National and European Objectives

Indicatore		Digital Compass 2030	Italia digitale 2026
Digital Identities % population		**80%**	**70%**
Digital skills, % population		**80%**	**70%**
Cloud adoption, %		**75%** private organizations	**75%** Public Service Organizations
Digitization of the Public Services, % basic public services availability		**100%**	**80%**
Ultra-broadband connections, % families		**100%**	**100%**

1) Residenti 16-74 anni

SPID

→ **P**ublic **D**igital **I**dentity **S**ystem.
→ Over **39 millions of identity** provided to citizens.
→ Over **72 million accesses per month**.
→ **12 Identity Providers.**
→ **+33000 Service Providers**.
→ Go live in 2017 with SAML2.
→ Adopted OpenID Connect in 2022.
→ Governance by a National Agency (AgID).

CIE id

→ **E**lectronic **I**dentity **C**ard.
→ Over **44 millions of identity** provided to citizens.
→ **30 million accesses (+130%)** "year to date" and over **7 million accesses** in the last month.
→ **1 Identity Provider**.
→ **+14000 Service Providers**.
→ Go live in 2019 with SAML2.
→ Adopted OpenID Connect in 2022.
→ Go live in 2023 with OpenID Connect
→ Governance by Ministry of Interiors, IPZS is the supplier

IT-Wallet

→ Officially **established in March 2, 2024**
→ Legislative Decree No. 19/2024
→ New Article 64-quater into the Digital Administration Regulation ("CAD")
→ **Anticipates the release of the EUDI Wallet**
→ First pre-release in December 2024

