



Co-funded by
the European Union

DC4EU project is Co-funded by the European Union's Digital Europe Programme
under Grant Agreement no. 101102611



**DC4EU - DEFINITION OF THE DC4EU
COLLABORATION AND COOPERATION STRATEGY**

Work package	WP 3
Task	T3.1. Collaboration and cooperation
Submission date	28/12/2023
Deliverable lead	GRNET
Version	1.0
Authors	GRNET, ATOS
Reviewers	GRNET, INCM, SGAD, SUNET, DVSV, DRV Bund, VM, 3CL, COO PMO (SGAD)

DISCLAIMER

The information, documentation and figures available in this deliverable are written by the "Digital Credentials For Europe" (DC4EU) project's consortium under the EU's Digital Europe Programme under Grant Agreement no. 101102611 and do not necessarily reflect the views of the European Commission.

The European Commission is not liable for any use that may be made of the information contained herein.

COPYRIGHT NOTICE

© 2023-2025 DC4EU

Project co-funded by the European Commission in the Digital Europe Programme		
Nature of the deliverable:		R, document
Dissemination Level		
PU	Public, fully open, e.g. web	X
CL	Classified, information as referred to in Commission Decision 2001/844/EC	
CO	Confidential to DC4EU project and Commission Services	

* R: Document, report (excluding the periodic and final reports)

Document Revision History

Version	Date	Change editors	Changes
0.1	06/07/2023	Thodoris Papadopoulos (GRNET)	Initial structure and sketch of contents
0.2	10/07/2022	Thodoris Papadopoulos (GRNET)	Update of Section 1 and 2
0.3	24/07/2022	Thodoris Papadopoulos (GRNET)	Initial version of Section 3
0.4	25/07/2023	Thodoris Papadopoulos (GRNET)	Added KPIs and Action Point tables in Section 4 (in draft)
0.5	20/08/2023	Thodoris Papadopoulos (GRNET)	Updated Action Points and KPIs. Sections 4 and 5 merged.
0.6	28/08/2023	Alberto Crespo (Atos) Teemu Kääriäinen (Vm)	Contributions to sections 1, 2 and 3. Comments and proposals.
0.7	29/08/2023	Thodoris Papadopoulos (GRNET)	Review and merging of comments. PKIs, Tools and Action Points moved to separate Section.
0.8	07/09/2023	Thodoris Papadopoulos (GRNET)	
0.9	18/09/2023	Thodoris Papadopoulos (GRNET)	Final version for internal review
1.0	01/10/2023	Alberto López (INCM)	Internal review

Quality Control

Role	Name (Partner short name)	Approval Date
WP Leader	Thodoris Papadopoulos (GRNET)	18/09/2023
Internal (WP) review	Alberto López (INCM)	01/10/2023
Strategic Committee	SGAD, SUNET, DVSV, DRV Bund, VM, 3CL	04/12/23
Project Coordinator	COO PMO (SGAD)	28/12/23

EXECUTIVE SUMMARY

This report defines the DC4EU strategy for internal and external collaboration, cooperation, and stakeholder engagement activities of the project. Starting with a general overview of the current EUDIW ecosystem, the report then presents the stakeholders identified for collaboration activities. The identification of stakeholders is an important first step to better understand the opportunities for collaboration, exchange of knowledge and joint activities. To better manage and plan activities with external stakeholders, a typology is proposed. In the typology, stakeholders fall into five main groups of actors and are further categorized in ten stakeholder roles. The report also proposes an overall approach to collaboration and coordination based on three main components, namely: (1) Coordination with the EC, (2) Collaboration with external stakeholders and (3) Internal LSP alignment. Each component targets a different set of stakeholders and produces specific outputs that overall contribute to the objectives of the Project. The report concludes with a proposal for the means of this collaboration, and specific actions and KPIs that will be used to monitor the progress of collaboration and cooperation activities. It is important to emphasize that this report is a first step in an evolving process of collaboration related tasks as described in the project's General Agreement. The identification of stakeholders, the arsenal of activities and the means of collaboration will be continuously assessed and reviewed and would be included in future deliverables.

TABLE OF CONTENTS

1. OVERVIEW OF THE EUDIW ECOSYSTEM	8
1.1 Workstrands of the EUDIW Development	8
1.1.1 The Legislative Process.....	9
1.1.2 The eIDAS Expert Group.....	9
1.1.3 The Common EU Toolbox.....	10
1.1.4 The Reference Implementation	10
1.1.5 The Large-Scale Pilots.....	11
1.1.6 The Coordination Group.....	12
1.2 Main roles in the EUDIW Reference Architecture.....	13
2. STAKEHOLDERS IDENTIFICATION	17
2.1 External Stakeholders.....	17
2.2 Internal DC4EU Stakeholders	20
3. ENGAGEMENT APPROACH	22
3.1 Overall Approach.....	22
3.1.1 Coordination with EC	22
3.1.2 Collaboration with external Stakeholders.....	23
3.1.3 Internal LSP alignment	23
3.2 Engagement types.....	24
3.2.1 One to One Meetings.....	24
3.2.2 Joint Meetings.....	24
3.2.3 Workshops	24
3.2.4 Networking and cohesion activities	24
4. ACTION POINTS AND KPIS	25
4.1 Action Points	25
4.2 KPIS.....	26
5. REPORTING ON THE FIRST ACTIVITIES THAT HAVE ALREADY TAKEN PLACE	27

