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Use of open-source P2P energy sharing platforms for energy Democratization

Deliverable D 8.1 Project Management Plan

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Disclaimer

This document has been produced in the context of the U2Demo project¹. Views and opinions expressed in this document are however those of the authors only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

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¹ <https://u2demo.eu/>

Executive Summary

The Deliverable D8.1 - Project Management Plan (PMP) outlines how the U2Demo project is structured and will be executed and effectively monitored and managed. The document specifies the project structure and timeline, includes all relevant project management tasks, and defines the roles and responsibilities of the participant partners, the management team, and governance bodies. This deliverable also addresses the procedures related to quality assurance, risk assessment, data management, and communication and dissemination of the project.

A set of guidelines will be provided to ensure proper project management and timely completion within budget. These guidelines cover the use of collaborative tools, internal communication protocols with partners and the European Commission (EC), meeting organization, preparation and submission of deliverables and reports, financial reporting, and the management of communication and dissemination activities within the U2Demo project.

This deliverable, together with the U2Demo Consortium and Grant Agreements, serves as a reference document for all members of the U2Demo Consortium ensuring the efficient implementation and management of the project while achieving the objectives set out in the Grant Agreement.

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Keywords, Acronym

D	Deliverable
DER	Distributed Energy Resources
DMP	Data Management Plan
DSO	Distributed System Operator
ECs	Energy Communities
EV	Electric Vehicles
GA	General Assembly
IMR	Internal management reports
IPR	Intellectual Property Rights
MoM	Minutes of Meeting
NGO	Non-governmental organization
P2P	Peer-to-peer
PMP	Project Management Plan
PO	Project Officer
PU	Public
R&D	Research and Development
SC	Scientific Committee
SEN	Sensitive
SME	Small and Medium sizes Enterprises
TSO	Transmission System Operator
ToC	Table of Contents
WP	Work Package

1 Introduction

1.1 Scope and Objectives

This document serves as a reference for the U2Demo Consortium, including the Project Coordination, the Scientific Committee members, Work Package (WP) and Task leaders, and General Assembly members, to support them in their daily duties. The Project Management Plan (PMP) provides a guide to the key aspects of the U2Demo project, covering its organizational structure, tools, and processes that are critical for ensuring the timely achievement of the project aims.

Specifically, the plan describes the structure and governance of the project, outlining strategies and guidelines for efficient project execution and effective collaboration between partners. It also includes preliminary guidelines on dissemination & communication activities and data management.

1.2 Structure

This document is organized into several sections to guide the reader through the project's structure, management framework, tools, procedures, and quality assurance measures. Specifically, Section 1 *Introduction*, explains the purpose, objectives, and structure of the document, while Section 2, *Project Structure*, provides an overview of the U2Demo project WPs, outlining the project timeline and highlights the milestones and deliverables.

In Section 3, *Organization, Management Structure, and Governance*, the U2Demo repository and internal communication channels are described, together with identification of the U2Demo meetings and procedures for the meeting organization. Section 4, *Internal Management Procedures*, outlines the processes for preparing and submitting project deliverables, internal and periodic reports and assessment of risk management. Section 5, *Quality Assurance Procedures*, highlights the strategies employed to ensure that the project maintains high standards of quality assurance. Section 6, *Communication and Dissemination Preliminary plan*, provides guidelines for participation in events, preparation of scientific articles and release of public communication materials. Section 7, *Data Management Plan*, defines the procedures for the development of the Data Management Plan. The document concludes with Section 8, *Conclusions*, with an overview of the document.

1.3 Relationship with other deliverables

The PMP guides procedural and quality frameworks, connecting tasks and deliverables to make sure the project runs smoothly. The PMP is crucial for the execution of the U2Demo project, helping partners to collaborate and achieve the proposed goals on time. This plan relates to all tasks and deliverables, but directly connects with the following deliverables:

- **D8.2 – Project Management Plan update:** D8.2 updates the description of the tools and procedures adopted in D8.1 for the U2Demo management.
- **D7.1 – Dissemination and Communication Plan and D7.2 – Update Dissemination and Communication plan:** D7.1 covers the U2Demo dissemination and communication plan and respective update at M24 (D7.2).
- **D8.3 – Data Management Plan and D8.4 – Data Management plan update:** D8.3 outlines the U2Demo Data Management guidelines to be followed by the consortium, which specifies how data handling must comply with FAIR principles and align with EC policies, and respective update at M24 (D8.4)

2 Project structure

This section specifies the structure of the U2Demo project, highlighting the objectives, WPs, milestones, and deliverables to be carried out by the U2Demo consortium to create innovative, consumer-centred management strategies that facilitate widespread participation in Peer-to-Peer (P2P) trading and Energy Sharing.

2.1 Project summary and objectives

U2Demo project aims to develop user-centric management strategies that foster the widespread development of consumer participation in P2P trading and energy sharing, and equitable and democratic access to sustainable energy resources.

The specific objectives of the project are:

- To reduce the barriers to use (open source) tools developed for active consumers and energy communities (ECs).
- To improve the engagement of the active consumers and citizens in P2P trading energy sharing and ECs.
- To empower the EC members in their decision process, improving their remuneration opportunities.
- To create tools contributing to the reduction of energy poverty and increase the fairness in the energy access.
- To reduce administrative barriers in P2P trading, energy and sharing, and ECs.
- To propose a clear definition of the role of each stakeholder.
- To contribute to the increase of interoperability between systems.
- To provide a reliable, secure and trustable blockchain-enabled platform.
- To develop robust, scalable and interoperable P2P and energy sharing tools.
- To improve the integration of electric vehicles (EVs) in the global power systems.
- To increase the use of renewables and other distributed energy resources (DERs).







The main outputs of this project are the development of open access tools and platform for active consumers and energy communities. Those will be tested at four energy communities with different characteristics and governance models across four different EU countries: Portugal, Italy, Belgium and the Netherlands.

2.2 U2Demo Consortium

The U2Demo Consortium comprises 17 participant partners and 2 associated partners from eight European countries, each bringing unique expertise and capabilities to the project, as identified in Table 1.

Table 1 – U2Demo consortium expertise and role in the project

No.	Entity	Description	Expertise	Role in U2Demo
1		R&D Institute	Distributed Energy Resources integration in power systems and energy markets	Coordination/Academic solution provider
2		R&D Company	Research on energy technologies, energy markets and business models.	Coordination of WP5 and PT Pilot
3		Technology provider	Offers a turnkey solution to players wishing to deploy on large-scale Web3 (3DCloud, Blockchain, Edge Computing)	Coordination of WP3. U2Demo platform development
4		R&D Institute	Research-based innovative energy solutions for the sustainable growth of cities, local communities and industries.	Coordination of WP6. Standardization.
5		R&D Institute	R&D focusing on key energy technology aspects spanning market design, flexibility procurement, regulation, modelling, and tool development.	Coordination of WP2. P2P trading methodologies
6		University	Energy systems modelling, applications towards energy and climate policies, electricity markets and regulation.	P2P trading methods and energy sharing
7		Technology provider	Specialized in optimisation, decision support and modelling, expertise on market design methodologies and algorithm implementation.	Implementation of the P2P trading and decision support algorithm (WP4)
8		ECs manager	REC Developer. Flexibility management and energy efficiency. ECs creation and stakeholder engagement	Coordination of Italian Pilot. User Engagement
9		R&D / TSO	R&D centre belonging to the PT TSO focused on optimization of power systems and markets operation and planning.	System services, Forecasting, Standardization
10		R&D	Leading centre for applied energy and materials research, expertise in SSH	ECs consumer engagement
11		Energy Community Association	Renewable energy cooperative in Flanders, supporting citizens, businesses and local authorities on community energy	Dissemination & Communication. ECs user engagement
12		Engineering company/ Tec. Provider	Flemish energy cooperative focusing its activities on the Rivierenland region, in the Mechelen area	Coordination of Belgian Pilot. ECs management
13		Municipality	Living Lab in Scheveningen to test tech applications for societal needs, process legal and data issues, and	Coordination of the Netherlands Pilot. Policy maker

			adopt its role in smart city. As part of the living lab a smart local grid has been developed acting as a ECs.	
14	 EUROPEAN UNIVERSITY INSTITUTE	University	Academic research, ECs regulatory aspects and policies	Regulatory framework analysis
15	 INŠTITÚT PRE PASÍVNE DOMY	NGO	It provides information and works to stimulate the Slovakian market for energy efficient buildings and components.	Regulation, policies and ECs management
16	 E.DSO	DSO Association	EU policy and regulation, RD&I initiatives in the field of smart grids and energy system integration	Regulation, Policies and dissemination
17	 watt is	SME	Promote energy efficiency and user service using Data Analytics to convert data into services	Development of user interfaces
18	 energy web	Tec. Solution developer	Open-source Web3 technology developer and deployer for energy companies	Development of U2Demo platform
19	 STEDIN.NET	DSO	Dutch distribution system operator	Participation in U2Demo Dutch Pilot

DSO, Distributed System Operator; TSO, Transmission System Operator; R&D, Research and Development; REC, Renewable Energy Community; SME, Small and Medium-sized Enterprise; SSH, Social Sciences and Humanities; NGO, Non-governmental organization

Deloitte² is in phase of negotiation to join the consortium as Associated Partner.

2.3 Work Structure

The U2Demo project is organized into 8 WPs, divided into four phases:

- i) preparation, design and conceptualization (WP1 and WP2),
- ii) development, testing and integration (WP3 and WP4),
- iii) prototyping and demonstration (WP5)
- iv) recommendations and future exploitation (WP6).

The first four months of the project focus on analyzing existing solutions for P2P trading, Energy Sharing and ECs in European countries and social research (WP1). The following 18-24 months are centred on R&D development under WP2, WP3 and WP4. The U2Demo WPs and their interconnections are depicted in Figure 1.

² [Deloitte Consulting GmbH](#)

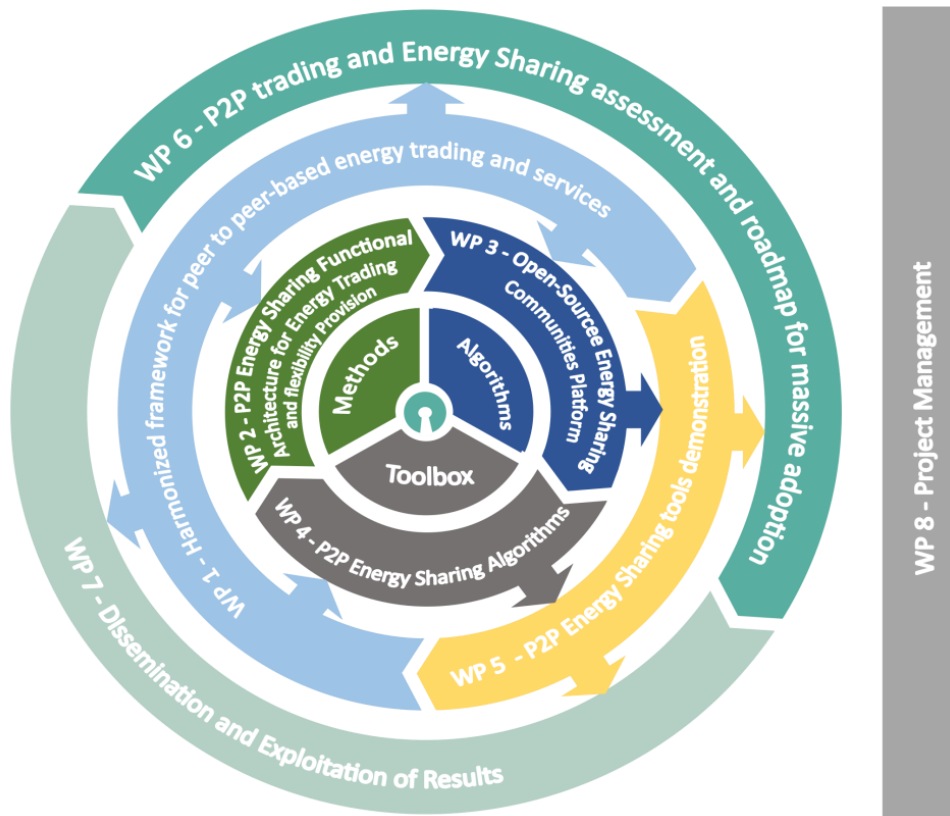


Figure 1 – Work Packages Organization

Below is presented an outline of the project WPs and their respective beneficiary leaders (Table 2):

Table 2 – U2Demo Work Package (WP) details

WP	WP name	WP description	Leader
1	Harmonized framework for peer-based energy trading and services	Create a harmonized framework of active consumer roles and motivations, mapping the regulatory, social, and business context of U2Demo pilots, and supporting EU harmonization efforts like BRIDGE, CIGRE, and eBlX.	TNO
2	P2P Energy Sharing Functional Architecture for Energy Trading and Flexibility Provision	Develop a framework, models, and methodologies for P2P trading and energy sharing, exploring architectures, trading methods, and flexibility mechanisms for active consumers, along with decision support tools for market participation.	VITO
3	Open-Source Energy Sharing Communities Platform	Specify and develop an open-source P2P trading and energy sharing platform based on Blockchain/DLT. This platform will integrate data from various sources, adhering to cybersecurity and interoperability standards, while offering a smooth user experience.	EXAION
4	P2P Energy Sharing Algorithms	Scale up the methodologies from WP1 and WP2 by developing robust algorithms that integrate P2P trading and energy sharing into European electricity markets.	Artelys

		These algorithms will be integrated into the final U2Demo platform developed in WP3.	
5	P2P Energy Sharing Tools Demonstration	Demonstrate the tools and methodologies developed throughout U2Demo in four pilots, assessing performance in different environments. The pilots will also evaluate the tools ability to promote DERs adoption and integrate ECs into the global energy ecosystem, with replication activities planned across different pilots.	EDP NEW
6	P2P Trading and Energy Sharing Assessment and Roadmap for Massive adoption	Evaluate the open-source tools and P2P strategies using WP1 KPIs, providing a roadmap for prosumer engagement, policy recommendations, and strategies for standardization with European initiatives.	EIFER
7	Dissemination and Exploitation of Results	Promote project visibility through communication strategies, knowledge transfer, and connections with national and European initiatives. It also assesses the scalability and replication potential of P2P trading and energy sharing tools.	RESCOOP VLAAND
8	Project Management	Ensure project execution, aligning with objectives, budget, and timeline while maintaining technical and scientific excellence. It also manages open data policies, commercialization, intellectual property rights (IPR), and risk management to ensure project success.	INESC ID

2.4 Timeline, Milestones and Deliverables

With a total duration of 42 months, the U2Demo project started on the 1st of September 2024, and is expected to be concluded by the end of February 2028.