Department for Digital Transformation

- *Leads national modernization through digital technologies.*

- *Supports the Presidency in promoting and coordinating government actions.*

- *Defines a unified strategy for digital transformation.*

- *Implements the Prime Minister's directives on digital matters.*

- *Coordinates national digitization programs.*

National Priorities in the field of the Digital Identities

Government of the preexistent national digital identity systems with the EU framework.
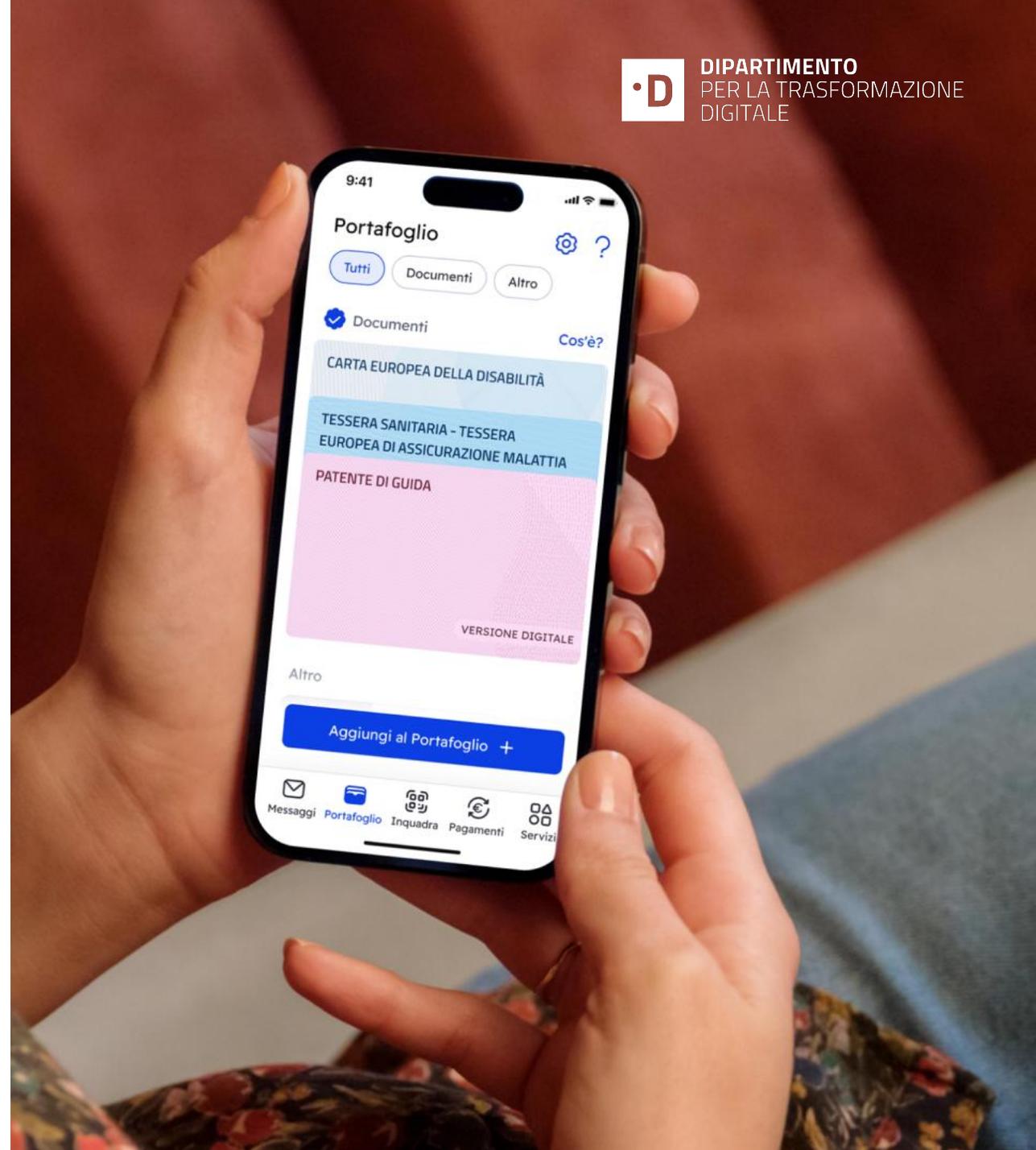
Technical advancements implementing the Digital Identity Wallet according to the **European Digital Identity Wallet**, introduced by the consolidation version of the eIDAS regulation (in force from 10 October 2024).

Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC
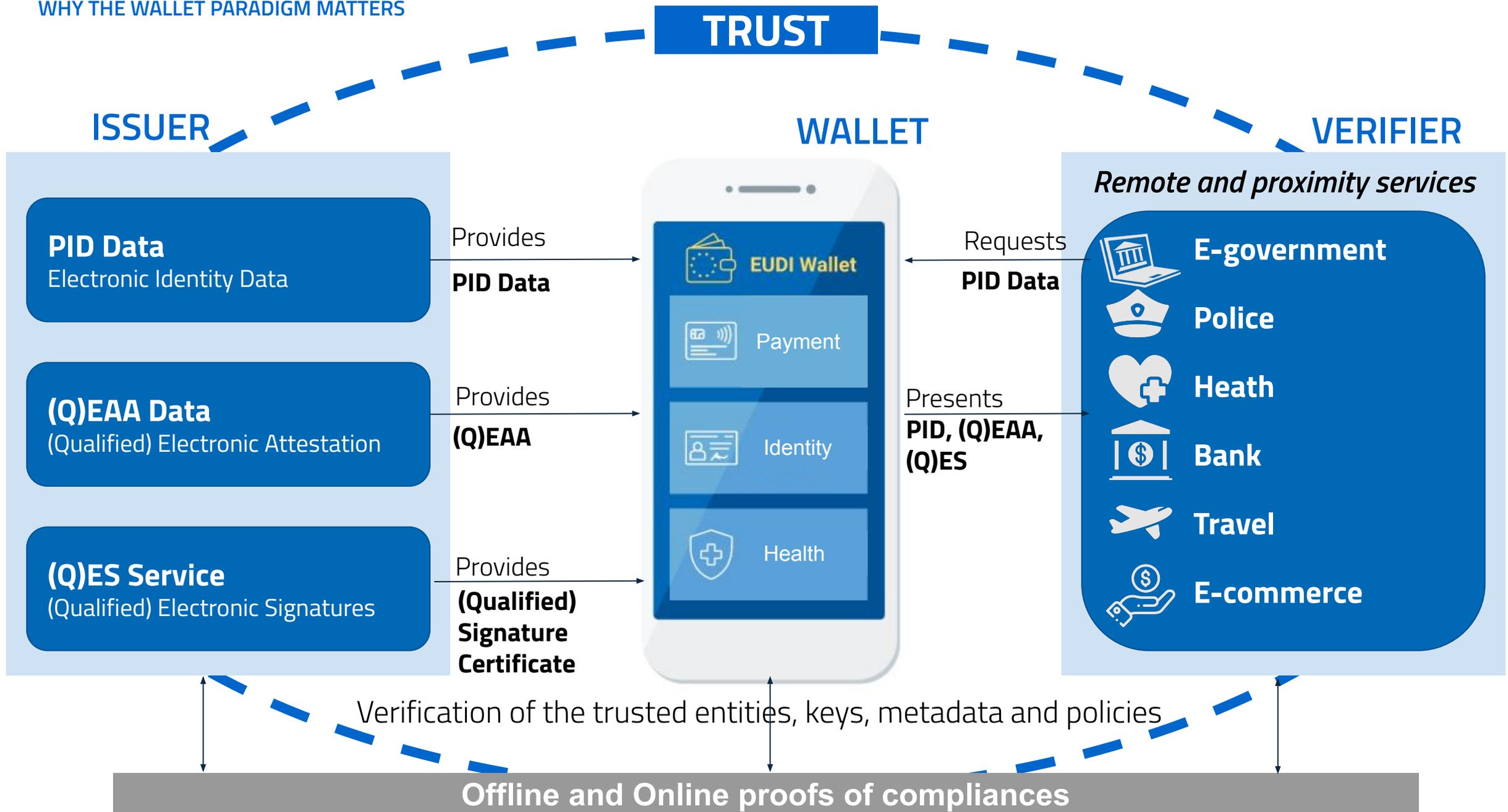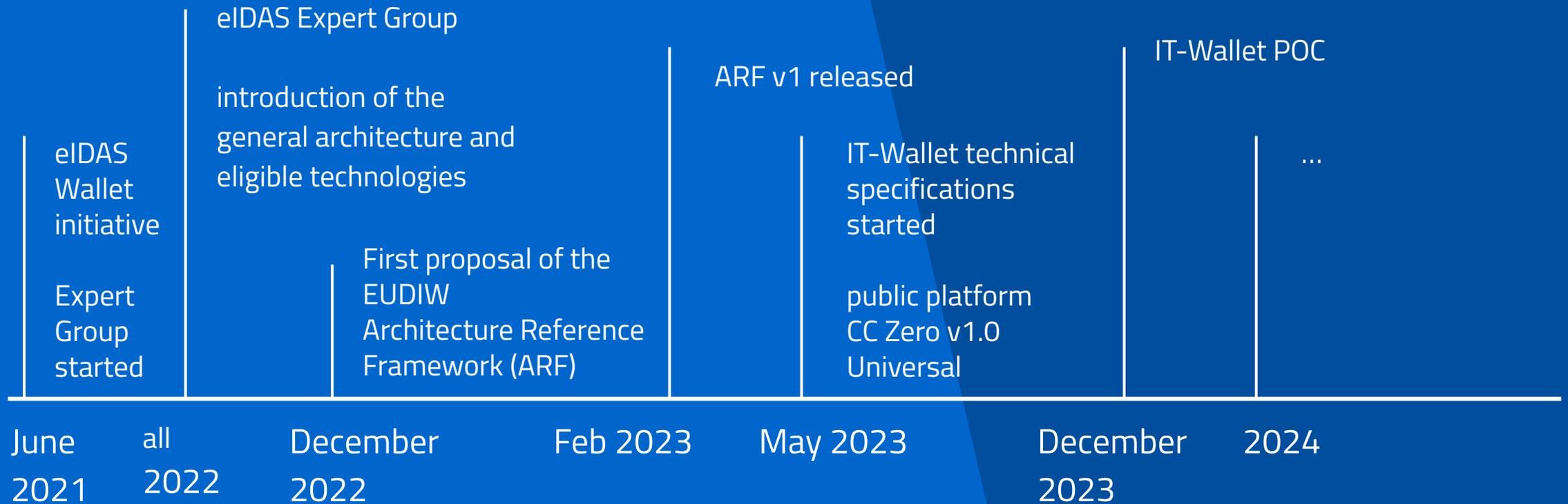
Today@TDI 2025

