

TOWARDS CBDC WALLETS THE eIDAS 2.0 PAYMENT-AUTHORIZING WALLET

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- Coming after Payment (X-Pay) wallets, Identity wallets are now on the eIDAS 2.0 horizon
“The vast majority of the needs of electronic identity and remote authentication remain with the private sector, in particular in areas like banking...” (eIDAS.2 Explanatory memorandum)
- This will facilitate the combination of identity, status and payment attributes in customer journeys, a step with far-reaching implications for service providers
- Retail CBDC developments are already in production in China and actively considered by the ECB. They will need mobile phone wallets but will also have to meet AML/CFT requirements, a fact positioning identity wallets as key tools for CBDC deployment

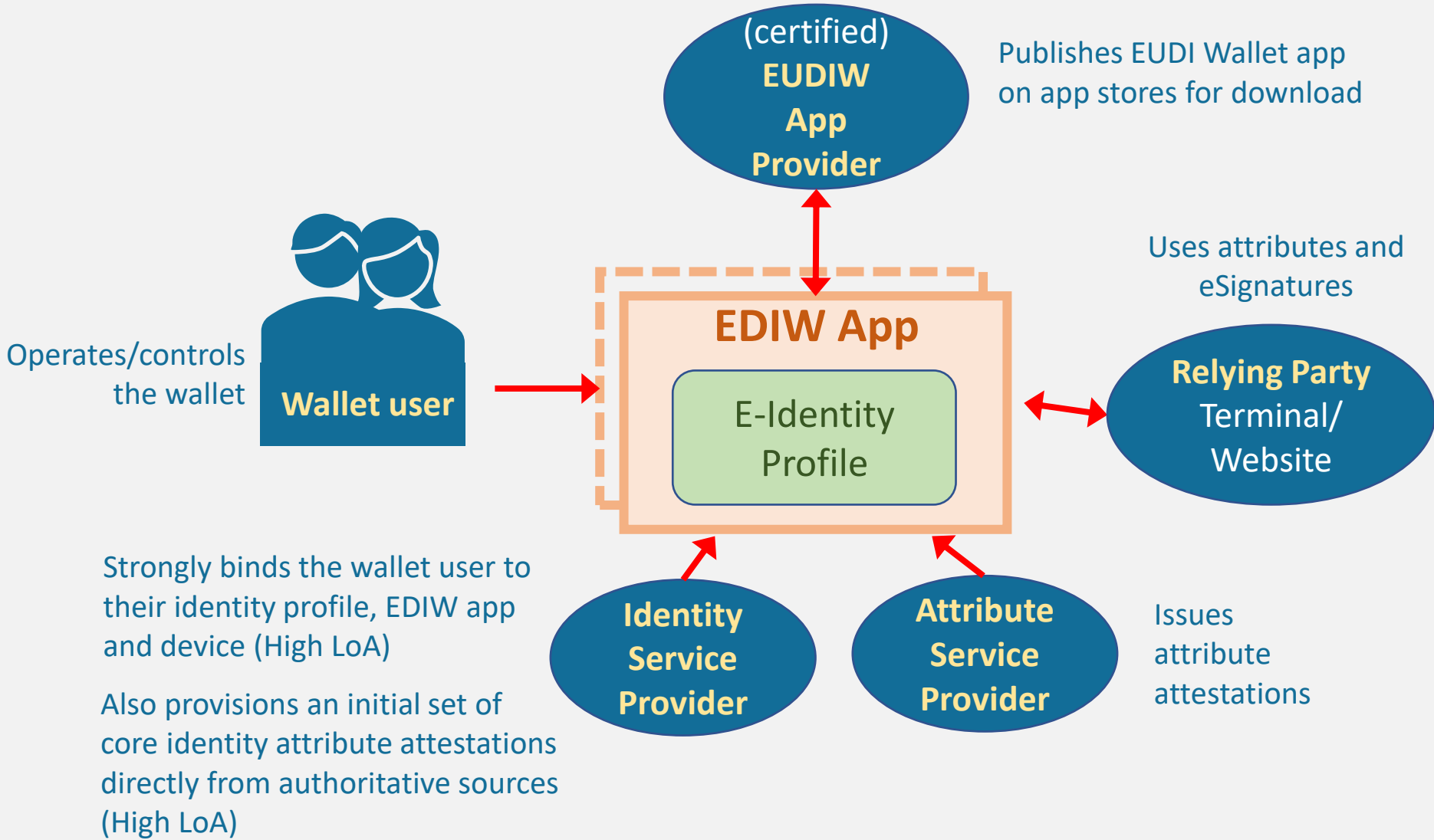
DIW
Attribute
Presenting

EU DIW
Payment-enabled
Contract signing

Extended DIW
CBDC-supporting
Offline balance

THE EUDIW
ECOSYSTEM
5 MAIN ACTORS

All actors operate autonomously within the trust framework.



MUST HAVES

Allow the communication of identity, status and other attested attributes

Issued or 'approved' by a Member-State

Offer High Level of Assurance (Identity attributes)

Put EDIW users in full control of EDIWs

Accepted for identity-proofing by relying parties offering financial and other key services as well as 'very large online platforms' (GAFAM + BATX)

Accept eAAs (electronically attested attributes) – Qualified and unqualified

Create Qualified Electronic Signatures/seals for legal irrevocability

Work offline as well as online

Support Strong Customer Authentication requirements (inc. for payment authorisation)

Strengthen privacy – Decentralized identity

Allow several identity profiles

Support CBDCs

NICE TO HAVES

- **All key service providers MUST accept EDIWs – including AML/CFT ‘Obligated entities’ (banks)**