The Gantt chart for the project is shown in Figure 2, with specific colour coding to indicate key events:

- i)* red markers highlight the 12 progress milestones for the U2Demo project,
- ii)* light-blue markers represent the scheduled evaluations/Periodic Reviews with the European Commission/European Climate, Infrastructure and Environment Executive Agency (EC/CINEA),
- iii)* yellow markers denote the biannual General Assembly Consortium Meetings,
- iv)* blue bars mark the duration of a task,
- v)* purple bars denote the WP duration.

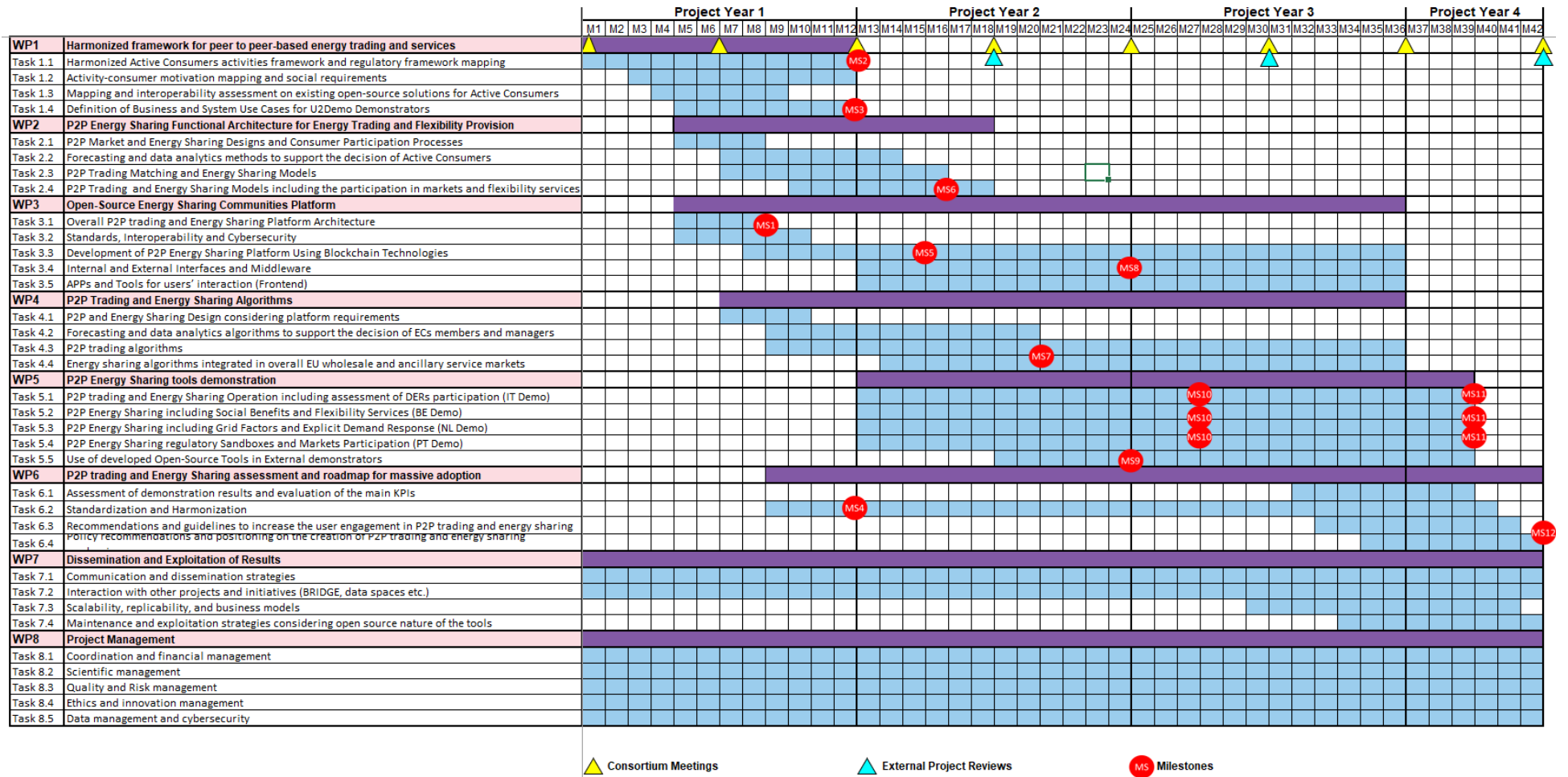


Figure 2 – U2Demo Gantt Chart

To properly monitor U2Demo progress, twelve milestones have been defined, marked in red in the Gantt chart (Figure 2). These milestones correspond to key achievements of the project and indicate the completion of specific phases of the project. The U2Demo milestones are detailed in Table 3.

Table 3 – U2Demo list of milestones

Milestone No	Milestone Name	WP	Means of Verification	Due Date
1	Specification of the architecture and rules (data structure, APIs) of U2Demo platform allowing its development	3	The specification of U2Demo platform will be fundamental for the development of the algorithms in WP4. This specification will be available in D3.1.	M08
2	Comprehensive mapping of the most important initiatives related with P2P trading, Energy Sharing and Energy Communities	1	D1.1 will include a mapping of the most important research and demonstration activities that will be used as reference for the developments in WP2, WP3 and WP4.	M12
3	Detailed definition of business models and UCs to be considered in the development of U2Demo platform and pilots	1	Delivery of the definition of the use cases providing the first vision of the interactions, algorithms and information exchange needs between stakeholders (D1.4).	M12
4	Definition of a strategy to interact with Standardization and Harmonization bodies	6	A strategy for participating in standardization and harmonization bodies will be defined. This plan will be published in D6.2.	M12
5	Development of core function of U2Demo platform allowing the integration of P2P trading and Energy Sharing algorithms	3	The core function of U2Demo platform allows the integration of the algorithms that will be developed in WP4. The functions will be available in GitHub repository.	M15
6	P2P Matching and energy sharing methodologies validation	2	Provide P2P trading and energy sharing methodologies to be implemented in WP4. The final versions of the methodologies will be published in D2.3 and D2.4.	M16
7	A first version of the P2P Matching and energy sharing algorithms	4	P2P trading and energy sharing algorithms will be available to be tested in the pilots and in a GitHub repository (or similar)	M20
8	Tests and validation of the U2Demo platform	3	Before being tested in the pilots U2Demo platform should be tested in realistic applications. Deliverable D3.3.	M24
9	Procedures to promote the test of algorithms and tools in external active consumers and ECs	5	Definition of the procedures allowing the test of tools and replication of the pilots. This can be validated in the procedure to be presented in dedicated webinars and replication call.	M24
10	Commissioning of the U2Demo platform and algorithms to be tested in the pilots	5	Specification of pilots, implementation, and simulation results will be described in deliverables D5.1 and D5.2.	M27

11	Conclusion of the validation phase of the pilots	5	Validation of UCs and KPIs tested in pilots. This MS allows the definition of a roadmap and guidelines for the proposed solutions (D5.4).	M39
12	Guidelines, roadmap, and policy recommendations related with P2P trading and energy markets	6	Main recommendation, guidelines and roadmap for the exploitation of P2P trading and energy sharing will be available in D6.3 and D6.4.	M42

Table 4 provides a list of the U2Demo project deliverables and respective leaders, type of document, dissemination level and due date. The U2Demo consortium will produce a total of 30 deliverables. In alignment with the project's open science commitment, these reports will be publicly available (dissemination level, PU), except one (D5.2 – Pilots' installation commissioning) which contains sensitive information regarding the deployment activities performed in the different pilots (dissemination level, SEN). Thus, deliverable D5.2 will be restricted to the U2Demo Consortium members and the European Commission. Twenty-six (26) deliverables will be presented in report (R) format and four (4) in OTHER formats, including a repository for use cases (Deliverable D1.4), an open-source platform based on blockchain technologies (Deliverable D3.3), a set of open algorithms for forecasting, decision support and data analytics (Deliverable D4.2) and a set of open algorithms for P2P matching and energy sharing (Deliverable D4.3). Important to note that even the "OTHER" type deliverables should be accompanied by a short report describing the tool to be submitted in the EC portal.

Table 4 – U2Demo list of deliverables

Deliverable	Deliverable Name	WP	Lead	Type	Dissemination level	Due Date
D1.1	Active consumers and ECs initiatives mapping	1	EUI	R	PU	M12
D1.2	Active consumers' needs and social parameters	1	TNO	R	PU	M12
D1.3	Open-source tools assessment	1	EIFER	R	PU	M09
D1.4	Use case repository	1	INESC ID	OTHER	PU	M12
D2.1	P2P Market and Energy Sharing Designs	2	TNO	R	PU	M08
D2.2	Decision support methods for active consumers and ECs	2	R&D NESTER	R	PU	M14
D2.3	P2P trading matching and Energy Sharing models	2	KU Leuven	R	PU	M16
D2.4	P2P trading matching and Energy Sharing models	2	VITO	R	PU	M18
D3.1	U2Demo architecture definition and guidelines	3	Energy Web AG	R	PU	M08
D3.2	U2Demo standardization, cybersecurity and data privacy	3	R&D NESTER	R	PU	M10
D3.3	U2Demo platform based on blockchain technologies	3	EXAION	OTHER	PU	M36

D4.1	P2P and Energy Sharing Design considering platform requirements	4	ARTELYS	R	PU	M10
D4.2	Decision support tools for active consumers and ECs	4	EIFER	OTHER	PU	M20
D4.3	P2P matching and energy sharing algorithms	4	ARTELYS	OTHER	PU	M36
D5.1	Detailed specification of the pilots	5	EDP NEW	R	PU	M18
D5.2	Pilots' installation & commissioning	5	KLIMAAN	R	SEN	M27
D5.3	Test of tools in external active consumers / ECs	5	INESC ID	R	PU	M36
D5.4	Lessons learned in the Pilots	5	EDP NEW	R	PU	M38
D6.1	Tools assessment report	6	R&D Nester	R	PU	M39
D6.2	Strategy for standardization and harmonization	6	EIFER	R	PU	M12
D6.3	Roadmap and guidelines to promote the user engagement in P2P energy sharing and ECs	6	TNO	R	PU	M41
D6.4	Policy recommendations and strategic positioning framework	6	EUI	R	PU	M42
D7.1	Dissemination and Communication Plan	7	RESCOOP VLAAND	R	PU	M06
D7.2	Dissemination and Communication Plan - Updated	7	RESCOOP VLAAND	R	PU	M24
D7.3	Scalability, replicability and business models for ECs	7	EIFER	R	PU	M41
D7.4	Open-Source Tools maintenance and evolution strategies	7	Energy Web AG	R	PU	M42
D8.1	Project Management Plan	7	INESC ID	R	PU	M02
D8.2	Project Management Plan - Updated	7	INESC ID	R	PU	M18
D8.3	Data Management Plan	7	INESC ID	R	PU	M06
D8.4	Data Management Plan- Updated	7	INESC ID	R	PU	M24

3 Organization, Management Structure, and Governance

U2Demo’s objectives and the active participation of all partners, including stakeholders, require an effective management framework supported by a governance structure that will monitor the decision-making processes, the management of day-to-day activities and communication with the European Commission, foster collaboration across the various tasks and activities and monitor the development of the work plan. The U2Demo project is guided by a top-down strategy, while issues are solved using a bottom-up approach.

The U2Demo management structure and governance operates at 4 levels (Figure 3):

- the Project Coordinator (administrative and financial coordination),
- the General Assembly (strategic and vision management),
- the Scientific Committee (scientific coordination)
- the Stakeholders’ Board (stakeholder coordination).

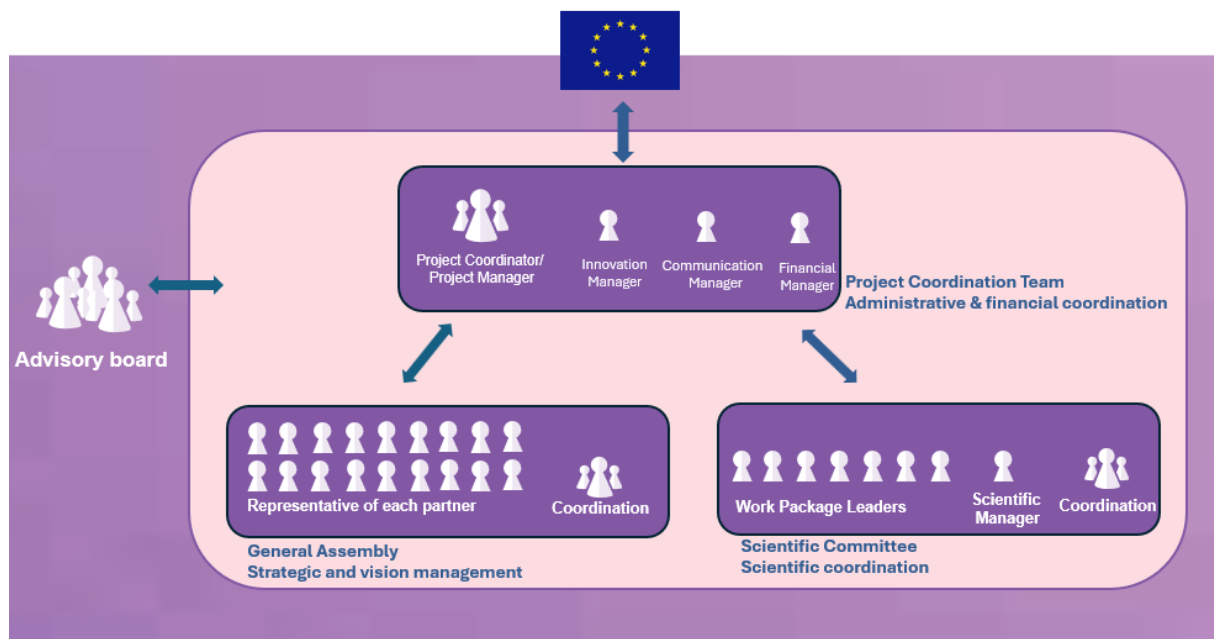


Figure 3 – U2Demo management structure and governance

3.1 Project Coordinator

The U2Demo project is coordinated by INESC ID, which has established a dedicated Project Coordination Team composed by the Project Coordinator, Project Manager, Financial manager, Communications Officer and Innovations Manager.

Attributions to the Project Coordinator/Project Coordination Team are described in section 6.4.2 of the U2Demo Consortium Agreement (CA) [1] and include, among others, those identified in Table 5.