→ Why the **Wallet** paradigm matters
 ○ **benefits** introduced by its use

→ A bit of history from the last 3 years
 ○ **the work made so far** (timeline)

→ **IT-Wallet today**

→ **Roadmap** for 2025

→ **Implementations strategies** for organizations with deadlines

→ Open development platforms
 ○ and **open discussions**

TRUST

ISSUER   **WALLET**   **VERIFIER**

PID Data
Electronic Identity Data

(Q)EAA Data
(Qualified) Electronic Attestation

(Q)ES Service
(Qualified) Electronic Signatures

Provides
PID Data

Provides
(Q)EAA

Provides
(Qualified) Signature Certificate

EUDI Wallet

Payment

Identity

Health

Requests
PID Data

Presents
PID, (Q)EAA, (Q)ES

Remote and proximity services

E-government

Police

Heath

Bank

Travel

E-commerce

Verification of the trusted entities, keys, metadata and policies

Offline and Online proofs of compliances

The Evolution of IT-Wallet

eIDAS Expert Group

introduction of the
general architecture and
eligible technologies

ARF v1 released

IT-Wallet POC

eIDAS
Wallet
initiative

IT-Wallet technical
specifications
started

...

First proposal of the
EUDIW
Architecture Reference
Framework (ARF)

public platform
CC Zero v1.0
Universal

Expert
Group
started

| June 2021 | all 2022 | December 2022 | Feb 2023 | May 2023 | December 2023 | 2024 |

