensus-based manner. If the conflict remains unresolved at the TMT level, the GA will be consulted and will vote for a decision to resolve the issue.

3.2.2.2 Procedure for resource reporting and management

The project resources are managed by the PC based on the Grant Agreement. ELABORATOR will provide the periodic reports required by the EC and also generate an internal report every six months about the progress of the work, the achievements, the risks, as well as an overview of the resources spent. These internal reports will help in monitoring and controlling the project and will be the basis for the provision of the EC periodic reports. They will also help in mitigating performance issues from participants or anticipating the need for updating the project plan, including the reorganisation of resources.

The internal reporting procedure will be based on the official periodic reporting requirements and include input from all project beneficiaries. These reports will comprise of two parts:

- Part A will contain resource management reports for the period.
- Part B will describe the work done during that period.

In more detail:

- Towards the end of each reporting period (M01-M06, M07-M12, etc.), the PC, ICCS, will send out a request to all partners to provide input in the dedicated templates.
- For Part A, each beneficiary partner will report their resource use for the period based on a per task estimation of expected resource use; a summary of the activities performed will be provided along with justification for deviations.
- For Part B, WPLs will collect input from Task Leaders and other beneficiaries and report the progress made in the provided template. The contribution of all beneficiaries involved in the WP will be briefly summarised.
- The PC will use this report to ensure that project activities are on course and all beneficiaries are contributing as expected.
- Corrective action may include shifting resources (PMs) from under/non-performing partners.

3.2.2.3 Project meetings procedures

The procedures for organising meetings are described in section 6.2 – General operational procedures for all Consortium Bodies – of the ELABORATOR Consortium Agreement. It is essential that these procedures are followed, to of all decisions and actions of the consortium.

Representation in meetings

The meetings between any of the Consortium members can be held physically, by teleconference or videoconference, or by using any other telecommunication means. Any party that partakes in a Consortium Body shall designate one representative (member), and each member must be present or represented at every meeting; if this is not possible, a substitute or a proxy must me appointed to attend and vote. A meeting may be recorded after the consensus of all participants, and the recording will be shared with the partners.

Convening meetings

ELABORATOR meetings will be convened at various representation levels from a GA to Task level. In order to better cooperate and organize activities, periodic meetings have been scheduled at task and WP levels; their frequency and timing is set by the task and WP current needs at each time stamp.

On the contrary, management meetings shall be held periodically to review the overall status of the project. Such meetings are meant to ensure that the project is compliant with the work schedule. The following meetings take place on a regular basis:

- GA telcos: These are chaired by the PC.
- TMT telcos: These are chaired by the PC and TM.
- WP telcos: These are chaired by each WPL. They also occur on a regular basis. Specifically, their average periodicity is bi-weekly.

Ad-hoc meetings may occur, on demand, to discuss specific matters.

Moreover, in order to form strong bonds with external partners and the overall community, participation to the following online meetings is pursued:

- Cross-project telcos: A liaison activity with other related projects has been initiated, where the ELABORATOR PC and TM or TMT representatives participate.
- EEAB telcos: Meetings with the EEAB will take place on an ad-hoc basis. The TMT will participate in these meetings.

Notice of a meeting

The chairperson of the Consortium shall notify each Consortium Member for a meeting the soonest possible, and, by no means, later than the minimum number of days preceding the meeting as indicated below. These notices apply to each type of meetings.

	Ordinary meeting	Extraordinary meeting
General Assembly	60 calendar days	15 calendar days
Technical Management Team	20 calendar days	7 calendar days

Sending the agenda

The chairperson of the Consortium is responsible for the preparation of an agenda for the related meeting; it shall also send each Consortium member the agenda no later than the minimum number of days preceding the meeting as indicated below. This mainly applies to physical meetings.

	Ordinary meeting	Extraordinary meeting
General Assembly	21 calendar days	10 calendar days
Technical Management Team	10 calendar days	5 calendar days

Adding agenda items

Any agenda item requiring a decision by the Consortium must be identified as such on the agenda. Any Consortium member may add an item to the original agenda by written notification to all of the other members up to the minimum number of days preceding the meeting as indicated below.

	Ordinary meeting	Extraordinary meeting
General Assembly	14 calendar days	7 calendar days
Technical Management Team	4 calendar days	2 calendar days

During a meeting the Members of a Consortium Body (either present or represented) can unanimously agree to add a new item to the original agenda.

Minutes of meetings

The chairperson of the Consortium must produce written minutes of each meeting which shall be the formal record of all decisions taken. He shall send the draft minutes to all members within ten (10) calendar days of the meeting.

The minutes shall be considered as accepted if, within fifteen (15) calendar days from the day of receipt, none of the members has sent an official objection or demur, in writing to the chairperson with respect to the accuracy of the record of the minutes.

The chairperson, finally, must send the PC and all the Parties the accepted minutes, and PC shall retain an appropriate number of copies.

3.2.2.4 Management of risks and quality assurance

Quality and Risk Management opts to ensure the timely and high-quality delivery of the whole project. Deliverable D1.2 analyses the related (quality) management plan, while Risk management is analysed within this (D1.1) deliverable.