Table 5 – U2Demo Coordination team role

U2Demo Coordination Team responsibilities
Monitorization of project's work assuring compliance with the consortium and grant agreements;
Communication facilitation between partners, keeping the contact lists of all members updated and available;
Collecting, reviewing to verify consistency and submitting reports, other deliverables and specific requested documents to the Granting Authority;
Transmitting documents and information connected with the Project to any other Parties concerned
Administering the financial contribution of the Granting Authority and fulfilling the financial tasks described in CA and GA;
Providing, upon request, the Parties with official copies or originals of documents that are in the sole possession of the Project Coordinator when such copies or originals are necessary for the Parties to present claims or other justified reasons
Arranging any necessary amendments to the Grant Agreement with the Granting Authority, after receiving explicit consent for the amendment by the General Assembly;
Preparing the meetings, proposing decisions and preparing the agenda of General Assembly meetings, chairing the meetings, preparing the minutes of the meetings and monitoring the implementation of decisions taken at meetings.
Signing a separate agreement with Deloitte Consulting GmbH, as an associated partner, that guarantees their commitment to the U2Demo project. This agreement will take place after the beginning of the Project but before any participation from Deloitte.

Table 6 identifies the members of the Coordination Team and their roles in the U2Demo project.

Table 6 – U2Demo Project Coordination Team

Role	Institution	Name	Contact	Function
Project Coordinator (PC)	INESC ID	Hugo Morais	hugo.morais@inesc-id.pt	U2Demo project primary responsible, intermediary between consortium and the Granting Authority. Responsible for overall coordination of the project execution, assisted in his role and responsibilities by the Project Manager.
Project Manager	INESC ID	Ana Rita Nunes (Main) João Marques (Support)	aritanunes@inesc-id.pt joao.marques@inesc-id.pt	Responsible for overseeing administrative and financial management of the project, assist the Project Coordinator by assuring that the project outputs have the highest standards and are finished on time. Communicates with the European Commission, consortium, advisory boards and stakeholders
Financial Manager	INESC	Ilda Ribeiro	ilda.ribeiro@inesc-id.pt	Manages all financial aspects of the project

Communication Officer	INESC ID/ Rescoop Vlaanders	Mariana Carmo / other to be defined	mariana.carmos@in esc-id.pt / other to be defined	Manages the planning and execution of dissemination and communication activities, oversees project branding, and promotes engagement with the target audience. The first 4 month of the project and the implementation of the Dissemination and Communication plan will be done by INESC ID, afterwards will be the responsibility of Rescoop Vlaanders with the support of INESC ID
Innovation Manager	INESC ID	Hugo Morais	hugo.morais@inesc- id.pt	Leads the innovation and exploitation strategy, ensuring alignment between research objectives, result exploitation, and user validation. The IM defines Innovation KPIs and consolidates partners' exploitation plans.

3.2 General Assembly

The General Assembly (GA), the main decision-making body of the consortium, is responsible for handling key strategic decisions that impact the implementation and success of the project. The GA is chaired by Project Coordination Team (Project Manager) and is composed of one beneficiary representative. Each beneficiary is allowed to have one vote. The beneficiary representative can appoint a substitute or a proxy in case of unavailability, and can also invite other beneficiary members, without voting rights. Every member of the GA has the authority to discuss, negotiate, and make decisions on all matters specified in the Consortium Agreement. Table 7 identifies the designated members for the GA, one per beneficiary, although the members may change during the course of the project.

Table 7 – U2Demo General Assembly representatives

Partner	Representant
INESC ID	Hugo Morais (Chairperson)
EDP NEW	Humberto Queiros
EXAION	Gilles Deleuze
EIFER	Samrat Bose
VITO	Anibal Sanjab
KU Leuven	Glenn Reynders
ARTELYS	Michael Gabay
ENGREEN	Roberta Alonzo
R&D Nester	Gonçalo Glória
TNO	Karina Veum

RESCOOP VLAANDEREN	Anton Gerits
KLIMAAN	Steven Laurijssen
DEN HAAG	Bart van Velthoven
EUI	Lucila de Almeida
iEPD	Ľubica Šimkovicová
eDSO	Ondrej Cerny
WATT-IS	Miguel Carvalho
Energy Web AG	Ioannis Vlachos

The GA procedures and attributions are defined in Section 6.3 of the U2Demo Consortium Agreement [1] and identified in Table 8.

Table 8 – U2Demo General Assembly

U2Demo General Assembly Procedures
GA meetings take place every 6 months, with eight (8) GAs planned in total. GA meetings are prepared in coordination with the Host partner, following the processes identified in Section 3.2 of this deliverable.
The GA can decide on financial changes to the consortium plan and on the distribution of EU contribution among the beneficiaries.
The GA can propose changes to Annex 1 and Annex 2 of the Grant Agreement to be agreed by the Granting Authority.
The GA can propose to modify or withdraw the Background in attachment 1
The GA can propose the entry of a new Party to the project or withdraw a Party from the project
The GA can propose to the granting Authority for a change of the Project Coordinator, for suspension of all or part of the project or for termination of the project and the consortium agreement
The GA can identify a breach by a Party of its obligations under the Consortium Agreement or Grant Agreement, declare a Party to be a defaulting Party, terminate the participation of a defaulting participation in the Consortium and to take steps to be taken for litigation purposes
Decisions can be made either during GA meetings or via email, requiring a majority of 51% for approval, with the option of a veto if any issue significantly affects a party.

3.3 Scientific Committee

The U2Demo Scientific Committee (SC) is chaired by the Project Coordination Team (Project Manager) and includes the Scientific Coordinator and the WP leaders, identified in Table 9.

Table 9 – U2Demo Scientific Committee members

Role	Institution	Representant
Project Coordinator	INESC ID	Hugo Morais
Project Manager	INESC ID	Ana Rita Nunes / João Marques
Scientific Coordinator	KU Leuven	Glenn Reynders / Ruben Smets
WP1 Leader	TNO	Karina Veum
WP2 Leader	VITO	Anibal Sanjab
WP3 Leader	EXAION	Gilles Deleuze

WP4 Leader	ARTELYS	Michael Gabay
WP5 Leader	EDP NEW	Humberto Queiroz
WP6 Leader	EIFER	Samrat Bose
WP7 Leader	RESCOOP VLAANDEREN (INESC ID)	Anton Gerits (Mariana Carmo)

The Scientific Committee meetings are held once a month to assess project’s technical aspects and strategic implementation. Specifically, the aims of the SC are indicated in Table 10.

Table 10 – U2Demo Scientific Committee

U2Demo Scientific Committee roles
Execute and implement decisions of the General Assembly
Monitor the implementation of the project and compliance with the Grant Agreement. If needed, they will propose modifications of the grant Agreement to the General Assembly
Monitor and ensure the quality of the technical/scientific progress
Identify and mitigate risks
Ensure information flow withing all tasks of each WP and between WPs
Monitoring milestones and deliverables
Support the Coordinator in preparing and attending meetings with the European Commission (e.g. Review meetings)

3.4 U24U Advisory Board Forum

The coordination has been discussing with all partners the possibility of establishing a unique Advisory Board forum called *U24U*, which will meet every 6 months and will be composed of key valued and recognized stakeholders in the field of energy communities, energy sharing, P2P trading, Blockchain, Distribution system operators, Transmission System operators, Distributed energy resources, and consumer engagement.

The *U24U* forum will promote open European discussions, maintain an innovative and inclusive mindset within the U2Demo project, and play a pivotal role in both the development of U2Demo solutions and the project's dissemination and outreach strategy. The main responsibilities are listed in Table 11.

The Coordination has requested the Scientific Committee members to validate the establishment of the Forum and to suggest experts to be selected as members of the Advisory Board. The experts will then be contacted officially by the Coordination team/Scientific Coordination, via email, to join the advisory board of the U2Demo project.

Table 11 – U2Demo Advisory Board Responsibilities

U2Demo Advisory Board
Guidance to the Scientific Committee on the project progress by identifying opportunities, and strategies to ensure the solutions can be replicated and exploited.
Guidance on validating results by assessing their innovation potential and feasibility.

Giving valued feedback to be integrated into the project’s deliverables and other dissemination activities.

Participate in the U2Demo GAs, supporting decision-making process, but have no voting right.

3.5 Other roles supporting the Coordination

Other important roles of the U2Demo project include Work Package Leader (Section 3.5.1), Task leader (Section 3.5.2), Legal officer (Section 3.5.3) and Data protection officer (Section 3.5.4).

3.5.1 Work Package Leader

Each U2Demo WP is led by one beneficiary that assigns a person to act as WP leader. The U2Demo WP leaders have already been identified in Table 7. Table 12 indicates the activities and responsibilities of the WP leaders.

Table 12 – WP Leader roles

U2Demo WP Leader roles
Coordinate tasks and activities within the WP, assuring the WP aims are achieved and successfully completed
Ensure information flow between tasks of the same WP and between WPs
Monitor the tasks progress and ensure the quality of the results
Report to the SC the progress of the tasks and inform on any technical and temporal deviations or risks related to the project activities
Provide inputs for the reports to the European Commission
Organize periodic WP meetings with the task leaders and participants of all tasks of the work package. This involves scheduling, planning and moderating the meeting. At the end of the meeting, it is their responsibility to keep the Minutes of Meetings (MoMs) up to date and share any other relevant materials
Ensure that the respective WP mailing list (and other platforms defined, e.g. Discord) are used for issues related to task activities and members are up to date.
Participate in Periodic review meetings with the Coordination Team and Project Officer.

3.5.2 Task Leader

Each U2Demo task is led by one beneficiary that should delegate one person to act as task leader. Table 13 outlines the roles and responsibilities of the task leaders.

Table 13 – U2Demo Task Leader role

U2Demo Task Leader roles
Attending work package meetings where they should report the progress of the work to the WP leader;
Identify task risks and deviations and report them to the WP leader and Coordination

Manage, develop and conclude the task activities on time and with the objectives proposed
Plan and write the respective deliverables, coordinating efforts with other task participants. Inform WP leaders on the status of the deliverables
Send deliverables for internal revision on time and accordingly with the deliverable's guidelines set in Section 5.2 of this deliverable.

3.5.3 Legal Officer

U2Demo project counts with the help of the Coordination Legal officer (Eva Reis, INESC) and other beneficiaries' legal departments for questions involving legal requirements, regulations and documents (e.g. Consortium and Grant Agreements).

3.5.4 Data protection Officer

U2Demo project counts with the help of the Coordination Data protection officer (Weronika Figueiredo, INESC) for questions involving Intellectual Property Rights, open-source licences and data protection regulation.

4 Internal management procedures

This section outlines the tools used for management and coordination within the project to promote collaboration among the U2Demo partners. It covers the main communication channels, document management processes and information about U2Demo meetings and workflow processes for each type of meeting.

4.1 Project Repository

The U2Demo project repository is hosted by Microsoft Teams/SharePoint. The project repository contains all the technical information about the project, and it is private and confidential – only members of the consortium have access to the repository. The repository contains all project-related documents, including deliverables, scientific articles and all material needed for the elaboration of those documents, posters, contact lists, datasets, project templates, guidelines, project dissemination materials and project visual identity, among others. An overview of the U2Demo repository structure is shown in Figure 4. The documents are organized by WP folders, which are then divided by tasks, ensuring a structured and easily navigable environment for accessing documentation (Figure 4). The Data Manager (Coordination team/INESC ID) is responsible for assuring that partners are complying with the correct use of the repository.

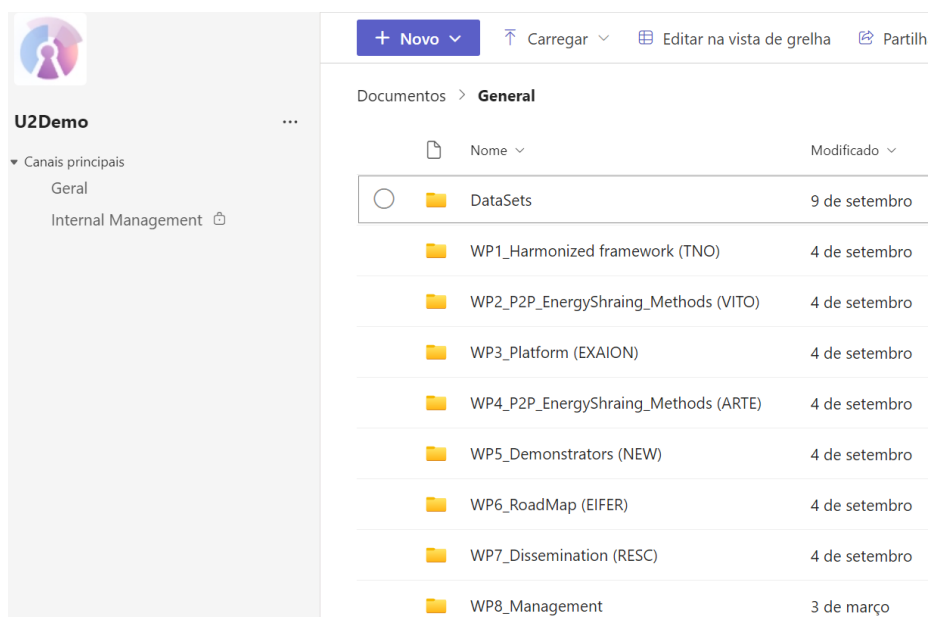


Figure 4 – U2Demo Repository

4.2 Internal Communication

This section outlines the various communication channels and protocols used to ensure effective collaboration among project partners. While emails (Section 4.2.1) and web calls

(Section 4.2.2) are the primary methods of communication within the U2Demo project, other methods may be utilized if needed, indicated in Section 4.2.3, such as, a) telephone calls, reserved for urgent, direct communication, with key outcomes shared via email; b) printed letters sent via registered mail for official documents requiring physical signatures, such as the Consortium Agreement to ensure security and confirmation and c) other platforms like Discord³.

4.2.1 Email Correspondence and Mailing lists

The primary means of daily communication between partners is regular email exchange. This method is the default mean for sharing information, engaging in discussions, and distributing documents throughout the partnership network. The use of the U2Demo mailing lists is highly recommended. Table 14 describes the mailing lists of the project.