DIPARTIMENTO
PER LA TRASFORMAZIONE
DIGITALE

The Digital Version of Documents Available for Citizens

23 OTT

6 NOV

20 NOV

4 DIC

50.000
citizens

250.000
citizens

1.000000
citizens

All the
citizens
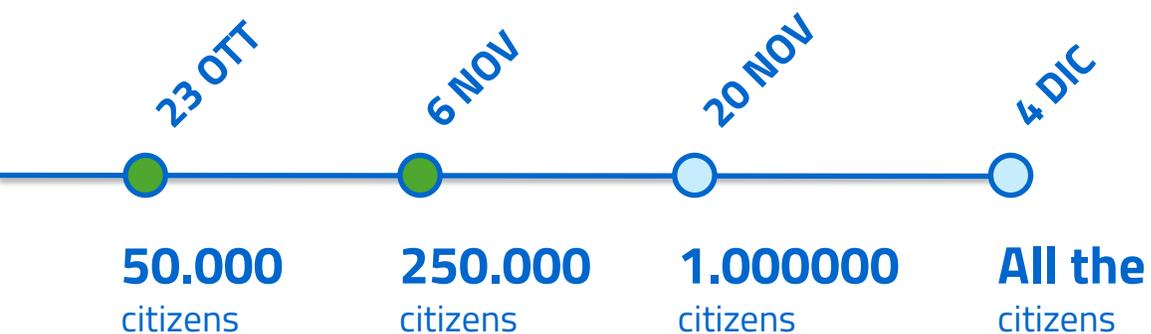
Number of activations completed: 3.622.122
Updated at 26/01/2025
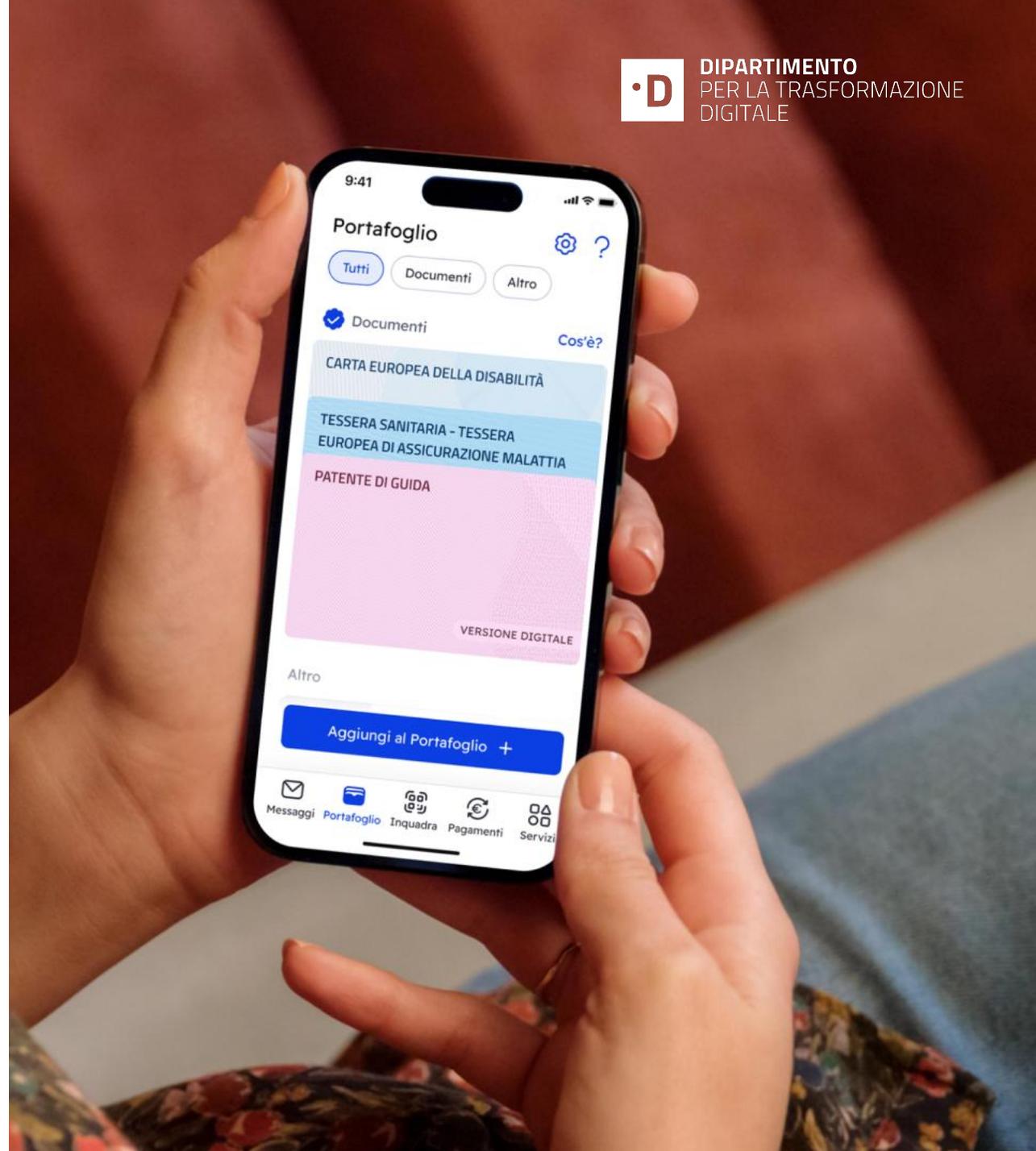
Documents in Digital Format

The IO App Wallet has evolved to include the digital version of the first three documents and to allow their easy and secure use, only for those who wish to activate them.