Risk management comes along with an analysis of potential threats and possible correcting actions. This is extremely important in order to achieve the maximum cooperation between the beneficiaries, the optimal project fulfilment,

and the maximum of synergies with other, related, projects. Thus, the Failure Mode and Effects Analysis (FMEA)[1] will be used as the basis for risk-management. A 'risk' is defined as a future event precluding the achievement of the objectives of a certain activity or task. Risks can be identified by any consortium member. Risk management is a cyclic process. The risk management cycle consists of the following steps:

I) Identifying risks:

- WP and Task Leaders will identify the risks relevant to their activities or tasks and subsequently properly and promptly inform the Risk & Quality Manager who will add them to the risk register.
- Identification of risks is performed continuously during the last step (monitoring and acting upon risks) and periodically in dedicated risk sessions.

II) Analysing risks:

- Analysing risks is performed during the dedicated risk sessions.
- During this step, all risks are assessed for their relevance. If a risk is no longer relevant it may be closed.
- Risks are assigned a risk owner/caretaker, being the person who will be able to detect and/or manage the risk best.

III) Evaluating risks:

- All risks are rescored using the FMEA scoring methodology, assessing Severity (S) and Occurrence Probability (P).
- The risk register is constantly revisited and mitigating measures are defined by the owner in cooperation with the TMT.

IV) Monitoring and acting upon risks:

- The risks are actively monitored during the TMT sessions.
- Certain risks that are identified as critical or highly probable will be actively managed. This means that preventive mitigating measures will be put in place.
- If a risk materialises, upon detection the necessary mitigating measure(s) will be put in place.

The risks are tracked in a Risk register, regularly updated by the Risk & Quality Manager. More details about quality management procedures are presented in D1.2 – Quality management plan. By defining clear procedures and establishing deadlines for deliverable production, review and submission, the Risk & Quality Manager will ensure low exposure to risk and the highest possible quality of ELABORATOR outcomes.

Table 4 in the Annex presents the risks identified. The risks are included in a shared collaboration space, where they will be continuously monitored and updated.

[1] Raymond J. Mikulak, Raymond J. et al. 2017. The basics of FMEA (2nd ed.), Taylor and Francis; ISBN: 9781439809617.

4 Project coordination and communication tools

The successful execution of a project depends to a large extent on participants having good tools and services at their disposal to facilitate project-internal communication and streamline workflow. For a large project such as ELABORATOR such management tools are indispensable, and, thus, the project has chosen a combination of tools for various purposes. The main ones are:

Microsoft TEAMS and SHAREPOINT: The project uses the Microsoft TEAMS and SHAREPOINT framework. It allows for collaboration, chat, calls and meetings. SHAREPOINT Online is primarily a document management and intranet platform where one can store, collaborate, and share information seamlessly across organizations, and is part of the Microsoft 365 platform. This framework ensures both safe storage of documents and supporting collaboration among partners (such as public deliverables, minutes and agendas, and for the various project Registers).

Microsoft TEAMS: This is the main platform used for the project regular or on-demand telcos. Doodle is usually used in order to setup new meetings, so that all required attendees have the chance to vote their preferred timeslots.

Website: The main project vehicle for communication and dissemination activities will be available at: http://www.elaborator-project.eu/.

Sympa: A listserv for targeted group-based internal communication (i.e., mailing lists). The [ELABORATOR] tag is used in all communication. Available at: https://lists.elaborator-project.eu/wws/.. All lists are open to members of the consortium and new members can be easily added (e.g., new colleagues joining ELABORATOR).

To ensure that the consortium receives relevant information in a timely manner, without an excessive use of email, project communication will reflect the structure of the project and will target the smallest possible group of members (via email or listserv). Targeted information sharing will be based on the classification of internal communication as 1) communication related to project activity execution, or 2) communication related to administrative matters.

Communication relating to administrative matters (financial statements, signature of contracts, payments, etc.) will be targeted to the administrative staff of each organization, which is not necessarily involved in the execution of project activities. To make sure that the information reaches all the staff involved in the administrative management of the project, the communication will be distributed to the contact persons identified as ELABORATOR contacts in the EC participant portal.

When the PC needs to communicate on administrative matters with the whole consortium, he will address the list of contact persons downloaded from the EC participant portal. Therefore, in order not to miss any important administrative information, each partner has the responsibility to maintain this list up to date.

5 Conclusions

This document, deliverable D1.1 – project management plan, is closely aligned with and takes as its starting point the Grant and Consortium Agreements of ELABORATOR. It details the roles and responsibilities of governance bodies as well as all beneficiaries and members of the project Consortium. It describes the structures, tools, processes, and procedures that WP1 (project management) has instituted to ensure that the project runs smoothly and effectively and in accordance with the Grant Agreement. An integral part of the project management plan is ELABORATOR's risk management strategy based on the Failure Mode and Effects Analysis. D1.1 is specifically relevant for the execution of Tasks T1.1 (Administrative and financial coordination) and T1.2 (Technical and innovation coordination). This deliverable will be complemented by the other deliverables of WP1. Together with the Grant Agreement and the Consortium Agreement, this document is to be regarded as a reference for the overall project management of ELABORATOR, to ensure good organisation of work effort and high quality of project results.