Table 14 – Scope of U2Demo Email Distribution Lists

Mailing List	Email Address	Subscribers	Scope
Dissemination	u2demo.dissemination@inesc-id.pt	Coordination and Communication Officer	To promote and disseminate project-related information both internally and externally.
Coordination	u2demo.coordination@inesc-id.pt	Project coordinator and manager	For operational discussions and project management among team members.
External Expert Advisory Board	u2demo.advisory.board@inesc-id.pt	External Expert Advisory board members	To provide strategic advice and insights from the project's guiding experts.
Consortium	u2demo.consortium@inesc-id.pt	All contacts involved in the project	To ensure comprehensive communication across the entire team.
Scientific Committee	u2demo.scientific.committee@inesc-id.pt	Scientific experts selected for the Scientific Committee	For discussions and exchanges focused on technical and research-oriented guidance.
WP1	u2demo.wp1@inesc-id.pt	WP1 Leader and participants	For discussions and exchanges regarding WP1 task activities
WP2	u2demo.wp2@inesc-id.pt	WP2 Leader and participants	For discussions and exchanges regarding WP2 task activities
WP3	u2demo.wp3@inesc-id.pt	WP3 Leader and participants	For discussions and exchanges regarding WP3 task activities

³ <https://discord.com/>

WP4	u2demo.wp4@inesc-id.pt	WP4 Leader and participants	For discussions and exchanges regarding WP4 task activities
WP5	u2demo.wp5@inesc-id.pt	WP5 Leader and participants	For discussions and exchanges regarding WP5 task activities
WP6	u2demo.wp6@inesc-id.pt	WP6 Leader and participants	For discussions and exchanges regarding WP6 task activities
WP1/Task 1.1	u2demo.t1.1@inesc-id.pt	Task 1.1 Leader and participants	For discussions and exchanges regarding the activities of Task 1.1

These mailing lists are moderated and updated by the Coordination Team. The *U2Demo contact mailing list* Excel file is available in the U2Demo repository (WP8_Management folder) for partners to update their teams and allocate their members to the different WPs, to be included in the relevant mailing lists.

All partners should follow the guidelines mentioned in Table 15 for U2Demo project emails.

Table 15 – U2Demo email guidelines

U2Demo email guidelines
The project identifier should be placed in the subject line as "[U2Demo] - Subject."
If an email requires immediate action, "[ACTION REQUIRED]" should be placed before the project identifier.
To share files, place them in the project repository and include a direct link in the email, instead of attaching the documents to the email.
Use the appropriate mailing list as outlined in Table 14.
The coordination mailing list should be added in cc, when technical discussions and exchanges between partners take place.

4.2.2 Video-Conference Calls

In addition to emails, regular video calls are held to monitor progress, discuss technical issues, and manage the project with partners across the consortium in the different countries. These meetings are ranging from team-wide to one-on-one, and are a key part of daily communication and project discussion. The U2Demo uses Microsoft Teams for video conference calls. Examples of the regular video-calls are the Scientific Committee meetings, the WPs meetings, internal workshops, among others. Video conference calls can also be used for webinars open to external stakeholders.

4.2.3 Other means of internal communication

The other means of communication are:

- Face-to-face meetings – Examples of face-to-face meeting are the Kick-of-Meeting, the General Assemblies, Review meetings with the Project Officer, demonstration events, solution tests.
- Telephone – Direct telephone calls can be used for quick discussions, if the subject is urgent. Afterwards, the outcome of the telephone call should be distributed to the participants via email.
- Printed letters shall be used for official/legal correspondence, to send documents that usually require ink signature. This is the case of the Consortium Agreement signatures that were collected from all partners and sent by airmail to the partners. Official correspondence should be sent via registered email.
- A U2Demo Discord account has been created and several channels have been set up (one channel per WP, one channel for management, one channel for dissemination) (Figure 5). The consortium partners will be invited to join the account and channels, to facilitate discussions, updates and notifications among partners.

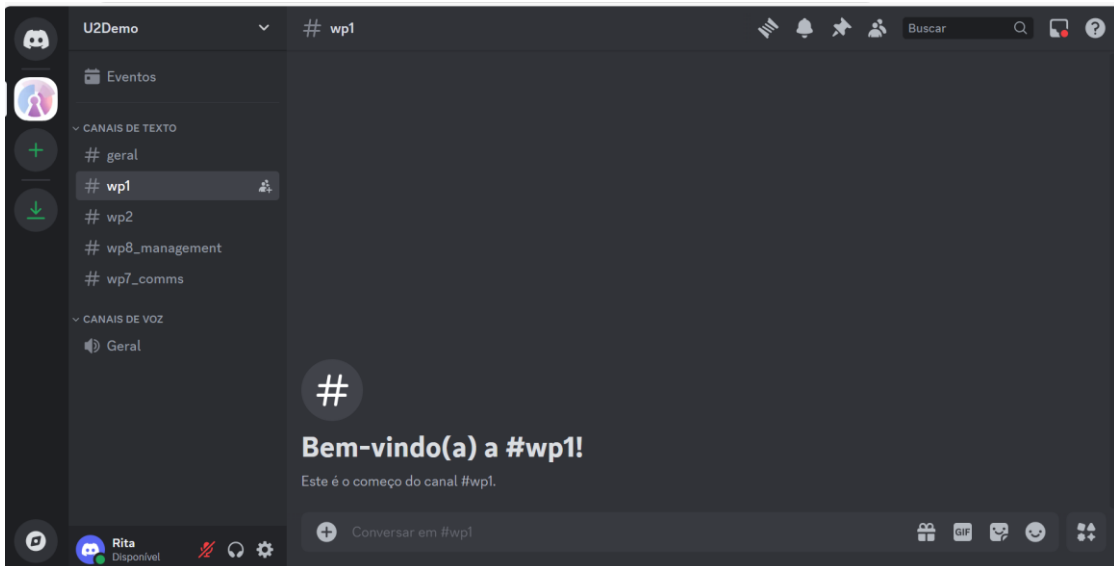


Figure 5 – U2Demo Discord platform

4.3 U2Demo Meetings

Several types of meetings will be organized under the U2Demo project. Table 16 summarizes the types of recurrent meetings and periodicity, and further procedures regarding these meetings will be identified in the sections below.

Table 16 – U2Demo meetings

U2Demo Meetings	Frequency	Participants
Kick-off Meeting and General Assembly meetings	Eight meetings (Face-to-face meeting): - M1 – Lisbon, Portugal (INESC ID, KoM) – 05-06/09/24 - M6 – France, Paris (EXAION) – 06-07/03/2025	GA members: - Coordination team - at least 1 beneficiary representant

	<ul style="list-style-type: none"> - M12 - Slovakia (iEPD) - M18 - Germany (EIFER) - M24 - The Netherlands (TNO) - M30 - Belgium (VITO) - M36 - Italy (EnGreen) - M42 - Lisboa/Évora (INESC / NEW) 	
Scientific Committee meetings	42 meetings (Video-conference calls) -Monthly meetings	SC members: - Coordination team - WP leaders -Scientific Coordinator
Periodic Review meetings	Three meetings held in Brussels: M18, M30 and M42	- Coordination team - WP leaders - Project Officer
Work Package meetings	From the beginning to the end of the WP duration - Monthly, bi-weekly or weekly meetings accordingly with the tasks developments	- WP Leader - Task Leaders - Task Participants

4.3.1 General Assembly Meetings

General Assembly meetings will occur every 6 months in different locations (Table 17). These meetings are co-organized by the host partner together with the Coordination team. The host partner has the responsibility to cover all expenses related to the meeting, including venue, catering and GA dinner. The venue should provide equipment (projectors, power outlets, tables, microphones) and ensure that accommodate all participants, access to internet to allow for a hybrid event and has a location with easy access by transportation. Table 18 identifies guidelines for the organization and preparation of the GA meetings. The timelines take in consideration that partners have internal travel procedures, and administrative processes often take time, so GAs must be prepared well in advance. Importantly, the GA meeting, should be thoroughly documented with photographs and a hand-signed attendance list.

The locations and proximate dates of the U2Demo GA meetings are indicated in Table 17.

Table 17 – U2Demo General Assembly Meetings

U2Demo GA	Local	Host partner
September, 05-06 th , 2024 (KoM)	Lisbon, Portugal	INESC ID
March, 6-7 th , 2025	France, Paris	EXAION
M12/13 (TBD)	Slovakia	iEPD
M18/19 (TBD)	Germany	EIFER
M24/25 (TBD)	The Netherlands	TNO
M30/31 (TBD)	Belgium	VITO
M36/37 (TBD)	Italy	ENGREEN
M42 (TBD)	Portugal	INESC ID/ NEW

Table 18 – U2Demo GA meetings guidelines

U2Demo GA meeting guidelines	Timeline
Dates and a draft agenda should be discussed between the Coordination team and the host partner.	About 3.5 months prior meeting
The GA Agenda and dates should be discussed and approved in the SC meeting.	3.5 months prior meeting
Coordination team, together with host partner, prepares the registration form. Once dates and agenda are approved, GA agenda and dates are shared with the consortium and registration is open. The notice of meeting and agenda should be done by writing and should never be later than 21 calendar days (or 7 calendar days in case of extraordinary meetings) preceding the meeting.	3 months prior meeting
Once the number of registries is set, or in parallel, the host partner books the venue, catering and event network dinner. Attendance list is shared among the consortium.	2 months prior meeting
Reminder emails with practical information regarding the GA meeting, including link for remote access, are shared among the consortium	1 month prior meeting
The Coordination will organize the participant presentations and finalize documents (e.g. presentation templates, attendance list to sign on site)	15 days prior meeting
Only one vote is allowed per beneficiary and decisions shall be taken by a majority of two-thirds (2/3) of the votes, if at least two-thirds of the members are present in a meeting. A decision can be taken by email following that the Coordination circulates an email to all members of the GA with a deadline for responses of at least 10 calendar days and the decision is agreed by 2/3 of the partners.	During the meeting
Minutes of meeting (MoM) should be prepared by the Coordination and sent to the consortium.	Within 10 days after meeting
The consortium should validate the MoM. If no objection is raised by the specific date, MoM is considered validated.	Within 15 days of receiving the MoMs

Figure 6 illustrates the timeline and responsibilities during the GA preparation.

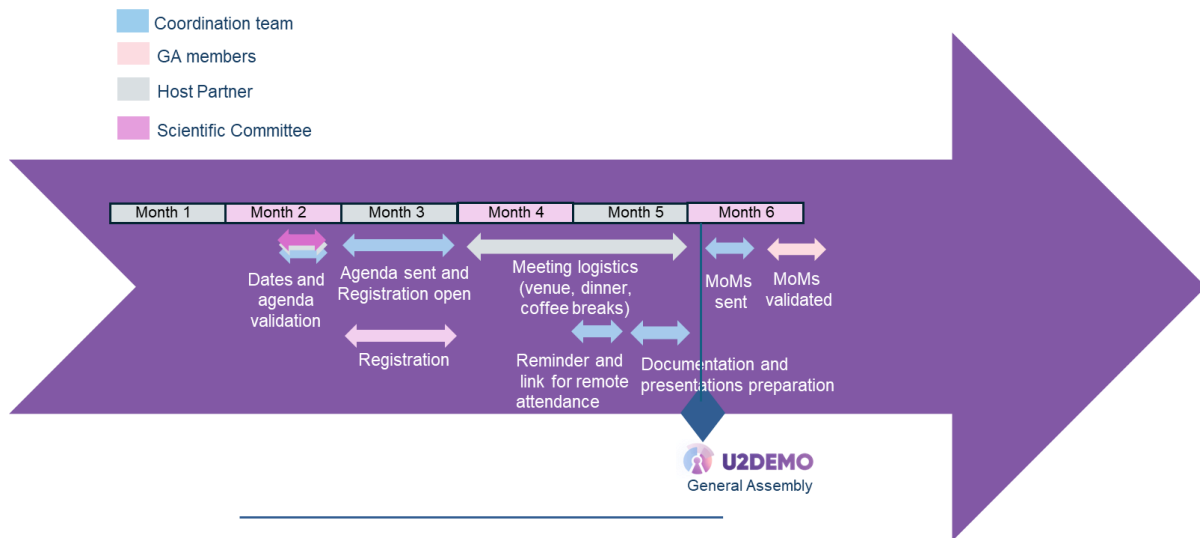


Figure 6 – U2Demo General Assembly meeting timeline

4.3.2 Scientific Committee Meetings

Table 19 outlines the main guidelines for the organization of Scientific Committee meetings.

Table 19 – U2Demo Scientific Committee Meetings guidelines

U2Demo SC meeting guidelines	Timeline
The Project Manager (PM) is responsible for scheduling the meeting and, together with the Project Coordinator (PC), for preparing the agenda.	Until 2 weeks before the SC meeting
PM sends a reminder to the SC members (via dedicated mailing list) with remote link + agenda for the next SC meeting.	1 week before the SC
The PM and PC moderate the SC meeting	During SC meeting
WP leaders update on WP task progress, discussing possible risks and delays. The Scientific coordinator overviews the scientific developments of the project. Management issues are also addressed.	During SC meeting
If there is no consensus on the date of the new SC meeting during the meeting, PM will organize a doodle with new dates right after the meeting and a new date should be set	Until 2 weeks after the SC meeting
The PM sends the MoMs to the SC members.	Up to 1 week after meeting
SC members validate the agenda	Up to 1 weeks after receiving the MoMs

Figure 7 represents the timeline for the organization of the U2Demo SC meetings.