 - Core EDIW identity attributes available for CDD purposes (EU AML draft regulation)
 - No need for Obligated entities to reverify identity when receiving EDIW attributes (High LoA)
- **Data providing side : Financial institutions can provide electronically attested attributes on EDIWs (IBAN, account information, etc)**
 - Unlikely to imply TSP status – EAAs rather than QEAs
- **For CDD processes : EDIWs will facilitate KYC/CDD data portability**
 - EDIWs are digital alternatives to official ID documents – facilitate customer onboarding
 - EDIWs avoid *Third party reliance* constraints (FATF recommendation 17)
- **EDIWs will authorize payments online and offline**
 - Structural impact on PSD2 SCA processes
 - ‘Redirection’ no longer needed (inconsistent with offline mode)
- **EDIWs will also help with future retail CBDC deployments**
 - CBDCs will need wallets – and robust ID credentials for AML/CFT purposes

- Presentation of the eIDAS Expert Group's understanding of EUDIWs
- Main use cases defined
 - Secure and trusted identification to access online services
 - Mobility and digital driving licence
 - **Payment authorisation**
 - Health
 - Education/diploma
- Defines key roles in the ecosystem (14 identified)
- Defines EDIW functional requirements
 - Perform electronic identification, store and manage [Q]EAAs **locally or remote**;
 - Request and obtain attestations from providers of PIDs and [Q]EAAs;
 - Selecting, combining and sharing PIDs and [Q]EAAs with relying parties;
 - **Mutual authentication between the EUDI Wallet and external entities**;
 - User interface supporting user awareness and explicit authorization mechanism;
 - Signing data by means of qualified electronic signature/seal;
 - Provisioning of interfaces to external parties.
- Outlines other non-functional requirements
 - eIDAS Article 8 – High LoA
 - Privacy by design, data minimisation, no usage tracking, etc.