ABBREVIATIONS

Dx.y	Deliverable number y, belonging to WP number x
EBSI	European Blockchain Services Infrastructure
EC	European Commission
eID	Electronic Identification
eIDAS	Electronic Identification and Trust Services
eIDAS EG	eIDAS Expert Group
GA	Grant Agreement
GDPR	General Data Protection Regulation
ICT	Information and Communication Technologies
KPI	Key Performance Indicator
LSP	Large-Scale Pilot
Mx	Month X
PC	Project Coordinator
QA	Quality Assurance
QM	Quality Manager
RP	Reporting Period
SDG	Single Digital Gateway
S.M.A.R.T	Specific, Measurable, Achievable, Relevant, and Time-Bound.
SSI	Self-sovereign Identity
VCs	Verifiable Credentials
WP	Work Package
WPL	Work Package Leader

Introduction

The main objective of the current report is to define the DC4EU strategy regarding the collaboration, cooperation, and stakeholder engagement activities of the project, including engagement activities realized with the EC eIDAS Expert Group, external stakeholders, and relevant key players of LSPs. The development of this report concludes Milestone #9 and is an essential part of **Task 3.1: Collaboration and Cooperation Planning** of the DC4EU proposal. Deliverable 3.1, scheduled to be completed in M24, will include and report on the actual results, KPIs and activities included in this plan.

This report addresses the following objectives as described in the GA:

- Coordination with the European Commission (see section 3.1.1), relevant bodies in eIDAS Toolbox process and inter-LSP coordination (DG-CNECVT-H4, eIDAS Expert Group see section 1.1.2, Coordination Group, see section 1.1.6) for iterative eIDAS reference wallet releases, eIDAS revision updates and ARF evolution.
- Coordination with other ongoing cross-border initiatives (other eIDAS-related consortia, EBSI, etc.), see section 3.1.2.
- Internal DC4EU LSP coordination and alignment (see section 3.1.3).

This report has been consistently checked against foreseen KPIs, in particular those described in section 3.4 of the GA and has been reviewed internally and approved by the Project Coordinator.

Relation to other Work Packages and Deliverables

According to the project proposal and the GA, the following tasks are identified for WP3, in particular with regard to relationships with other WPs:

- Creation of a plan for coordination among the various LSPs of this project, in collaboration with WP1.
- Strong interaction with WP2 with respect to planification, analysis and design.
- Close collaboration with WP7 to ensure the alignment with the process to be established for iterative releases of the eIDAS Architecture Reference Framework and the reference wallet application and related APIs for integration with external parties.

However, in general, this work package will interact with all the other WPs of DC4EU, with respect to alignment and synchronization of activities that each WP undertakes. Such interaction may involve, for example, the alignment of the work of WPs 5 & 6 (Educational & Social Security LSPs) with the rest of the technical WPs and the iterative releases of the ARF, as well as the interactions with WP9 regarding the setup of newsletter mechanisms and the sharing and distributing of good-practice information.

1. OVERVIEW OF THE EUDIW ECOSYSTEM

In 2021 the European Commission announced the European Digital Identity Wallet (EUDIW) in the context of the revised EU Digital Identity Framework. The EU Digital Identity Wallet initiative is a key pillar of the 2030 Digital Decade policy program, which outlines Europe’s digital transformation aspirations for the next decade. By 2030, the goal¹ is for all key public services to be accessible online, allowing all citizens to access governmental and private digital services and ensure everyone has access to secure, privacy-enhancing electronic ID. It will provide a secure and convenient way for European citizens, residents and businesses to share, under their control, identity data needed for accessing digital services across the EU. The Digital Identity Wallet is built upon the foundation of the European electronic identification and trust services initiative (eIDAS Regulation), which has provided the basis for cross-border electronic identification, authentication, and website certification within the EU since 2014 and more directly on the proposal for revision of the Regulation which is undergoing the final phase in the legislative process for its approval.

1.1 Workstrands of the EUDIW Development

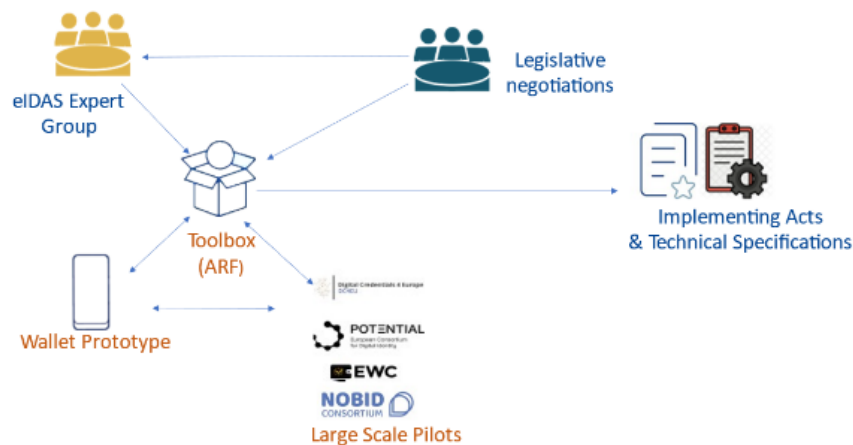
The development of the EUDIW is based on a novel approach which is largely inspired by an agile methodology and essentially provides for the simultaneous development of legal and technical specifications and model implementations, in stark contrast to the hitherto usual approach which required the completion of legal text as a prerequisite to trigger the initiation of technical and other procedures.

The chosen approach for the EUDIW development evolves in parallel strands of work where each one feeds the other. The main nodes with their relationships are depicted in the following picture and are explained in more detail in the remainder of the current section, as they are a prerequisite for understanding the ecosystem and facilitate the identification and prioritisation of external stakeholders that are a source for the project's external collaboration processes.