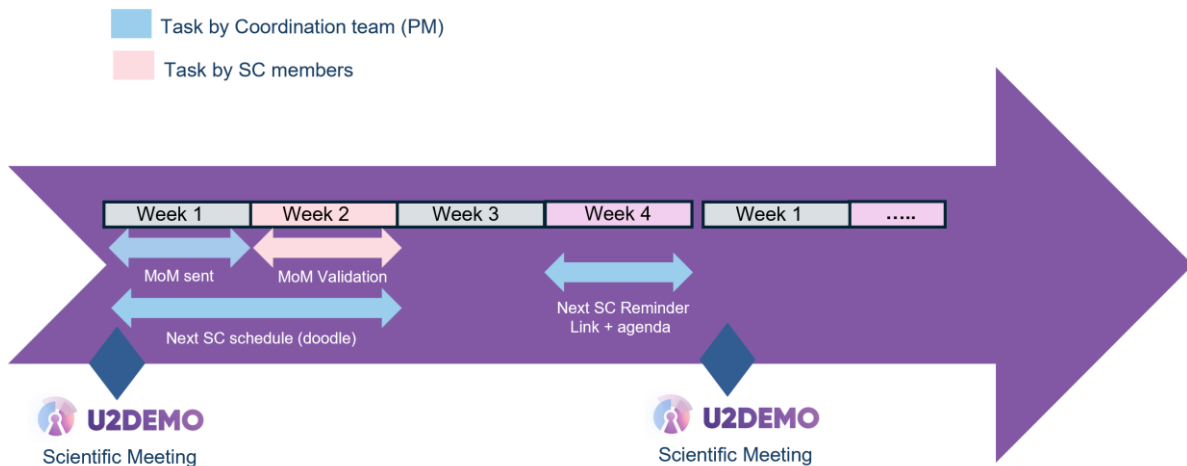


Figure 7 – U2Demo Scientific Committee meeting timeflow

4.3.3 Periodic Review Meetings

Technical review meetings take place within 60 days after the end of the reporting periods (M18, M30 and M42) and prior to the submission of the report. These meetings represent an opportunity for the Project Officer (PO) clarify questions related to the reporting period and to guide the coordination and WP leaders in the report submission process. The periodic review meeting includes the coordination team, the leaders of the WPs active during the reporting period (and Scientific Coordinator) and the PO. The review meetings are usually held in Brussels, but date and place are scheduled according to the PO’s availability. Meetings should be planned for two days: one pre-meeting for preparation, with coordination team and WP leaders; and a second day dedicated to the review meeting with PO. During the meeting, project coordination and WP leaders present an overview of *i)* activities and main achievements, innovations, status of deliverables and milestones, *ii)* dissemination activities and results and *iii)* overview of the effort, use of resources, costs and associated deviations. The agenda should also include an outlook for the activities of the next project period, followed by discussions with the PO.

Table 20 – U2Demo Periodic Review meeting

U2Demo Periodic Review meeting guidelines	Timeline
The Project Manager schedules the meeting with the PO and WP Leaders and prepares the agenda	2 months prior meeting
PO validates the agenda	2 months prior meeting
Project Manager shares the final agenda with participant members	2 months prior meeting
Project Manager prepare presentation templates and organize presentations with participants	1 month prior meeting
Project Manager sends the draft periodic report to the PO	1 week prior meeting
Pre-meeting with Coordination and WP leaders	1 day prior meeting

Review meeting with Coordination, WP leaders and PO	Review meeting
Project Manager sends the MoMs	Within 1 week after meeting
Participants validate the MoMs	Within 1 week after receiving the MoM
PM incorporates PO suggestions and comments in the report	Within 2 weeks after meeting

Figure 8 represents the timeline for the U2Demo Periodic Review meetings.

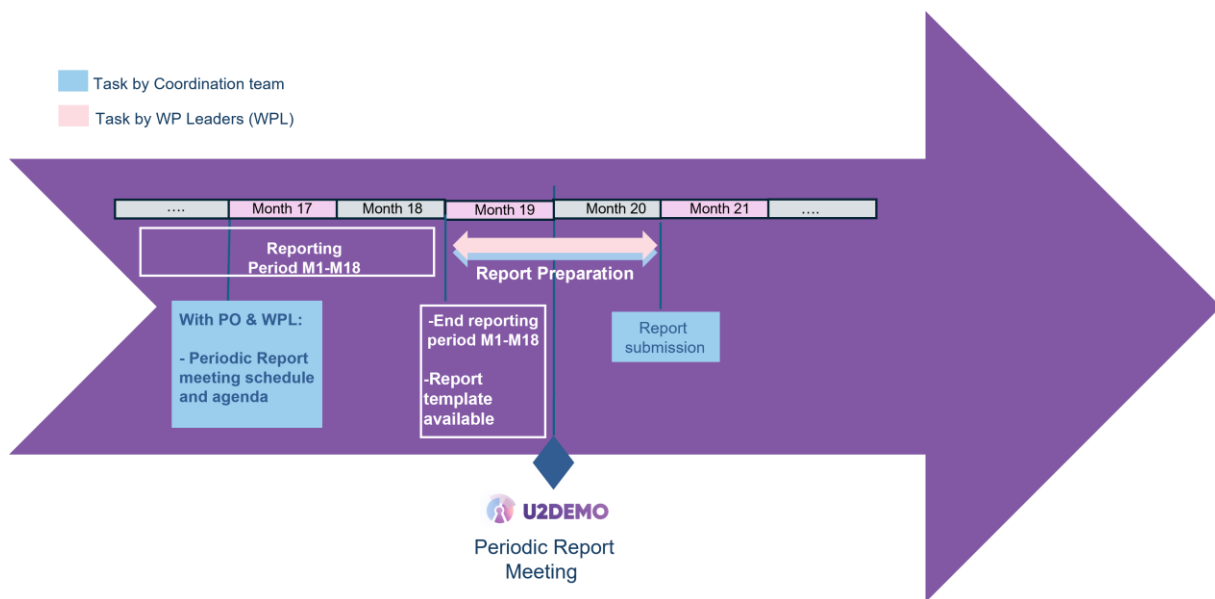


Figure 8 – Periodic Review meeting guidelines

4.3.4 Work Package Meetings

Table 21 outlines the main guidelines for the organization of Work Package meetings. Of note, WP meetings may vary in frequency, ranging from monthly to weekly or bi-weekly, depending on the workload and the number of active tasks.

Table 21 – U2Demo WP meetings guidelines

U2Demo WP meeting guidelines	Timeline
WP Leader circulates a doodle poll among the WP participants (via dedicated mailing list) with suggested dates, and schedules the meeting based on the most popular date	Until 2 weeks prior meeting
WP Leader prepares and shares the agenda with remote link for the meeting	Until 1 week prior the meeting
WP Leader discusses with WP participants about tasks progress, risk assessment and next action points	During the meeting

The MoM is prepared and shared among the WP participants. MoM is also placed under a WP Monthly meeting dedicated folder, under the respective WP folder	Up to 1 week after meetings
WP participants validate the MoMs	Up to 1 week after receiving the MoMs
WP leader informs the Coordination Team if participants need to be added to the mailing list, if any risks/ critical delays have been identified	When applied

Figure 9 represents the timeline for the organization of the U2Demo WP monthly meetings.

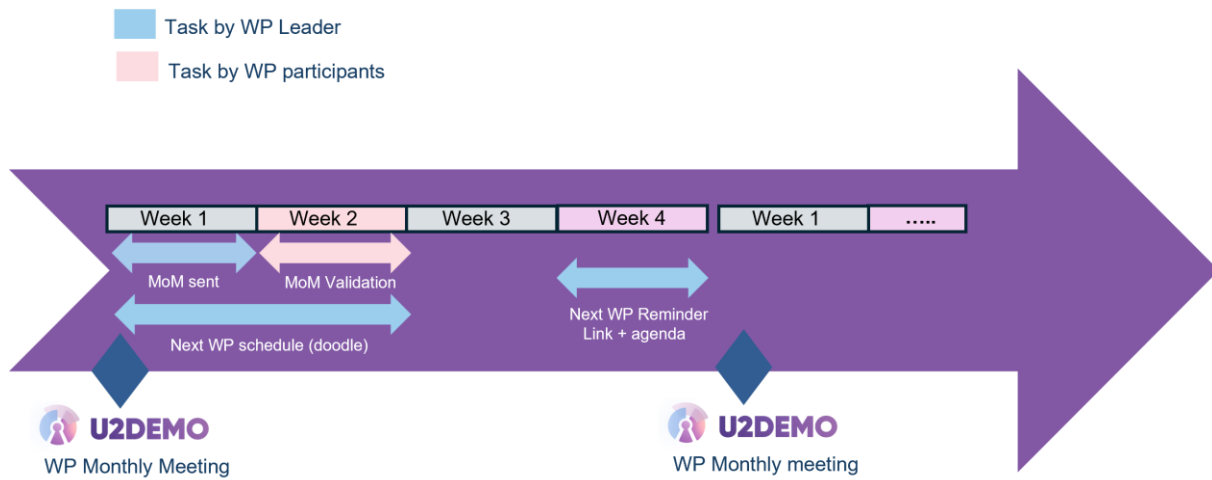


Figure 9 – U2Demo WP Monthly Meeting

5 Quality assurance procedures

The U2Demo project will follow several procedures to monitor the progress and quality of the project work. This section covers the U2Demo reporting procedures (Section 5.1), deliverable development, revision and submission guidelines (Section 5.2) and risk monitoring and mitigation (Section 5.3).

5.1 U2Demo Reporting

Throughout the project, three types of reports are expected: Internal Management Reports (IMRs), Periodic reports to the EC, and bi-monthly reports to the PO. The report frequency and contributors are indicated in Table 22. IMRs must be completed by each beneficiary every 6 months, so that U2Demo Coordination can monitor technical and financial progress and reduce project risks (Section 5.1.2). Also, the U2Demo coordination and beneficiaries will report financial and technical progress to the EU at three defined periods: M18, M30 and M42 (Section 5.1.2). Finally, the Coordination team will also report a short summary of activities to the Project Officer, every two months (bi-monthly reports, Section 5.1.3).

Table 22 – Frequency of U2Demo reports

U2Demo Reports	Frequency	Contributors
Internal Management Report (IMR)	Reports covering the periods: - M1 – M6 - M7 – M12 - M13 – M18 - M19 – M24 - M25 – M30 - M31 – M36 - M37 – M42	- Coordination team - WP Leaders - Task Leaders
Periodic Review Reports	Three reports covering the periods: - M01 – M18 - M19 – M30 - M31 – M42	- Coordination team - WP leaders - Task Leaders
Bi-monthly Reports	Every two months (24 in total)	- Coordination team

The U2Demo reporting calendar is indicated in Table 23 and respective proceedings in sub-sections below.

Table 23 – U2Demo reporting calendar

U2Demo reports	Period covered	Templates available	Deadline to send to Coordination team	Deadline to send to EU/PO
Bi-monthly report 1	Sep 2024 - Oct 2024	n/a	n/a	08/11/2024
Bi-monthly report 2	Nov 2024 – Dec 2024	n/a	n/a	08/01/2025
Bi-monthly report 3	Jan 2024 – Feb 2024	n/a	n/a	08/03/2025

IMR 1 (M1 – M6)	Sept 2024 – Feb 2025	M04-M05	15/03/2025	n/a
Bi-monthly report 4	Mar 2025– April 2025	n/a	n/a	08/05/2025
Bi-monthly report 5	May 2025 – Jun 2025	n/a	n/a	08/07/2025
Bi-monthly report 6	Jul 2025 – Aug 2025	n/a	n/a	08/09/2025
IMR 2 (M7 – M12)	Mar 2025 – Aug 2025	M10-M11	15/09/2025	n/a
Bi-monthly report 7	Sep 2025 – Oct 2025	n/a	n/a	08/11/2025
Bi-monthly report 8	Nov 2025 – Dec 2025	n/a	n/a	08/01/2026
Bi-monthly report 9	Jan 2026 – Feb 2026	n/a	n/a	08/03/2026
Periodic Report 1 (P1 M1 - M18)	Sep 2024 – Feb 2026	M17-M18	15/03/2026	30/04/2026
Bi-monthly report 10	Mar 2026 – April 2026	n/a	n/a	08/05/2026
Bi-monthly report 11	May 2026 – Jun 2026	n/a	n/a	08/07/2026
Bi-monthly report 12	Jul 2026 – Aug 2026	n/a	n/a	08/09/2026
IMR 3 (M19 – M24)	Mar 2026 – Aug 2026	M22-M23	15/09/2026	n/a
Bi-monthly report 13	Sep 2027 – Oct 2027	n/a	n/a	08/11/2026
Bi-monthly report 14	Nov 2027 – Dec 2027	n/a	n/a	08/01/2027
Bi-monthly report 15	Jan 2027 – Feb 2027	n/a	n/a	08/03/2027
Period Report 2 (M19-M30)	Mar 2026 – Feb 2027	M29-M30	15/03/2027	30/04/2027
Bi-monthly report 16	Mar 2027 – April 2027	n/a	n/a	08/05/2027
Bi-monthly report 17	May 2027 – Jun 2027	n/a	n/a	08/07/2027
Bi-monthly report 18	Jul 2027 – Aug 2027	n/a	n/a	08/09/2027
IMR 4 (M31- M36)	Mar 2027 – Aug 2027	M34-M35	15/09/2027	n/a
Bi-monthly report 19	Sep 2027 – Oct 2027	n/a	n/a	08/11/2027
Bi-monthly report 20	Nov 2027 – Dec 2027	n/a	n/a	08/01/2028
Bi-monthly report 21	Jan 2028 – Feb 2028	n/a	n/a	08/03/2028
Periodic Report 3 (M31-M42)	Mar 2027 – Feb 2028	M41-M42	15/03/2028	30/04/2028

5.1.1 Internal Management Reports (IMR)

As stated in Section 6.10.2 of the U2Demo Consortium Agreement [1], the U2Demo Coordination will monitor the effective and efficient implementation of the Project, by collecting information every 6 (six) months about the work performed during the specified reporting period (IMRs). The IMRs will be prepared by all project beneficiaries and submitted, via email, to the U2Demo coordination in due time. The U2Demo IMRs include two reports:

- Management and technical report (delivered as an MS Word document)
- Financial report (delivered as an MS Excel file).

The management and technical report cover the work carried out during the respective reporting period, and any deviations to the work plan and risks identified. The report includes:

- explanation of the work carried out by the beneficiaries and overview of the progress. Each partner will describe the work carried out in all tasks they participated.
- Project team description, by indicating the members of the organization for which the partners are reporting effort during the reporting period;
- Identification of deviations regarding the use of resources, between planned versus actual use.
- Identification of deviations regarding the planned work, such as delays in tasks and deliverables and reason for those deviations.
- Identification of risks based on the U2Demo risk registration (Section 5.3) or identification of unforeseen risks.

The financial report includes details on the actual effort spent by all beneficiaries:

- All beneficiaries are requested to declare the person-months by task and the personnel costs per each WP.
- Beneficiaries will also report travel, other goods and equipment, if these costs apply.
- Regarding equipment, the partners agreed, at the beginning of the project, to follow the depreciation rule. Thus, partners must declare in the report the depreciated amount related to the equipment use during the reporting period.

The U2Demo Coordination will distribute the report templates to partners, compile all inputs, analyse the information and present the analyses during the General Assembly meetings. Table 24 identifies the U2Demo IMR workflow.

Table 24 – U2Demo IMR guidelines

U2Demo IMR meeting guidelines	Timeline
Coordination team prepares and shares the IMR template	About 3 weeks prior to the end of reporting period
Coordination sets a deadline to receive the IMRs from partners	2 weeks after the end of the reporting period
Coordination analyses all reports	within 2 weeks after receiving the reports.

Coordination shares the results and take mitigation actions if needed	Next SC meeting or GA meeting
-----------------------------------------------------------------------	-------------------------------

Figure 10 presents the timeline to deliver the report.