MOTORIZZAZIONE CIVILE

Mobile Driving License

→ It demonstrates to law enforcement the possession of a valid driving license

RAGIONERIA GENERALE DELLO STATO

Heath Card - TEAM

→ enables to collect medication at a pharmacy
→ enables eligibility for a medical service

INPS - MINISTERO PER LE DISABILITÀ

Disability Card

→ enable access dedicated services with discounts and/or benefits

2024

Documents in AppIO (Public Wallet Solution)

Codice dell'Amministrazione Digitale (CAD) art. 64-quater comma 7

2025

IT-WALLET Consolidation

Codice dell'Amministrazione Digitale (CAD) art. 64-quater

2026

EUDI-WALLET Adoption

Regolamento (UE) 2024/1183 del Parlamento Europeo e del Consiglio

Consolidation and Advancements

➜ **Security consolidation** enabling credential presentations
- ○ Wallet and credential revocation mechanisms signalling
- ○ Wallet Solution internal architecture
- ○ Data removal requests from Holder to Relying Parties
- ○ Test plans to facilitate technical onboarding

➜ **Offline use case**
- ○ ISO 18013-{5,7} verifier app implementation
  - ■ Issuance of X.509 certificates

➜ **Credential Issuance**
- ○ Credential Catalog proposal
- ○ Credential Offer for more flexibility in the discovery of new credentials

➜ **Continuous Integration** and alignments with:
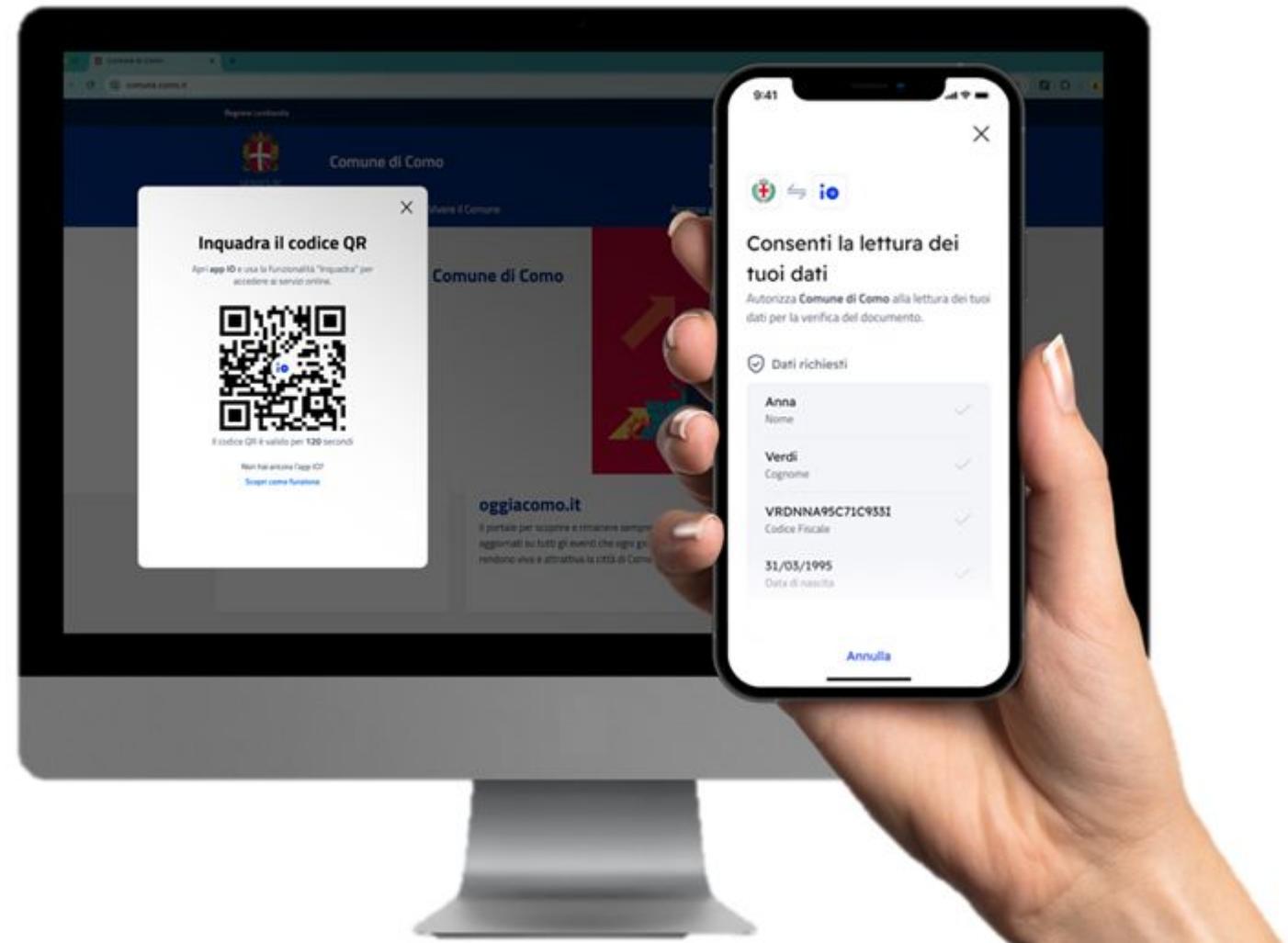- ○ IETF, OpenID, ISO, ETSI and CEN/CENELEC drafts.