¹ https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/europes-digital-decade-digital-targets-2030_en

EUDIW Development Strands

Building blocks / relationships



1.1.1 The Legislative Process

In June 2021, the European Commission published the [proposal of a Regulation amending eIDAS](#) with the aim to establish a framework for a European Digital Identity; in other words, eIDAS 2.0. The Commission proposal amends and updates the existing eIDAS Regulation by responding to the challenges raised by its structural shortcomings and limited implementation and to technological developments since its adoption in 2014².

On 6th December 2022, the Council adopted its common position ([general approach](#)) on the file of the amendment proposal while on 16th March 2023, the European Parliament adopted the mandate to enter inter-institutional negotiations. On March 2023, a round of trilogue negotiations initiated and on 29th June the European Parliament and the Council of the EU reached a [provisional political agreement](#) on the proposal for the European Digital Identity Framework. Technical work will continue to complete the main legal text according to the political agreement before it is endorsed by Member States' representatives and the formal adoption by the Parliament and the Council, while other open issues will need to be resolved before the necessary implementing acts for the wallet are prepared and come into effect for adoption by the Member States.

1.1.2 The eIDAS Expert Group

As part of the [EU Digital Identity Wallet Toolbox Process](#), the eIDAS regulation revision is being concretized by an [expert group consisting of representatives from the 27 Member States](#). To accelerate the process and minimize the risk of delays in the delivery of the wallet, the European Commission proposed an agile approach regarding the development of the specifications, that provides the development of the technical

² [A trusted and secure European e-ID - Regulation | Shaping Europe's digital future \(europa.eu\)](#)

details describing the functioning of the wallet, in parallel with the legal text and the implementation of the [reference implementation of the wallet](#).

In this direction, the EU Commission, DG-CONNECT, and the EU Member States are cooperating within the assembled eIDAS Expert Group to establish a common EUDI Wallet Toolbox. This Toolbox, which is explained in more detail in the next section, includes the [European Digital Identity Architecture and Reference Framework \(ARF\)](#), which is the main output of the eIDAS Expert Group (eIDAS EG) and acts as the technical and architectural guide for the implementation of EUDI compatible wallets. The eIDAS EG meets on a regular basis to be informed on updates regarding the policy process, to update and review proposed amendments to the ARF, to finalise the development of the ARF, to resolve any problems and to take specific technical or operational decisions.

Other groups and sub-groups can be formed and operate under the umbrella and supervision of the eIDAS EG. Such are the technical subgroup, which undertakes the development of technically rigorous and detailed specifications in relation to the architecture and proposes solutions to emerged technical dilemmas, and the certification subgroup, which is involved with the security and certification requirements for the EUDIW.

1.1.3 The Common EU Toolbox

Along with the regulation amendment proposal the Commission adopted a [Recommendation](#) calling on Member States to work towards the development of a Toolbox including a technical Architecture and Reference Framework (ARF), a set of common standards and technical specifications and a set of common guidelines and best practices. The Recommendation specifies that these outcomes will serve as a basis for the implementation of the European Digital Identity Framework Regulation once adopted. The Toolbox will complement the legislative proposal on a trusted and secure Digital Identity and is a crucial first step that will enable the creation of a robust framework for digital identification and authentication based on common standards across the EU.

The [first version](#) of a common EU Toolbox to implement the EU Digital Identity Wallet was published by the Commission on 10th February 2023 while some days later the eIDAS Expert Group agreed on the first draft version of the ARF (ARF 1.0.0).

1.1.4 The Reference Implementation

On 2nd December 2022, the Commission announced the results of the procurement tender and the signing of a framework contract for the development, consultancy and support for the EUDI Wallet between DG CONNECT and the wallet contractor consortium. The consortium is led by Netcompany-Intrasoft and Scytales together with several subcontractors.

The prototype wallet, procured under the Digital Europe Programme:

- Serves to trial and update the specifications developed by Member States in close collaboration with the Commission, as the common EU Toolbox to implement the EU Digital Identity Wallet;
- Will be tested in a number of Large Scale Pilots (see section 1.1.5) that cover different sectors, such as healthcare, financial services, education and transport;

- Will be made available for re-use by Member States, Pilot Projects and other contributors as open source.

An initial version of the reference implementation is to be made available on GitHub together with the first complete version of the common EU Toolbox to implement the EU Digital Identity Wallet in September 2023.

1.1.5 The Large-Scale Pilots

Before its actual implementation in the Member States, the European Digital Identity Wallet will be assessed in four large-scale pilots. These [projects](#) aim to evaluate digital identity wallets in real-world scenarios covering numerous sectors. The Commission made the announcement of the winning consortia in December 2022, following [a call for proposals](#) published in February of the same year. The aim of the pilot schemes is to test the deployment of the EU Digital Identity Wallet in priority use cases such as banking and eGovernment services, and across national borders. They represent a combined investment of over €90 million in the EU digital identity ecosystem, co-financed by the Commission at 50%, with participation from more than 250 private companies and government agencies from 25 Member States as well as Norway, Iceland, and Ukraine.