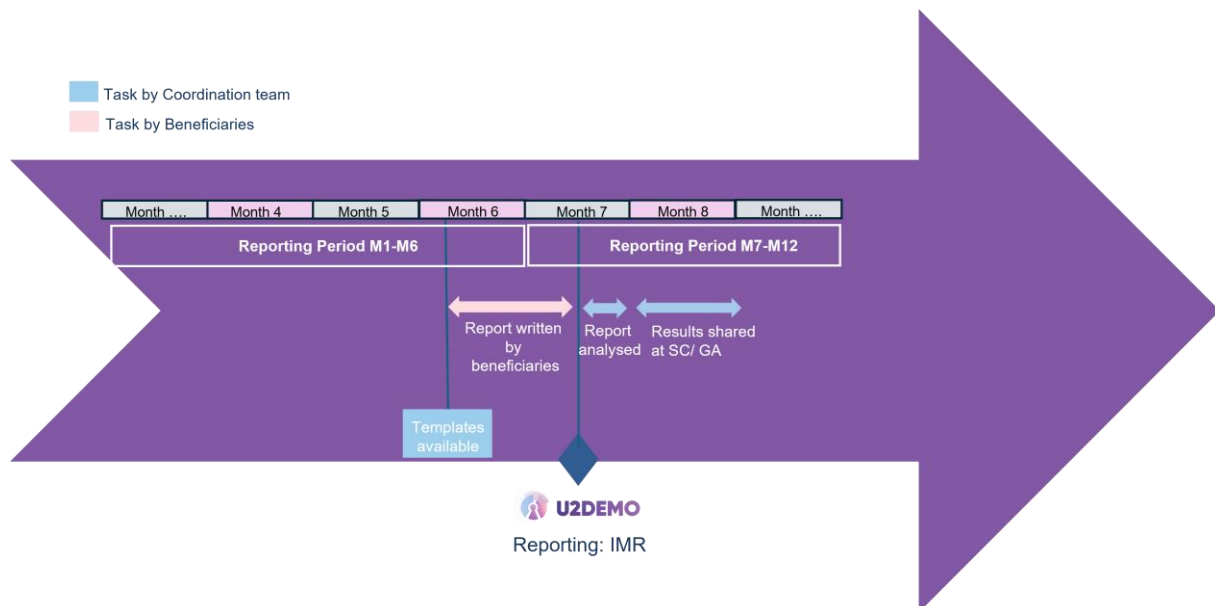


Figure 10 – Timeline for preparation of the U2Demo Internal Management Report

5.1.2 Periodic Reports to EC

The U2Demo Periodic reports are prepared at the end of three reporting periods:

- Period 1 (P1), covering M1 to M18 (01-09-2024 to 28-02-2026),
- P2, covering M19 to M30 (01-03-2026 to 28-02-2027),
- The final period, covering M31 to M42 (01-03-2027 to 28-02-2028).

According to the EC guidelines [2], the periodic reports must be submitted to the EC within 60 days after the end of the reporting period by the Coordination, through the *Syigma* portal. The report consists of:

- *Web-based questionnaire at Syigma platform.*
The coordination must update the Deliverables, Milestones, Critical risks and mitigation measures, publications, results, dissemination activities, standards, Intellectual property rights, impact and datasets. Beneficiaries are asked to update their research teams involved in the project during the reporting period.
- *Technical report which template is provided by the EC.*
The technical report is written by the coordination, with contributions from partners, in a word document shared in dedicated folder of the repository. It includes:
 - o Explanation of the work carried out and overview of the progress – this section includes the objectives of the project, timeline and status on deliverables, milestones, risk management & monitoring, and explanation of the work carried

out per WP, with descriptions of each active tasks, impact and updates of the plan for exploitation and dissemination of results.

- Follow-up of recommendations and comments from previous reviews (if applicable).
- Open Science. This section includes the description of the practices that the project participants have been following regarding open science.
- Deviations from Annex 1 and Annex 2 – This section contains the deviations in each WPs and the use of resources. In the use of resources section, beneficiaries with deviations higher than +/- 25% from the linear consumption for both personnel costs and direct costs must present and indicate a justification on the effort, cost per beneficiary and personnel cost rate.

- *Financial report*

The financial report is prepared directly in the Sygma portal by each beneficiary and after validation by the Coordination team, it is electronically signed and submitted by each beneficiary Project Signatory Person. Thus, to ensure all deadlines are met, beneficiaries must appoint their Project Signatory person in advance. The financial report consists of:

- An individual financial statement from all beneficiaries, presenting an effort by WP and Use of Resources for each budget category during the reporting period.
- If costs declared under “other direct costs” are higher than 15% of the personnel costs then major direct cost items must be listed and explained, starting from the highest value cost item, apart from those that add up to less than 15% of your personnel cost.
- Once the information is introduced, the coordination reviews the financial data submitted by all beneficiaries and finalize the submission of the periodic report.

After the report is submitted, the European Commission can either approve it and start preparing the payment or request changes or clarifications. Once it has been accepted, the EC will transfer the payment to the Coordination within 90 days of receiving the report and will issue a letter confirming the payment. Upon receiving the letter, the coordination has 30 days to submit observations, if applicable. Figure 11 outlines the preparation of the periodic reports.

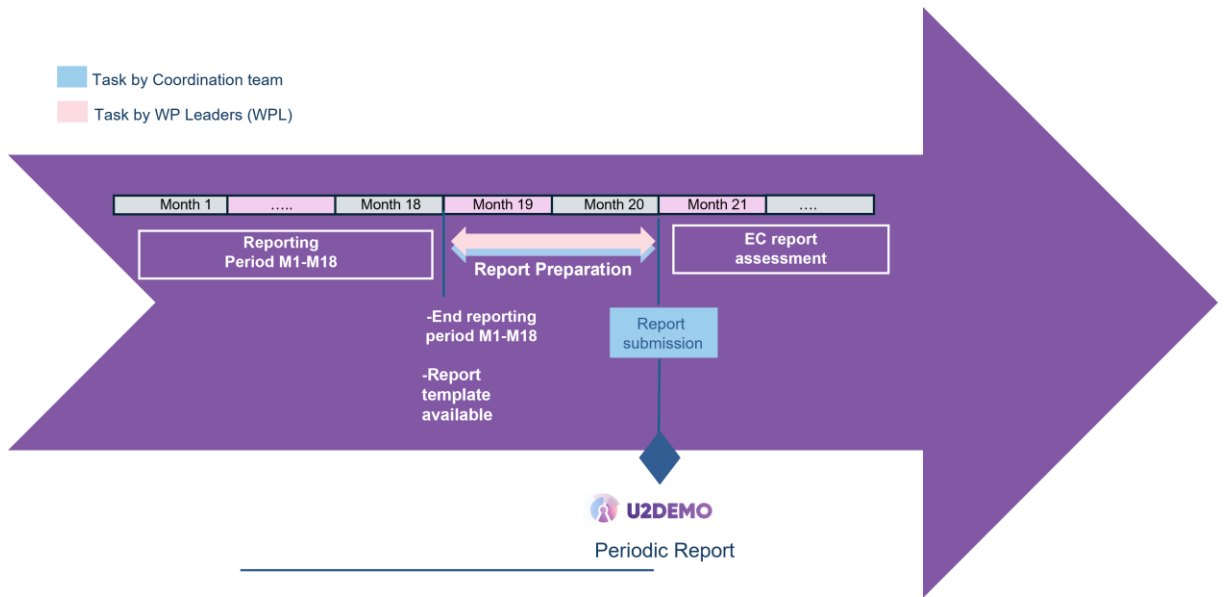


Figure 11 – U2Demo Periodic Report preparation

5.1.3 Bi-monthly reports

The Coordination team will provide the PO with regular updates on the work and execution status of the project. Every two months, the Coordination will submit a logbook style report, including:

- All relevant meetings held during the reporting period (e.g. Scientific Committee meetings, WP meetings, task kick off meeting);
- Dissemination actions that took place during the reporting period;
- Brief updates on the status of each active task.

These bi-monthly reports will be shared with the Project Officer during the first week of the following month (Figure 12).

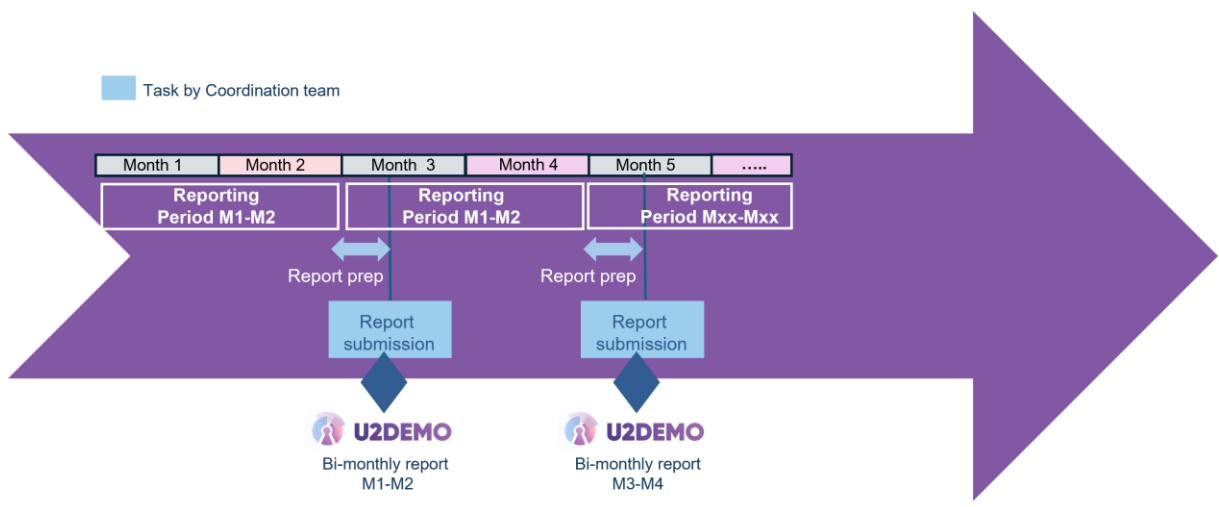


Figure 12 – U2Demo Bi-monthly report preparation

5.1.4 Payments

The project coordination will receive the funding from the European Commission and distribute the budget to all participant beneficiaries accordingly to the plan presented in the U2Demo Consortium agreement (Table 25):

Table 25 – U2Demo Payment Plan

Payment	Amount	Pre-condition of transfer	Notes
Pre-financing (48,33% of total EC contribution)	75% of the pre-financing	In the thirty (30) calendar days upon receipt of pre-financing from the Granting Authority	Exception: In case a Beneficiary at any time has used 100% of the first pre-payment received from the Coordinator and can provide sufficient proof of expenses (e.g. extract from the general ledger regarding project expenses) and has submitted all due deliverables led by them up to that point, then the Coordinator will release the remaining amount of the pre-financing towards that Beneficiary.
	25% of the pre-financing	At the beginning of the 2 nd project year (upon approval of the 2 nd Interim report to submit every 6 months).	
Interim payment(s)	100%	In the twenty (30) calendar days upon receipt of Interim payment(s) from the Granting Authority	
Final payment	100%	Upon receipt of the payment from the Granting Authority	

As observed in Table 25, the payments will be divided in:

- i) pre-financing - a first 75% instalment of the pre-financing at the beginning of the project and a second 25% instalment after the approval of the second internal management report (IMR);
- ii) two interim payments after approval of the P1 report and P2 reports;
- iii) payment of the balance after the P3 report.

5.2 Guidelines for Creating, Reviewing, and Submitting Project Deliverables

The U2Demo project will generate 30 deliverables, as detailed in Table 4. In addition to the standard reports “R”, the consortium will also produce four deliverables classified as “OTHER”. These “OTHER” files must be accompanied by a written report (short deliverable) to be submitted on the portal. Partners participating in a specific U2Demo task are required to collaborate in producing the associated deliverables, under the coordination of the task leader. Detailed procedures for creating these deliverables are outlined in Sub-section 5.2.1. Quality

control guidelines are outlined in Sub-section 5.2.2. Deliverables are always submitted in the Sygma portal by the Coordination team, accompanied by a brief statement describing technical and temporal deviations, if applied.

5.2.1 Preparation of deliverables

Below are recommendations and guidelines for structuring the U2Demo deliverables, to ensure high-quality and timely submissions at the EC portal.

5.2.1.1 Deliverable Naming Standards and Format Requirements

Deliverables must be prepared using the specified MS Word template file template found in the project repository under “U2Demo_General > WP7_Dissemination (RESC) > 4. Templates”. Working versions should be in MS Word format (.docx) for ease of editing, and the final version, to be submitted, must be converted to PDF files (.pdf). The working versions should be stored under the respective task folder, in a dedicated folder for the deliverable, where all versions and support material should be stored. Under this folder, a sub-folder should be created to include the files from the revision process.

All U2Demo deliverables must follow a consistent naming format:

- DX.Y_Deliverable Name. U2Demo.(dd-mm-yyyy).(vx.y)

DX.Y represents the deliverable number, **Deliverable Name** refers to its title, **vx.y** represents the version number of the document: for draft or working versions, use version starting on 0.1 until 1.0, being the v1.0 the first submitted version.

5.2.1.2 Deliverable Preparation and Recommendations

Deliverables should be concise, with around 25-30 pages in length. Deliverables content should be original and information already available in other deliverables should be avoided and instead, properly cited. Deliverables content must comply with the Grant Agreement and be submitted on time, respecting the deadlines set in the GA.

The key participants in the preparation of the deliverable are presented in Table 26 and the workflow described in Table 27.