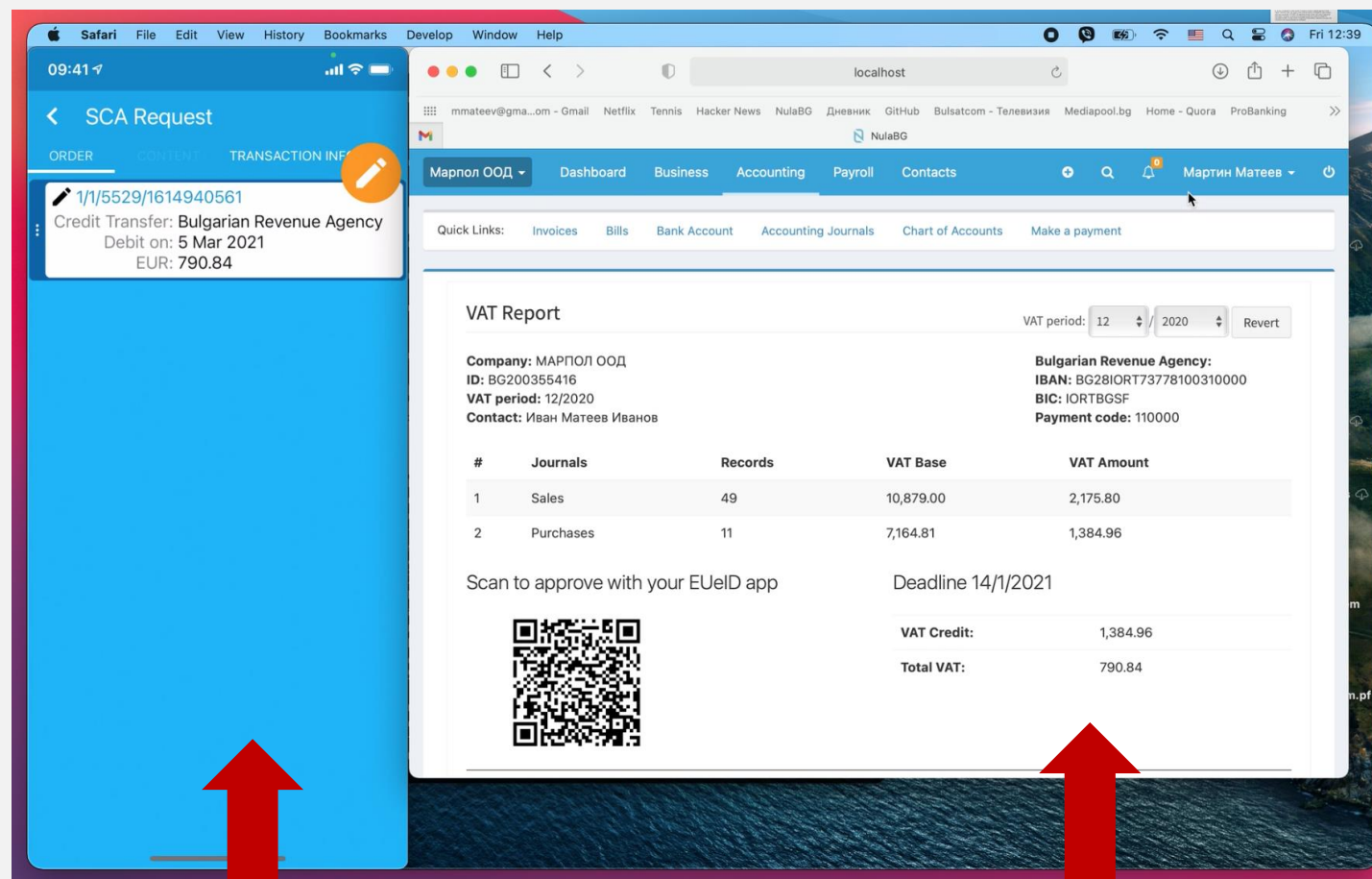
custodial wallet versus non custodial wallet is a critical point to be analysed

*The **mutual identification and authentication** capability shall cover both the EUDI Wallet end and the third party end [...] the EUDI Wallet may identify and authenticate itself or the user, however it shall be able to identify and authenticate the third party it is interacting with. Additionally, this mutual identification and authentication shall be **possible both online (over the Internet) and offline.***
(ARF Document – Section 4.4)

DEMO 1

[link to demo](#)