The four pilot projects that commenced on 1st April 2023 are:

- 1. POTENTIAL** (<https://www.digital-identity-wallet.eu/>)
Piloting the use of EUDI wallets for the authorization of payments for products and services by the wallet user/ holder. This includes accessing a digital public service (for example, when travelling to another Member State, a requirement for proof of identity or a necessity to obtain medical prescriptions) and opening bank accounts. Use of the EUDI wallet will also include the necessary requirement for signing contracts online, where a secure digital signature is provided.
- 2. NOBID** (<https://www.nobidconsortium.com/>)
The NOBID Consortium is developing a large-scale pilot to prepare, implement and test the EU Digital Identity Wallet. This will involve several banks for the authorization of payments for products and services. They aim to address the issuance of wallets, means of payment by financial institutions and acceptance of retail payments.
- 3. DC4EU** (<https://www.dc4eu.eu/>)
The project will pilot the use of the EUDI wallet across the education sector (by securing education credentials and professional qualifications) and the Social Security domain (PDA1 and EHIC). This will be achieved by deploying and accessing European interoperable digital service infrastructures, including integration, by applying the eIDAS cross-border framework.
- 4. EWC** (<https://eudiwalletconsortium.org/>)
Storing and presenting Digital Travel Credentials within the wallet, enabling cross-border movement within Europe. Further scope to include business digital identity wallets as well as storage of payment credentials to authorize account-to-account based transactions.

To ensure common implementation of the European Digital Identity framework, all LSPs must integrate with the iterative development of the reference application of the Wallet, to be developed based on the Architecture and Reference Framework (ARF).

1.1.6 The Coordination Group

The Coordination Group (CG) is a recently formed group that aims to bring together the different stakeholders in the wallet development ecosystem to facilitate the coordination between three key working-strands and the respective stakeholder groups. The Coordination Group is assembled as necessary, and it is formed with participation from:

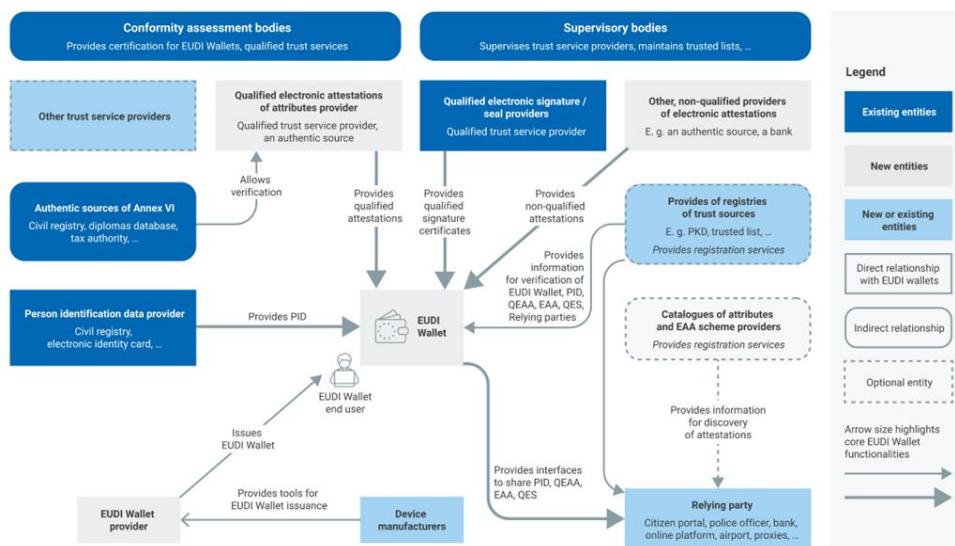
- The European Commission – DG CNECT (Chair)
- LSPs coordinators
- The Wallet contractor (NiScy)
- Representatives of the eIDAS Expert Group

The main objective of the eIDAS CG is to ensure planning alignment, to propose changes to the respective roadmaps and highlight potential blockers that could jeopardize timely delivery of either the ARF/Toolbox, the Reference implementation /or any of the Large-Scale Pilots. Its responsibilities include:

- Assisting DG CNECT in coordinating the roadmaps of the different implementation strands to ensure alignment.
- Discussing and presenting deliverables that could have an impact on the different strands.
- Suggesting backlog items that should be prioritised for the Toolbox and for the reference implementation of the Wallet.
- Recording any blockers or discrepancies that must be addressed to meet the planned objectives.

1.2 Main roles in the EUDIW Reference Architecture

The current section provides an overview of the roles that are foreseen in the European Digital Wallet ecosystem. Although no major changes are expected in this regard, we note that what follows is based on the version of the ARF that was officially available at the time of writing.



1. End Users of EUDI Wallets

End users are defined as natural or legal persons that will be using the wallets to send, receive, store and share attestations and personal attributes about themselves which would be used to prove identity. End users will be able to produce qualified electronic signatures and seals (QES) using an EUDI Wallet.

According to current ARF version, who can be a User of an EUDI Wallet by citizens depends on national law and will not be mandatory.

2. EUDI Wallet Providers

They are Member States or organizations mandated or recognized by Member States that make the EUDI Wallet available to End Users. The terms and conditions of the mandate or recognition would be determined by each Member State.

EUDI Wallet Providers are responsible for ensuring compliance with the requirements.

3. Person Identification Data Providers (PID)

PID providers are trusted entities and are responsible for verifying the identity of the EUDI Wallet user, maintaining an interface to securely provide PID to the EUDI Wallet, and making information available for Relying Parties to verify the validity of the PID, without receiving any information about the PID's use.

4. Trusted List Providers

In specific cases, the status of a role in the EUDI Wallet ecosystem may need to be verified. Such roles are:

- EUDI Wallet Providers
- Person Identification Data Providers
- Qualified Electronic Attestation of Attributes (QEAA) providers
- Qualified certificate for electronic signature/seal (QC) providers
- Relying Parties
- Non-qualified Electronic Attestation of Attributes (EAA) providers
- Non-qualified certificate for electronic signature/seal providers
- Providers of other Trust Services
- Catalogue of attributes and schemes for the attestations of attribute providers

5. Electronic Attestation of Attributes (QEAA) Providers

These can be providers either of Qualified or Non-qualified Electronic Attestation of Attributes.