Table 26 – Main participants in the U2Demo deliverables

U2Demo Key Roles	Description
Task Leader	Manages the deliverable development with other task participants and ensures quality and timely progress. Should report any temporal or/and technical deviations to the WP leader and U2Demo Coordination. Task leader submits the deliverable to the reviewers and incorporates the suggestions/changes.
Participant partners	The participant partners assist in the preparation of the deliverable, under the guidance of the task leader.
Work Package leader	Monitors the deliverable developments and technical achievements, on time. Inform the coordinator if deviations apply

U2Demo Coordination team	Monitors the deliverable progress, informs the project Officer if deviations occur and submits the deliverable in the Sygma portal.
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Table 27 – U2Demo Deliverable preparation workflow

U2Demo deliverables guidelines	
	The deliverable leader drafts an initial Table of Contents (ToC) at least 3 months before deadline. An initial ToC should be discussed during the task KoM.
	Partners collaborate to refine the structure and divide tasks
	Deliverable progress is updated during regular meetings (WP meetings and task meetings, if applicable).
	The task leader coordinates with the WP leader and informs them and the coordination team if any delays or issues arises
	If deviations apply (either technical or temporal), the coordination team will inform the Project Officer and request the change.
	Contributions to the deliverable are edited directly to the deliverable file, in track changes, in the project repository or uploaded to respective folder, according to what planned by task leader.
	A final draft must be completed ideally 1 month before the deadline, with all sections included.
	The final draft is submitted for internal review via email, cc'ing the WP leader and coordination team.
	Deliverable reviewers have about 10 working days to complete their review (see Section 5.2.1.3)
	The task leader must incorporate all suggestions/changes/ feedback in the final version of the deliverable and sent it to the Coordination team.
	The Coordination revises the document and if necessary, may request additional quality improvements
	The coordination submits the deliverable in the Sygma portal, writing a paragraph about technical and temporal deviations in the submission page, if applicable

Lastly, since deliverables have several authors, the following guidelines for the names of authors should apply:

- The first name in the deliverable should correspond to the main contribution author, followed by the authors from the same beneficiary partner placed in alphabetical order by last name.
- The following beneficiaries are placed in alphabetical order. If there is more than one author per beneficiary, then the last author's name should be placed in alphabetic order.

5.2.1.3 U2Demo Short version of Deliverables

A template for a deliverable short version will be added to the main deliverable for Task leader to summarize the work done in about 3 pages. This summary will not be submitted in the EC platform, but instead, published in U2Demo Zenodo repository. This short deliverable will be incorporated at the end of the deliverable document and will also be reviewed by the respective deliverable reviewers. Once the deliverable is accepted by the PO, the short version will be

uploaded in the U2Demo Zenodo platform and a DOI reference will be assigned to this document. The short deliverable will focus on the following sections:

- Introduction (summarizes the purpose, scope and objectives of the deliverable with approximately 1350-1500 characters (half page);
- Methodologies & Findings (explains and analyses the key topics, methodologies and findings, ensuring that the content aligns with open science principles with approximately 4000 to 5400 characters (not more than two full pages);
- Conclusions (summarizes the main points, highlight significant outcomes, and suggests potential next steps or recommendations with approximately 1350 to 1500 characters (half a page)).

5.2.2 Internal Review Process for U2Demo Deliverables

U2Demo has an established internal review process to ensure the highest quality of deliverables. All deliverables will undergo an internal review by two consortium partners, designated as the reviewers. Importantly, the reviewers have been chosen based on their overall involvement in the project, expertise, deliverables deadlines, and lack of involvement in the deliverable preparation.

A list of assigned reviewers has been validated and can be accessed in the U2Demo repository Teams folder: U2Demo – General > WP8_Management (INESC ID) > Deliverables > Deliverable Quality Check.

Table 28 identifies the beneficiaries that will review the deliverables (each beneficiary will assign the deliverables internally to members of their team). In case reviewers are unable to meet the deadlines due to unforeseen circumstances, they should first attempt to find a replacement within their team. If not possible, the coordination should be informed and arrange for other reviewers to replace them. Note that OTHER-type deliverables should be in a format of a short report, and no reviewers are assigned.

Table 28 – U2Demo Deliverable reviewers

Deliverable No	Deliverable Name	Reviewer 1	Reviewer 2	Revision date (expected)
D1.1	Active consumers and ECs initiatives mapping	WATT-IS	ENGREEN	01/08/25
D1.2	Active consumers' needs and social parameters	RESCOOP VLAAND	INESC ID	01/08/25
D1.3	Open-source tools assessment	KLIMAAN	ARTELYS	01/05/25
D1.4	Use case repository	N/A	N/A	N/A
D2.1	P2P Market and Energy Sharing Designs	RESCOOP VLAAND	INESC ID	01/04/25
D2.2	Decision support methods for active consumers and ECs	EDP NEW	ENERGY WEB AG	01/10/25
D2.3	P2P trading matching and Energy Sharing models	ARTELYS	EXAION	01/12/25

D2.4	P2P trading matching and Energy Sharing models	EXAION	KLIMAAN	01/02/26
D3.1	U2Demo architecture definition and guidelines	KU LEUVEN	EXAION	01/04/25
D3.2	U2Demo standardization, cybersecurity and data privacy	EIFER	INESC ID	01/06/25
D3.3	U2Demo platform based on blockchain technologies	N/A	N/A	N/A
D4.1	P2P and Energy Sharing Design considering platform requirements	KU LEUVEN	VITO	01/06/25
D4.2	Decision support tools for active consumers and ECs	N/A	N/A	N/A
D4.3	P2P matching and energy sharing algorithms	N/A	N/A	N/A
D5.1	Detailed specification of the pilots	EIFER	KU LEUVEN	01/02/26
D5.2	Pilots' installation & commissioning	EIFER	INESC ID	01/11/26
D5.3	Test of tools in external active consumers / ECs	INESC ID	WATT-IS	01/08/27
D5.4	Lessons learned in the Pilots	EIFER	VITO	01/10/27
D6.1	Tools assessment report	VITO	TNO	01/11/27
D6.2	Strategy for standardization and harmonization	INESC ID	ARTELYS	01/08/25
D6.3	Roadmap and guidelines to promote the user engagement in P2P energy sharing and ECs	R&D Nester	EXAION	01/01/28
D6.4	Policy recommendations and strategic positioning framework	INESC IS	ARTELYS	01/02/28
D7.1	Dissemination and Communication Plan	TNO	EUI	01/02/25
D7.2	Dissemination and Communication Plan - Updated	TNO	EUI	01/08/26
D7.3	Scalability, replicability and business models for ECs	eDSO	VITO	01/01/28
D7.4	Open-Source Tools maintenance and evolution strategies	EIFER	iEPD	01/02/28
D8.1	Project Management Plan	R&D Nester	DEN HAAG	01/10/24
D8.2	Project Management Plan - Updated	R&D Nester	DEN HAAG	01/02/26
D8.3	Data Management Plan	ENGREEN	EDP NEW	01/02/25
D8.4	Data Management Plan- Updated	VITO	EDP NEW	01/08/26

Below is the workflow for the revision process (Table 29).

Table 29 – Guidelines for U2Demo deliverable revision

U2Demo deliverables revision process
The Task leader must provide a high-quality document for internal review, having in account content, format, grammar, spelling and style.
The task leader must send the deliverable (in both word and pdf formats) to the designated reviewers, ideally 4 weeks before the submission at the EC portal, always with the coordination email in CC.

Any delays in the preparation of the deliverable should be discussed with the reviewers, to ensure the final deadline is met.
Reviewers are given 10 working days to complete the review.
A peer-review checklist to support the deliverable revision has been prepared and shared in the U2Demo repository, under U2Demo – General > WP8_Management (INESC ID) > Deliverables > Deliverable Quality Check. Reviewers are encouraged to follow the checklist and provide constructive feedback on the formatting of the document, content, tasks, results and conclusions. Specifically, it is requested that reviewers assess: <ul style="list-style-type: none"> i) The length of the deliverable ii) The organization and structure of the deliverable including if the deliverable follows the template, if the Executive Summary stands alone, stating the scope, aims and overall content, and if the deliverable explains its relationships with other project deliverables iii) If the content is aligned with the GA, whether there are deviations, if the scientific/technical approach is adequate, if the conclusions are justified by the data presented, if the data is of quality, the figures and tables correctly referenced and presented, and the bibliography completed. iv) If the deliverables are in British English, with good syntax and grammar.
If a reviewer is unable to meet the deadline, they must find a replacement within their team. If not possible, they should inform the PM and WP Leader for reassignment.
Reviewers provide a final rating of Accepted as it is, Accepted with minor revision or Accepted with major corrections (requiring further revision after corrections).
The task leader will incorporate the reviewers feedback and changes and send the final version to the U2Demo coordination for final check and submission to the EC, at least 3 days before submission deadline
All versions of the deliverable must be saved in the corresponding Teams folder.
The Coordination team will submit the final document to the Sygma portal, stating any technical or temporal deviations that may have occurred, if applied.
The Coordination team will inform the consortium that the deliverable has been submitted to Sygma portal.
Once Project Officer approves the deliverables, they will be available in the U2Demo project website, except SEN-type deliverables (D5.2).

Figure 13 illustrates the U2Demo deliverable preparation and revision timeline.

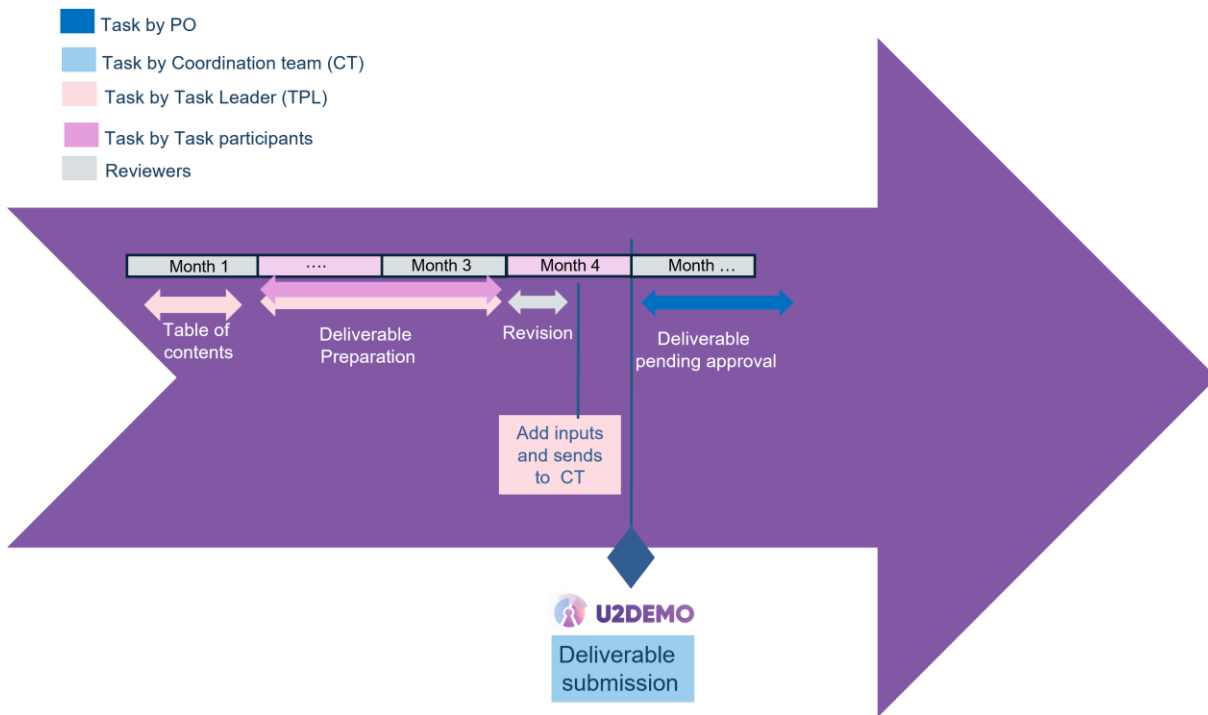


Figure 13 – U2Demo Deliverable preparation and revision process

5.3 Risk management

The critical risks assessed for the U2Demo project and proposed risk mitigation measures are presented in Table 30.

Table 30 – Critical risks assessment for U2Demo project

Description of risk	L ^a	S ^b	WP	Proposed risk-mitigation measures
Researchers & developers involved in the project leave the team.	High	High	All	Teams are very versatile, so existing collaborators can be quickly assigned to the project and highly qualified workforce replace leaving researchers.
Difficulty of finding and using appropriate free solvers in complex optimization problems.	Medium	High	WP2	Free solvers are usually very restricted in terms of solving large and complex problems. Thus, commercial solvers can be used to solve complex problems, such mixed-integer nonlinear problems, offer greater accuracy. Also, partners like ARTELYS, VITO, KU Leuven and INESC ID have strong expertise in the development/implementation of solvers and optimization algorithms.
Issues in the integration of the Open-Source algorithms with legacy systems already in place in Active consumers and ECs.	Medium	High	WP3	Partners like EXAION, EIFER, KLIMAAN, ENGREEN and EDP NEW, have strong experience in development and integration of algorithms in platforms. The communication and the continuous time spent from the early stages of the project to the standardisation of inputs and outputs to integrate all the tools in the platform is required. Additionally, the pilots will be developed in ECs where the partners are already developing tests and simulations.

Time spent for economic and technical coordination between partners.	Medium	Medium	WP1 to WP6	INESC ID have strong expertise in project management. A measure to mitigate delays and noise in communication between partners is to define regular meetings at consortium level (General Assemblies), with WP leaders (Scientific Committee) and with Task leaders (Organized by WP leaders).
Markets and ECs related regulation impacting the U2Demo proposed solutions.	Medium	Medium	WP2 WP3 WP4 WP5	Partners are aware of the most innovative ideas and trends. However, regulation analysis and the ongoing initiatives will be identified in WP1. Afterwards, U2Demo partners will be involved in other initiatives and interacting with regulatory bodies (T7.2).
Inconsistency between tools, models and methods developed by the partners.	Medium	Medium	WP2 WP3 WP4	Close collaboration between involved partners from the early stages of the project to clearly define the interfaces of the tools and models. WP3 includes a specific task addressing the development requirements and defining the type of data that should be exchanged between models and algorithms.
Delay in the development of tools and models due to underestimation of technical complexity and resources.	Low	Medium	WP2 WP3 WP4	Close monitoring of the progress. Allocation of more project resources in case deviations and unexpected delays are observed. Additionally, the algorithms modular and will be developed in sprints following the agile methodology. This means that delays in the development of one module will have a limited impact in the global execution of the project.
Difficulties to assure interoperability between proposed solutions and external systems.	Medium	High	WP3 WP5	Partners, (Energy Web AG, TNO, EXAION, VITO, R&D Nester), are involved in the development of data spaces and in Gaia-X. The integration of U2Demo platform with Gaia-X and Simpl Middleware allows to ensure the interoperability with most of the systems and stakeholders. Some additional effort can be required if interfaces with proprietary systems are envisaged.
Technical mistakes in assembling of equipment at demo sites.	Low	Medium	WP5	The duration of tasks related to the pilots was planned to accommodate unexpected issues during the tests phase. Partners will develop and cross-check a detailed installation diagram before commencing the process.
Difficulties in the use of Open-Source tools by external consumers/ECs	Low	Medium	WP5	WP5 includes a task dedicated to the organization of a call of demo replications. Afterwards, it is considered support activities in the implementation of the algorithms by external entities.