Picture from freepik.com

What Does the Consolidation of IT-Wallet?

Engagement of Credential Verifiers (Relying Parties)

to **enable citizens** to

Access online and offline services of public administrations and the private sector.

New Credentials and Digital Documents.

What About Organizations With Deadlines?

- Legacy eID systems like SPID and CIE ID gained **significant benefits from using Relying Party intermediaries**:

    - the **role of the intermediaries is fundamental** to get thousands of Relying Parties ready with the Wallet authentication.
    - **Privacy and transparency to the User is a key element** when intermediaries are involved.

- **Opens Source strategy**, according CAD Art. 69 (national regulation on the reuse of software solutions):

    - It represents an **important costs cushion**
    - It **facilitates adoption** in both the public and private sectors
    - It complements technical specifications with **tangible, assessable products**

Technical Topics that Matters to Evolve Wallets

- **Relying party authentication and policies** (over-asking reduction)
  - Trust infrastructure using eIDAS Trusted Lists (XML) and X.509 Certificates:
  - Registration Certificates (X.509 Certificates)
  - Access Certificates (not necessarily X.509, JWS may be enabled)
- **Post-quantum cryptography** (PQC)
- **Zero-knowledge proofs** (ZKP):
  - Advanced cryptography and innovations in the credential data formats (overcoming traceability, enabling privacy preserving age verifications and other proofs...)
- **Pseudonymization**
  - Facing limits in WebAuthn, alternatives may be evaluated
- **Advanced Credentials Use Cases**: Credential Sharing (not presentation!), **Delegation**, Power of Attorney.
- New approaches for **cryptographic material issuance and lifecycles**
  - Hierarchical Deterministic Keys
  - Asynchronous Remote Key Generation (ARKG)

International and European Standardization bodies are working to provide standards in compliance with the eIDAS regulation requirements and with EUDIW deadlines.

Join the Discussions

- **eIDAS Architecture Reference Framework**
  - 159 public issues published on Github
  - EUDI Wallet Reference Implementation Roadmap

- **IT-Wallet Technical Specifications**
  - 51 public issues published on Github
    - 5 issues work in progress in Milestone 0.9.1
    - 4 issues work in progress in Milestone 0.9.2, to be released the 15 February 2025
    - 17 issues in Milestone 1.0.0, to be released before the end of April 2025
    - 13 issues in Milestone 1.1.0
  - IT-Wallet Technical Specifications Development Board