Qualified EAA are provided by QTSPs. QEAA providers maintain an interface for requesting and providing QEAs, including a mutual authentication interface with EUDI Wallets and potentially an interface towards Authentic Sources to verify attributes. QEAA Providers provide information or the location of the services that can be used to enquire about the validity status of the QEAs, without having an ability to receive any information about the use of the attestations.

Non-qualified EAA can be provided by any Trust Service Provider. While they are supervised under eIDAS, it can be assumed that other legal or contractual frameworks than eIDAS mostly govern the rules for provision, use and recognition of EAA.

6. Qualified and Non-Qualified Certificate for Electronic Signature/Seal Providers

The EUDI Wallet enables the user to create qualified electronic signatures or seals. This can be achieved in two ways:

- The EUDI Wallet is certified as a qualified signature/seal creation device (QSCD),
- It implements secure authentication as a part of a local or remote QSCD managed by a QTSP.

7. Providers of other Trust Services

Providers of other qualified or non-qualified Trust Services such as timestamps. May be further expanded in future versions of the ARF.

8. Authentic Sources

Authentic Sources are the public or private repositories or systems recognized or required by law containing attributes about a natural or legal persons. Authentic sources are sources for attributes on address, age, gender, civil status, family composition, nationality, education and training qualifications titles and licenses, professional qualifications titles and licenses, public permits and licenses, financial and company data.

Authentic Sources are required to provide interfaces to QEAA Providers to verify the authenticity of the above attributes, either directly or via designated intermediaries recognized at a national level.

9. Relying Parties

Relying Parties are natural or legal persons that rely upon an electronic identification or a Trust Service. Relying Parties need to maintain an interface with the EUDI Wallet to request the necessary attributes within the PID dataset with mutual authentication. Relying parties are responsible for carrying out the procedure for authenticating PID and (Q)EAA.

10. Conformity Assessment Bodies (CAB)

The EUDI Wallets must be certified by accredited public or private bodies designated by Member States. QTSPs need to be audited regularly by Conformity Assessment Bodies (CABs).

11. Supervisory Bodies

The supervisory bodies are notified to the Commission by the Member States, which supervise QTSPs and act, if necessary, in relation to non-qualified Trust Service Providers.

12. Device Manufacturers and Related Entities

EUDI Wallets will have a number of interfaces with the devices they are based on, which may be for purposes such as local storage, online Internet access, sensors such as smartphone cameras, IR sensors, microphones, etc, offline communication channels such as Bluetooth Low Energy (BLE), WIFI Aware, Near Field Communication (NFC) as well as emitters such as screens, flashlights, speakers etc, and smart cards and secure elements.

13. Qualified and Non-Qualified Electronic Attestation of Attributes Schema Providers

(Q)EAA Schema Providers publish schemas and vocabularies describing (Q)EAA structure and semantics. It may enable other entities such as Relying Parties to discover and validate (Q)EAA. Common schemas, including by sector-specific organizations are critical for widespread adoption of (Q)EAAs.

14. National Accreditation Bodies

National Accreditation Bodies (NAB) under Regulation (EC) No 765/2008 are the bodies in Member States that perform accreditation with authority derived from the Member State. NABs accredit CABs as

competent, independent, and supervised professional certification bodies in charge of certifying products/services/processes against normative document(s) establishing the requirements (e.g., legislations, specifications, protection profiles). NABs monitor the CABs to which they have issued an accreditation certificate.

2. STAKEHOLDERS IDENTIFICATION

One of the main goals of the internal and external collaboration and alignment processes foreseen in the project is the coordination with European bodies and institutions, the eIDAS Expert Group, as well as coordination with other ongoing cross-border initiatives (other eIDAS consortia, EBSI, etc.). In addition, internal coordination within DC4EU LSPs and WPs is required to synchronise the actions and disseminate the volume of new knowledge and information resulting from the above-mentioned planned collaborations with external partners. A prerequisite for the progress of external and internal collaboration is to identify the possible stakeholders in order to establish the necessary relationships and communication channels that will drive the collaboration processes.

This section is structured in two parts and describes the initial results of the work that has been and will continue to be done throughout the project to identify and enrich the pool of the external collaboration stakeholders, as well as the internal partners and WPs along with the most suitable channels, links and collaboration processes.

2.1 External Stakeholders

Stakeholder identification and engagement is a critical first step in selecting the right stakeholders to work with, ensuring their participation and contribution to the DC4EU project, or channelling project feedback to specific activities as appropriate. To improve the identification and recording process, and to broaden the range of their characteristics to facilitate their subsequent engagement process, a stakeholder's typology has been developed. Using this typology, the initial pool of external stakeholders has been defined including the most significant and promising collaboration stakeholders. In the typology, stakeholders fall within five main groups of actors: Public (Government, Research), Community/ Hub, NGO/Non-Profit, Private (Business) and Project-based. Diving into deeper aspects of each group, stakeholders are categorized by ten stakeholder roles. The table below shows the typology used to classify stakeholders.