The risks identified in Table 30 have been characterized in Low (green), Medium (yellow) and High (red) in terms of likelihood to happen and impact on the project.

Unforeseen risks can also appear during the course of the project and must be monitored throughout the project lifecycle (e.g., unforeseen increases in prices, personnel and travel costs due to inflation). All partners are responsible for detecting and reporting risks at both task and work package levels and to report them to the respective task leader who reports to the WP leader, who then escalates them to the Coordination team and Scientific Committee/General Assembly. Risks may be identified by analysing the status of the deliverables, WP achievements, milestones and analyses of the periodic reports. The coordination team should keep track of all identified risks (risks record/registration) and monitor their likelihood and impact monthly at the Scientific Committee meeting and every 6 months in the Internal management reports (IMR), GAs and periodic reports. In case of risk materialization, the project employs responsive strategies to minimize impacts, including reallocating resources, adjusting timelines, increasing communication and discussions (Table 30).

6 Communication and Dissemination Preliminary plan

U2Demo consortium will implement a set of communication, dissemination and exploitation activities to ensure that the projects impacts are maximized. These activities will comply with an initial Communication and dissemination plan that will be detailed in Deliverable D7.1 at M6 and updated at M24 (Deliverable D7.2 – Communication and Dissemination update). The Communication and dissemination plan will include the identification of key stakeholders/target groups and respective messages, description on the planned actions and activities to be executed throughout the different phases of the project, identification of the Communication and dissemination KPIs of the project, development of U2Demo visual identity, website and social media, and guidelines for Communication and Dissemination activities. To maintain an up-to-date record of all communication and dissemination activities it is expected that the partners follow specific guidelines, listed below.

6.1 Procedures for representing the consortium in dissemination activities

Table 31 outlines the procedures for presentation of the U2Demo project in dissemination events.

Table 31 – U2Demo guidelines for presentations at a dissemination event

Procedures
Participant partner should inform the U2Demo Coordination team/Communication Officer beforehand (ideally 2 weeks in advance), by email, providing details of their participation in the event, including: type of activity, title, dates, location, audience, paper, if applicable. This prior notice is needed so that the Communication Officer can advertise the activity on time on social media and the website.
Participant partner should also share with other members of the consortium and stakeholders their participation in the event to increase network opportunities.
For presentations, partners should use the U2DEMO PPT template of the project, available in the project repository under General/WP7_dissemination (RES)/ Templates
Presentations should contain Consortium information, project context, objectives, solutions and impacts, do not contain sensitive information and always acknowledge the EC and CINEA, by showing the EU emblem and the statement: “This work has been developed under the activities of the U2DEMO project, funded by the European Union's Horizon Innovation Actions under grant agreement no. 101160684. Views and opinions expressed in this document are those of the authors only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.”
Partners should store into the project repository all the dissemination materials used at the event, including ppts and photos as a proof of attendance. Photos can also be used for social media.
Coordinate with the Communication Officer during and after the event for social media posts about the event and the U2Demo's participation.

6.2 Procedures for Publishing Scientific papers

Table 32 outlines the procedures for publishing papers under U2Demo funding.

Table 32 – U2Demo guidelines for publishing scientific articles

Procedures
Partners planning to publish a scientific paper funded by U2Demo project must inform the Coordination via email at least 45 calendar days prior acceptance of the publication, or to send the paper at the same time of submission.
The Project Manager will then send the paper to the consortium requesting feedback on possible conflicts of interest.
Partners that express objection, must communicate via email to the Project Manager/Coordination within 30 calendar days after receiving the publication.
If no objections are raised within the 30-day period, the publication is approved by the Consortium.
Papers must always include an acknowledgment of EC funding: "This work has been developed under the activities of the U2DEMO project, funded by the European Union's Horizon Innovation Actions under grant agreement no. 101160684. Views and opinions expressed in this document are those of the authors only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them
This information is collected for the U2Demo Data Definition Catalogue (management record) and, after paper being accepted, will be shared on U2Demo social media and website.

6.3 Procedures for partners to contribute to U2Demo social media

Table 33 outlines the procedures for contributions to U2Demo social media channels/ website.

Table 33 – U2Demo social media communication guidelines

Procedures
When partners have material/ideas/content for a post in U2Demo social media accounts, contact the Communication Officer via email.
The Communication Officer will review, adjust, and adapt the content to U2Demo's social media templates for LinkedIn and Twitter, and website if applicable. Partner will validate the final version.

6.4 Procedures for Press Releases and News Articles

Table 34 outlines the procedures for press releases and news articles.

Table 34 – U2Demo guidelines for press releases and new articles

Procedures

When partners have material to be released to national or international media, they should email the draft text to Communication Officer.

The U2Demo Communication officer will review the text for sensitive information and coherence with the project's image.

If needed, the Coordination will review the text before being issued.

After review, the final text will be sent back to the partner for release.

If partners need information on the project for journalists, they should consult with U2Demo communication officer to align on the common message and public information.

7 Data Management plan

The U2Demo project is strongly committed to follow the guidelines provided by the European Commission's Open Research Data Management, with the aim of improving and maximizing the accessibility and re-use of research data generated within the framework of EC-funded projects. U2Demo consortium aims to develop solutions that are open-source, freely accessible, free of intellectual property rights, easy to maintain and available for re-use.

The strategy for U2Demo Data Management includes the development of a Data Management Plan that complies with the FAIR principles and the EC's guidelines on Open Science.

7.1.1 Developing a Data Management Plan (DMP):

The U2demo Data Management Plan (DMP) will be developed at M6 (Deliverable D8.3) and updated on M24 (Deliverable D8.4), or whenever changes apply. The document will outline how research data will be managed throughout the project lifecycle, describing the types of data to be collected and how these will be collected, stored, documented and described. The DMP will also include a Data Definition Catalogue that contains information on all deliverables and data elements used and/or produced in the scope of the project.

The DMP will cover:

- U2Demo several Data types, formats, size and sources:
 - i) Deliverables (30 deliverables: 26 report (R) type, 4 Other type, 1 sensitive- only available to the consortium and 29 open to all).
 - ii) Scientific articles (at least 20 conference and journal articles, published preferentially in open access journals)
 - iii) Datasets (dataset from Demo activities and used in the project. Datasets will be stored in a dedicated folder, in the project repository, together with metadata files)
 - iv) Algorithms
 - v) Software
 - vi) Questionnaires (e.g. questionnaires responses from key stakeholders and participants from all pilots in the context of T1.2 and WP5).
- Data storage and preservation aligned with FAIR principles. The following repositories will be used:
 - Project repository Sharepoint
 - Zenodo U2Demo community
 - Github U2Demo community
 - Energy Community repository
 - RESCOOP.toolbox repository
- Address data security, ethics and management guidelines
 - The coordination, together with WP and task leaders will ensure that datasets are in accordance with the guidelines set out in DMP
 - All data collected from users/stakeholders will comply with the GDPR rules on data access, data sovereignty and data protection.
- Open-source software licenses

- U2Demo partners will adopt free and open-source licences such as MIT licence, European Union Public Licence, GNU general Public license

Further details will be provided in the deliverable Data Management Plan.

7.1.2 Workflow to develop the Data Management Plan

Table 35 shows the workflow for the development of the DMP.

Table 35 – U2Demo Data Management Plan development workflow

Procedures	Responsible	Timeline
Creation and setup of key supported systems such as project website, Project repository, Zenodo, GitHub	DMP Leader (INESC ID)	M1-M2
Identification of relevant data types, formats, size and sources to be produced/used throughout the project	DMP Leader (INESC ID), WP Leader, Task Leader	M1-M4
Guidelines development for files naming, storage, versioning and sharing	DMP Leader (INESC ID)	M3-M5
Identification of license options and guidelines for compliance with GDPR and ethical rules on data access, data sovereignty and data protection	DMP Leader (INESC ID), Data protection officer	M3-M5
Development of DMP and data definition catalogue and submission for revision	DMP Leader (INESC ID)	M6 (beginning)
DMP revision	Internal Reviewers	M6 (middle)
Collection of reviewers feedback, finalization and submission of the document.	DMP Leader (INESC ID)	M6 (end)

7.1.3 Workflow to monitor the Data Management Plan

U2Demo data will be continuously monitored by the coordination team/DMP Leader, supported by the task and WP leaders, to ensure that the research data is properly handled throughout the project lifecycle. The workflow to monitor the DMP is presented below in Table 36.

Table 36 – U2Demo Data Management Plan monitoring workflow

Monitorization	Responsible	Timeline
DMP shared to consortium to ensure all U2Demo partners are aware and follow the data guidelines	Project coordination	M6, M24
Regular monitorization of data collection, metadata creation and proper naming conventions and versioning for data files	Project coordination + task leader+ WP leader	Monthly
Regular monitorization of data storage locations and confirmation that data is being backed up properly	Project coordination + task leader+ WP leader	Every 6 months
Regular verification if data complies with legal and ethical standards (GDPR) and sensitive data is handled properly	Project coordination + task leader+ WP leader	when applicable
Regular check if procedures for data sharing are according to the DMP	Project coordination + task leader+ WP leader	Every 3 months
Regular check if data complies with IP rights and licensing agreements	Project coordination	When applicable
Ensure data intended for long preservation is archived in proper repositories	Project coordination	Every 6 months

Update the DMP	Project coordination	M24
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8 Conclusions

The Project Management Plan presents a thorough approach to the management processes of the U2Demo project, focussing on collaboration tools, project procedures, and quality management activities. It is fundamental for establishing a basis for the project activities, facilitating the communication of partners and achieving project deadlines. This deliverable described the work structure of the U2Demo project, identified the project structure and governance, main internal procedures, U2Demo quality assurance procedures and initial plans/guidelines in Communication and dissemination activities and data management.

As the first deliverable of the project, the Deliverable D8.1 – Project Management plan is essential for setting a structured management framework, important for contributing to the U2Demo main goal in creating innovative, consumer-centric management strategies that facilitate widespread participation in Peer-to-peer (P2P) trading and Energy Sharing.

9 References

- [1] U2Demo, Consortium Agreement, version1 dated 23/07/2024, DESCA Consortium Agreement Model (U2Demo internal document).
- [2] Periodic Reports, Horizon 2020 Online Manual. Available:
https://ec.europa.eu/research/participants/docs/h2020-funding-guide/grants/grant-management/reports/periodic-reports_en.htm

ANNEX I

U2Demo Project Repository

Access to the Project Repository

The U2Demo Microsoft Teams repository can be accessed via a web browser without requiring any special software and is restricted to Project Partners. To access the repository:

- Partners must request access by contacting U2Demo Coordination/Project Manager via the designated mailing list.
- Once access is granted by the Coordination, partners will receive an email notification with a secure link to the repository. Partners can access the repository by creating or using existing Microsoft credentials. Sometimes, to avoid conflicts with existing Teams accounts, it is advisable to open the link using an InPrivate Window.
- If partners have problems logging into the repository, partners must contact the U2Demo Coordination for assistance.

Utilizing the Repository

The U2Demo - General folder contains the following folders:

- WP1_Harmonized framework (TNO) – contain Task 1.1, 1.2, 1.3 and 1.4 folders. Each Task folder will contain all information regarding the developed activities, deliverables, scientific articles. Each task folder is managed by the task leader.
- WP2_P2P_EnergySharing_Methods (VITO) - contain Task 2.1, 2.2, 2.3 and 2.4 folders. Each Task folder will contain all information regarding the developed activities, deliverables, scientific articles. Each task folder is managed by the task leader.
- WP3_Platform (EXAION) - contain Task 3.1, 3.2, 3.3, 3.4 and 3.5 folders. Each Task folder will contain all information regarding the developed activities, deliverables, scientific articles. Each task folder is managed by the task leader.
- WP4_P2P_EnergySharing _Methods (ARTE) - contain Task 4.1, 4.2, 4.3 and 4.4 folders. Each Task folder will contain all information regarding the developed activities, deliverables, scientific articles. Each task folder is managed by the task leader.
- WP5_Demonstrators (NEW) - contain Task 5.1, 5.2, 5.3, 5.4 and 5.5 folders. Each Task folder will contain all information regarding the developed activities, deliverables, scientific articles. Each task folder is managed by the task leader
- WP6_RoadMap (EIFER) - contain Task 6.1, 6.2, 6.3 and 6.4 folders. Each Task folder will contain all information regarding the developed activities, deliverables, scientific articles. Each task folder is managed by the task leader
- WP7_Dissemination (RESC) – contain Task 7.1, 7.2, 7.3 and 7.4 folders. Each task folder will contain all information regarding the developed activities, deliverables, scientific articles. Each task folder is managed by the task leader. Task 7.1 contains

subfolders with visual identify of the project, U2Demo logos, Partners logos, an Event folder to include all events that the project will participate, a Scientific articles folder, to include all conference and journal scientific articles, Media activities folder with all the activities in social media and website, templates folder with all template documents for the project, including deliverable, MoM, PPT, Attendance list templates.

- WP8_Management (INESC ID) – Subfolders include: Proposal (with all the information exchanged during proposal phase), CA and GA folder (with all the legal documents of the project), Meeting folder (with all the information of Project meetings including SC meetings, GA meetings, Review meeting), Deliverables (with Management deliverables, and guidelines for the development and revision of deliverables), and a U2Demo contact mailing list.
- Datasets –all datasets used/created in the project, along with metadata files (each dataset in a dedicated folder)

Uploading and downloading files from the repository

To upload files, two options are available:

- navigate to the desired folder and click "Upload file"
- simply drag and drop the file into the folder.

To download files or folders, click the "More options" (three dots) icon in front of the file/folder, and select "Download." Additional options include adding to favorites, viewing details, accessing previous versions, moving, copying, or deleting the item.

Editing Files

Microsoft Teams allows multiple partners to collaborate on a document in real-time. To edit a file:

1. Open the file directly from the Teams repository.
2. Make your edits in review mode; changes are automatically saved and visible to all users with access.

Version Control

Microsoft Teams tracks document changes and maintains version history. To view or restore previous versions, click the "Open in Sharepoint" option (three dots) in front of the file, then click in "Version history" option (three dots) where earlier versions can be reviewed or restored as needed.

Teams' collaborative platform improves version control by tracking each user's contributions and automatically updating the document. This ensures all partners have access to the latest version while keeping a complete record of the document's changes over time.

Syncing files with the computer

To synch the Sharepoint files and folders with your computer, open the U2Demo project Sharepoint, go to Documents page and click in the three dots (synchronization bottom).