6 Annexes

6.1 Risk management by failure mode and effects analysis

The ELABORATOR project Consortium makes use of the Failure Mode and Effects Analysis (FMEA) for its risk-management. This structured approach gives the opportunity to discover the potential faults and failures in the process of project activities. By analysing the harmful effects of failures, the FMEA can identify, prioritise and ultimately help mitigate the collapsing or failing modes.

The risk assessment procedure includes the following main steps:

Step 1 – Identification and definition of the risks

Step 2 – Risk validation

Step 3 – Identification of risk mitigation strategy

Step 1 – Risk identification and definition

WP leaders along with Task Leaders will identify the risks relevant to their activities or tasks and subsequently properly and promptly document them in the risk register. The issues can be technical, organisational, behavioural or legal.

Step 2 – Risk validation

All risks will undergo a validation process in order to be ranked and prioritized. This step involves assessing each risk based on severity and occurrence probability (referred to as “risk likelihood”). The Risk Severity (S) stands for the severity levels for technical and organisational failures range from Low to High, while the Risk Occurrence Probability (P) index, ranging from Low to High, provides a ranking based on the probability that all the risk causes related to the risk modes described in the analysis can occur.

Step 3 – Mitigation strategies identification

The risk register will indicate the WPs or UCs implicated by the risk and, if needed, assign a caretaker for each risk, who will follow its analysis and mitigation. Mitigation of the risks adverse effects will rely on a risk reduction strategy by way of an iterative process. Some ways to do this will include:

- Reducing, if possible, the probability of the hazard occurring.
- Increasing the probability and the reactiveness in failure detection.
- Reducing the magnitude of the consequences of the potential hazard.
- Protecting against the risk-mitigating strategies to compensate for a failure (e.g., back-ups).

The following table indicates and briefly describes the risks identified at the time of submitting this deliverable. A risk register document in SHAREPOINT will be continuously monitored and updated.

Table 4: ELABORATOR risk registry - Description of critical risks and mitigation actions

Risk ID	Description of Risk	WP	Prob.	Sever.	Risk-Mitigation measures
01	Discrepancies in the technical visions: Project delays, etc	WP1	L	M	Frequent communication within WPs (through meetings, telcos, etc.) and at the TMT level to resolve issues. Good cooperation between Coordinator, Technical Manager, Innovation Manager, TMT and the Consortium.
02	The partners and the cities don't realise the need to incorporate an inclusive approach in the more technical aspects of the project	WP2, WP3	L	M	Partners and cities are aware of the importance to approach sustainability from an inclusive perspective and have expressed their willingness to adapt their interventions to fulfil inclusion criteria. Furthermore, many of the partners have already "Gender Equality Plans" and are conscious in this direction. The internal training sessions will aim to make clear to the partners how inclusion and gender equality are substantial to guarantee sustainable urban mobility interventions.
03	Insufficient details in the defined requirements, and performance monitoring framework that could lead to underestimating the performance of solutions to be achieved that could lead to wrong decision.	WP2, WP3	L	M	Coordination and participation of all relevant partners towards defining relevant KPIs that ensure performance goals are correctly monitored. Moreover, all partners are committed to provide the relevant data for the KPI baseline, especially the representatives of each city that form part of the consortium.
04	Issues related to collection of primary data: low level of responses in participatory processes and local surveys.	WP2, WP3, WP4 WP5, WP6, WP7	L	M	Direct involvement in the project of the local authorities responsible for the participatory processes will steer the involvement of the local actors.

05	Lack of stakeholders' engagement and low interest in the project	WP2, WP3, WP4, WP5, WP6, WP7, WP8	L	M	Continuous monitoring KPIs. Analysis of reasons to understand pitfalls. More targeted C&D actions with each target group in line with their needs.
06	Loss of a lighthouse/follower city	WP5, WP6, WP7	L	M	I) Task redistributions if possible. II) Substitution with new city which has similar characteristics
07	Lack of interest from Observer cities	WP6	L	M	More targeted D&C towards cities on 100 Smart and Sustainable cities not involved in any of the selected projects for this call. Exploitation of cities network of partners like POLIS and Safe and Sustainable Mobility Partnership (S3) platform.
08	Delays in implementing interventions will postpone evaluation and reduce the time to deliver	WP7	L	M	Adequate project management will prevent delays. Even if occurring, it is doubtful that the delay will happen for all cities simultaneously. Therefore, the evaluation can sprint isolated for each city.
09	Inability to collect one of the indicators due to lack of data	WP7	L	M	The project will already consider multiple indicators to describe the intervention results broadly. Therefore, the inability to collect a specific indicator will be overpassed by others representing similar or complementary aspects of the environmental, social and road safety impacts.
10	Lack of or poor external visibility and/or awareness about the project	WP8	L	M	ELABORATOR will draft a plan (D8.2) to provide the project with the most appropriate tool to maximise visibility and awareness raising. The implementation of the plan will be monitored constantly to avoid or

proactively anticipate this risk. Partners responsible for this WP have a consolidated experience in this type of project.