Role / Type	Public	Community / Hub	NGO / Non-Profit	Business	Project
Tech Provider	Yellow	Blue	Green	Orange	Purple
EUDIW Consortia					Purple
Policy Maker	Yellow		Green		
Standardization Body	Yellow	Blue	Green	Orange	
Business Entity		Blue	Green	Orange	

Role / Type	Public	Community / Hub	NGO / Non-Profit	Business	Project
Research	Yellow	Blue	Green	Orange	Purple
Educational UC	Yellow	Blue		Orange	
Social Security UC	Yellow	Blue		Orange	Purple
Consulting			Green	Orange	
Legal Advisor			Green	Orange	

The identified stakeholders are selected based on their potential contribution to the objectives of the project and, more generally, to the achievement of the objectives for the development of a robust and user-friendly European digital wallet. Another criterion of the selection process was the assessed ability for productive and meaningful cooperation between each stakeholder and our project. It should be noted that this is a preliminary list of stakeholders, which will be enriched throughout the development of the project.

Type	Stakeholder	Type	Level	Notes
Tech provider				
	EBSI	Public, Community	European	
Policy Maker				
	DG-CNECT	Public	European	
	DG-DIGIT	Public	European	
	DG-GROW			Mostly because of the SDG regulation and the OOTS
EUDIW Consortia				
digital-2022-deploy-02-electronic-id	EWC	Project	European	
	POTENTIAL	Project	European	
	NOBID	Project	European	
digital-2022-deploy-02-ebsi-services	EBSI-NE	Project		The project is about the development and adoption of the EBSI network at the European level by increasing the number of validator nodes in the production

Type	Stakeholder	Type	Level	Notes
Standardization Body	EBSI- VECTOR	Project		network and the provision of support services for all relevant EBSI stakeholders. The project will leverage the current EBSI capabilities and service around blockchain technology and the concept of Verifiable Credential (VC) and Self-Sovereign Identity (SSI) to reiterate and scale up education and define social security use cases in real-life production giving the data control back to the citizen.
	TRACE4EU	Project		Trace4EU stands for (T)raceability (R)eference (A)pplication (or (A)rchitecture) (C)onformant (E)BSI for European Union.
	ISO	Public	International	Mostly because of ISO 18013-5 & 18013-7
	ETSI	Public	European	Identification of existing European and international standards and gaps requiring standardization to support the EUDI Wallet
	CEN / CELENEC	Public	European	Identification of existing European and international standards and gaps requiring standardization to support the EUDI Wallet
Research	OpenID Foundation	Community / Hub	International	Mostly because of OpenID for Verifiable Credential & SIOP v2
	FIDO Alliance	Community / Hub	International	
	Cloud Signature Consortium	Community / Hub	International	Access to remote QSCDs via the Cloud Signature Consortium API
	GLASS	Project		EU H2020 research project to develop a Ledger based wallet
	IMPULSE	Project		EU H2020 funded project which focuses on AI and blockchain disruptive technologies and their impacts on eID.
	eSSIF-Lab	Project		Project Closed
	DE4A	Project		Project Closed
	OpenWallet Foundation	Project		

Type	Stakeholder	Type	Level	Notes
Educational UC	Trust Over IP Foundation	Project		
	European Student Card Initiative (ESCI)			
	European Digital Student Service Infrastructure (EDSSI)	Project		
Social Security UC	International Student Identity Card		Community	
	EESSI			
	ESSPASS			
	European Health Insurance Card (EHIC)			

2.2 Internal DC4EU Stakeholders

EU institutes, public administrations, business, legal frameworks, regulations, and associations are not the only source of information in defining the DC4EU development process. Consortium partners are also natural members of the stakeholders group as they are leading the processes by providing insights and connections and dealing with external stakeholders.

The following Work packages are of particular interest:

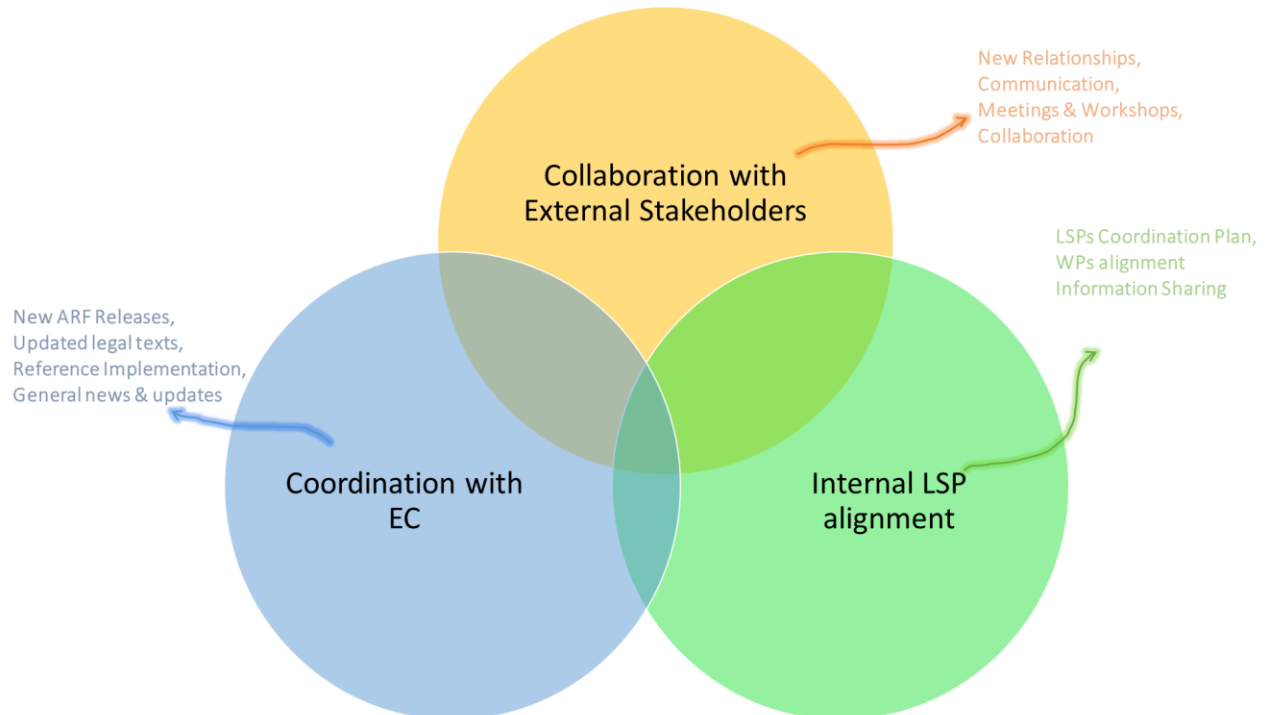
- **WP2**, which covers the core planning, design and analysis activities and the alignment with the Architecture Reference Framework.
- **WP4**, which is responsible for providing an implementation toolbox for stakeholders ensuring the complete functionality of the EUDIW and including the analysis of legal framework regarding onboarding of all actors presented in the ARF.
- **WP5** and **WP6**, that support the business domain UCs by addressing the Architecture Reference Framework (ARF) including onboarding proceedings, identifying business requirements, implementing interfaces for credential issuers, comprehensive business process testing of the target systems and the evaluation of processes.

- **WP7**, which is responsible for the development of an eIDAS compliant toolkit for (Q)EAA providers and relying parties, as well as its continuous integration with the wallet releases.
- **WP8** is responsible of establishing an ecosystem governance framework for DC4EU consortium use cases (education and social security). It identifies necessary guidelines, policies, and regulatory frameworks both in national and cross-border levels.
- **WP9**, which is responsible for promoting the development and deployment of use-cases in pilot sites involving both public and private sector stakeholders and ensuring the maximum visibility and awareness of the new European Digital Identity ecosystem, through widespread communication activities with existing stakeholders and public audience. It is also responsible for sharing inter-project information and updates (such as an internal newsletter).

3. ENGAGEMENT APPROACH

3.1 Overall Approach

The collaboration and coordination efforts have three main components, namely: (1) Coordination with EC, (2) Collaboration with external stakeholders and (3) Internal LSP alignment. Each component targets a different set of stakeholders and produces specific outputs that overall contribute to the objectives of the Work Package and the project.



3.1.1 Coordination with EC

For the first component, bidirectional activities between DC4EU and the EC will take place focusing on communication with relevant EC services and DGs, covering aspects from legal, policy and governance to functionality and security of the wallet, technological and architectural choices. The main contributions concern feedback to:

- The work carried out by the eIDAS Expert Group towards the eIDAS Toolbox and the ARF;
- The reference wallet iterative releases;
- The eIDAS related implementing acts.

The DC4EU team can contribute actively to the eIDAS Expert Group towards the ARF and the releases of the eIDAS reference wallet, building on the direct participation of several project partners' representatives in the eIDAS Expert Group as well as in the technical groups that are supporting the Reference Implementation development (touch-point meetings between the contractor of the reference wallet implementation and national experts and meetings of the Developers' Community where LSPs will also be invited to participate). During the project's execution period, DC4EU partners will channel findings and lessons learned on the user journeys of the academic and social security LSPs for improvements in successive releases of the reference eIDAS wallet.

Output from this component includes informative packages about iterative releases of the eIDAS ARF and the reference wallet application, presentations of the latest release of the ARF, internal training workshops and support services for LSPs (in close collaboration with WP2 and WP7), as well as newsletters and internal synchronous and asynchronous communications.

3.1.2 Collaboration with external Stakeholders

This component includes the establishment of new relationships with different types of external stakeholders that have been identified as potential partners of DC4EU including cross border initiatives such as EBSI, other eIDAS LSPs, Single Digital Gateway (SDG), existing EC's Building Blocks, and related domain initiatives and related services such as European Student Card Initiative, Europass and European Digital Credentials and European Social Security Pass (ESSPASS). The pool of external stakeholders will be extended and maintained throughout the duration of the project and will be included in the final version of Deliverable D3.1.

Depending on the type and nature of each stakeholder (see section 2.2) and the state of progress of the DC4EU LSP, the types of engagement activities will vary from one-to-one, physical or virtual meetings to joint workshops or joint teams of collaboration on specific technical issues. More details of the possible types of engagement are presented in more detail in section 3.2.

Output from this component includes liaison with other wallet project and consortia, joint activities and workshops with other EUDIW LSPs and meetings with external stakeholders that are having special interest for our project, as well as, other networking and cohesion activities, including participation in working groups and communities of practices and projects.

3.1.3 Internal LSP alignment

For internal coordination and alignment between the project partners, it is highly important to better understand the relationship between the project WPs and their intervention points. Accordingly, internal stakeholders who have taken on technical tasks, need to have a clear view of how their work interacts with the work of other technical WPs, what their expectations of other partners are, and what the current state of development is in other WPs.

In order to achieve the above objectives and to establish a knowledge sharing mechanism within the project, it is proposed to establish a monthly internal newsletter whose content will be agreed upon by all partners and shared with the whole consortium. In addition, it is proposed to hold specific technical

workshops between the technical WPs of the project to achieve the necessary shortening and cooperation. A matrix of the common expectations and offerings between all WPs is to be developed during these workshops in order to reveal the intervention points as an initial point of view to DC4EU Governance Model.

3.2 Engagement types

3.2.1 One to One Meetings

During the collaboration and engagement activities, the DC4EU Project will seek to contact various EU officials and experts which can bring collaboration and synergy possibilities. Accordingly, meetings with some of them will be organized in collaboration with WP9 and the Project Coordination Office (WP1). These one-to-one meetings will mostly take place online, but physical meetings could also be organized if necessary.

3.2.2 Joint Meetings

Identified private and public stakeholders who are representing business, government and research will be approached mainly by consortium partners' connections, proposed by experts, the WP1 Project Management and coordination team (WP1 Leader) and the Communication and Dissemination Coordinator's (WP9) communication database. Ad-hoc joint meeting with participation from one or more stakeholders will be organized to discuss common topics and share best practices.

3.2.3 Workshops

Workshops are another type of engagement activity, organised with the participation of a relatively small group of people and usually focused on a specific domain or topic. In the case of DC4EU, possible workshops can be organised with other EUDIW consortia, other wallet-related research projects, communities or hubs. Workshops with other EUDIW consortia will cover different dimensions (technical, business, user engagement and user experience, among other critical aspects of the pilot) according to the phase of the EUDIW LSPs and the common topics of interest for collaboration. Workshops with external projects, communities or hubs will mainly focus on knowledge exchange and sharing of good practices in order to facilitate the development of the DC4EU LSP and to disseminate the acquired knowledge and experience.

Workshops will be also organized inside DC4EU in order to align the work of technical WPs and review the status of the development activities.

3.2.4 Networking and cohesion activities

Including participation in conferences, communities of practices and projects.

4. ACTION POINTS AND KPIS

The plan for cooperation and coordination will be substantiated through the development of specific actions and the adoption of key performance indicators. The actions listed in the following subsection are grouped into 3 main components, which are aligned with the strands of the overall engagement approach described in section 3. It is emphasised that, as foreseen in the description of the Work Package, these actions are not static and are subject to possible revisions during the implementation of the project. The possibility of changes and updates is reinforced by the current delay in the publication of new versions of the ARF and the lack of details on the feedback channels to be used, as well as the tools and platforms through which the envisaged reference implementation will be published and managed.

4.1 Action Points

	What	Who / Partner	When / Frequency	How / Channel
C1	Component 1 – Collaboration with EC			
C1.1	Attend eIDAS Expert Group and Coordination Group Meetings and keep a record of important information <u>that can be shared</u> with the rest of the partners.	GRNET	According to the schedule of the EG & Coordination Meetings	
C1.2	Contribute to ARF development by collecting DC4EU feedback and posting it on the ARF Feedback Platform (possibly GitHub)			
C1.3	Contribute to the ARF development by collecting DC4EU feedback on ARF backlog EPICs prioritization and sharing it with the eIDAS EG and the Commission.			
C1.4	Organize and attend meetings with the Wallet Reference Implementation Contractor			
C2	Component 2- Collaborate with external stakeholders			
C2.1	Organize Meetings with other Wallet Consortia to discuss and promote common positions			
C2.2	Organize joint workshops with other Wallet Consortia to exchange views and demonstrate progress			
C2.3	Organize Meetings with Stakeholders that can contribute to the Educational Credentials LSP			
C2.4	Organize Meetings with Stakeholders that can contribute to the Social Security LSP			
C2.5	Liaison with other European projects			

What	Who / Partner	When / Frequency	How / Channel
C3 Component 3 – Internal DC4EU Alignment			
C3.1		Monthly	Emails
C3.2	ATOS	With every new release of the ARF	Project SharePoint / Emails
C3.4			

4.2 KPIs

KPI	Metric	M24
1	Participation and Contributions/Feedback from DC4EU partners to the eIDAS Expert Group & Coordination Group on ARF and Wallet Reference Implementation or other relevant topics	20
2	Presentation of main updates and important announcements from the ecosystem & the Coordination Group Meetings	12
3	Number of interactions with EC bodies and entities with participation from WP3 and other DC4EU partners	10
4	Analysis and identification of major changes in iterative releases of the ARF	6
5	Number of meetings/workshops with other wallet related Consortia and projects	6
6	Number of participants in workshops with other wallet related Consortia and projects	60
7	Number of DC4EU Internal alignment newsletters	10
8	Number of DC4EU Internal alignment workshops	6

5. REPORTING ON THE FIRST ACTIVITIES THAT HAVE ALREADY TAKEN PLACE

The following table shows the first collaboration and alignment activities that took place from the beginning of the project since the completion of this report (01/10/2023).

Date	Event	Type	Type / Place
2023-03-20	1st Coordination meeting	Coordination with EC	Online
2023-05-25	Inter-project alignment DC4EU Kick-off meeting (Madrid)	Inter-project alignment	Physical / Madrid
2023-06-28	2nd Coordination meeting	Coordination with EC	Online
2023-06-28	Preparation Meeting with EWC	Collaboration with External Stakeholders	Online
2023-07-01	1st DC4EU Technical Workshop (Würzburg)	Inter-project alignment	Hybrid / Würzburg
2023-07-21	Meeting with DG-Connect 21/07/2023	Coordination with EC	Online
2023-09-21	Meeting with DG-Connect 21/09/2023	Coordination with EC	Online
2023-09-26	2nd DC4EU Technical Workshop (Athens 26&27/09/2023)	Inter-project alignment	Hybrid / Athens
2023-09-28	Preparation meeting with GLASS project	Collaboration with External Stakeholders	Online