Developed in partnership with NulaBG Log-in and Authorise payments

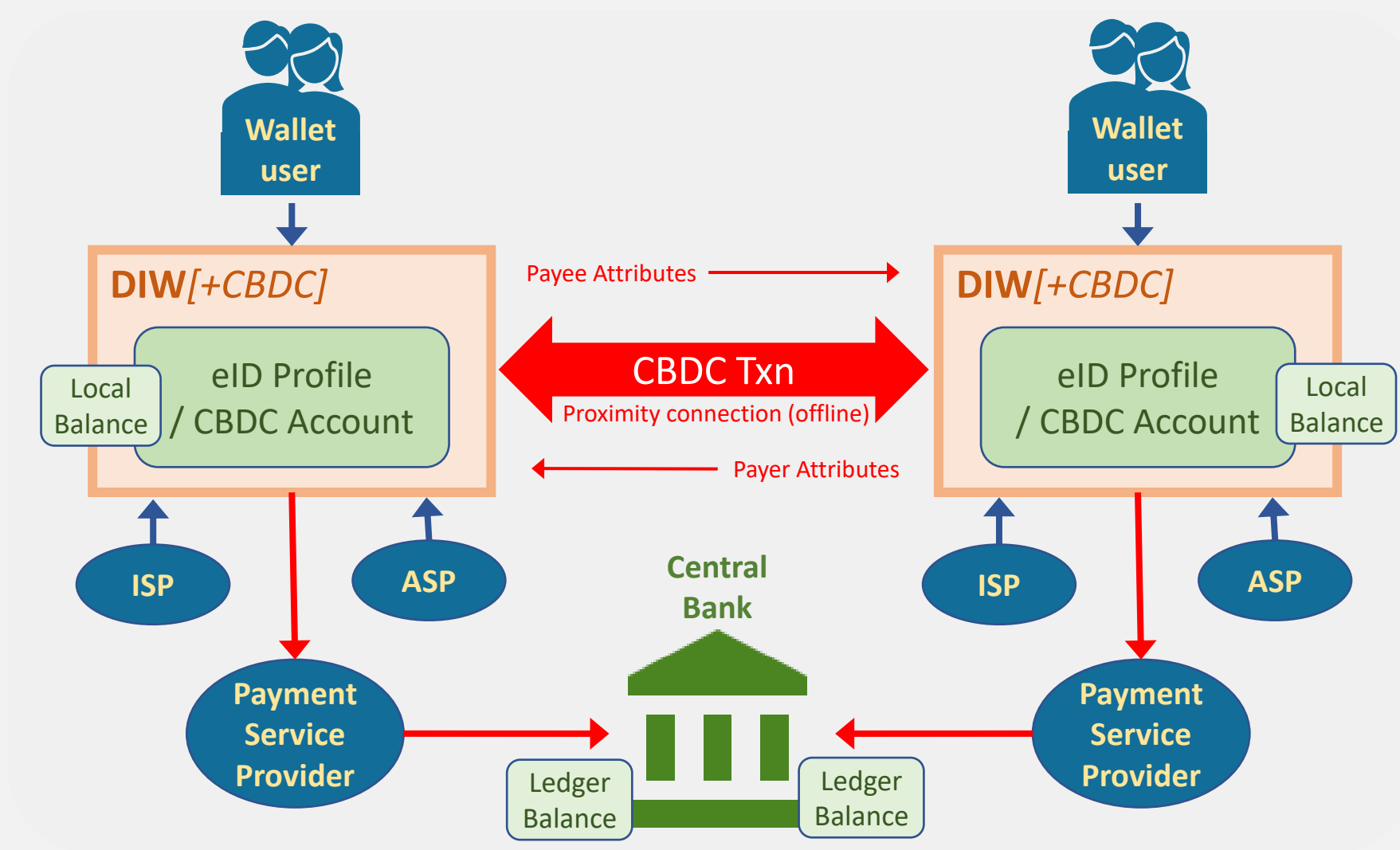


EUDI Wallet

NulaBG Business Banking website

Digital Identity is fundamental for Central Bank Digital Currencies

A CBDC wallet can be viewed as an enhanced Digital Identity Wallet (DIW).



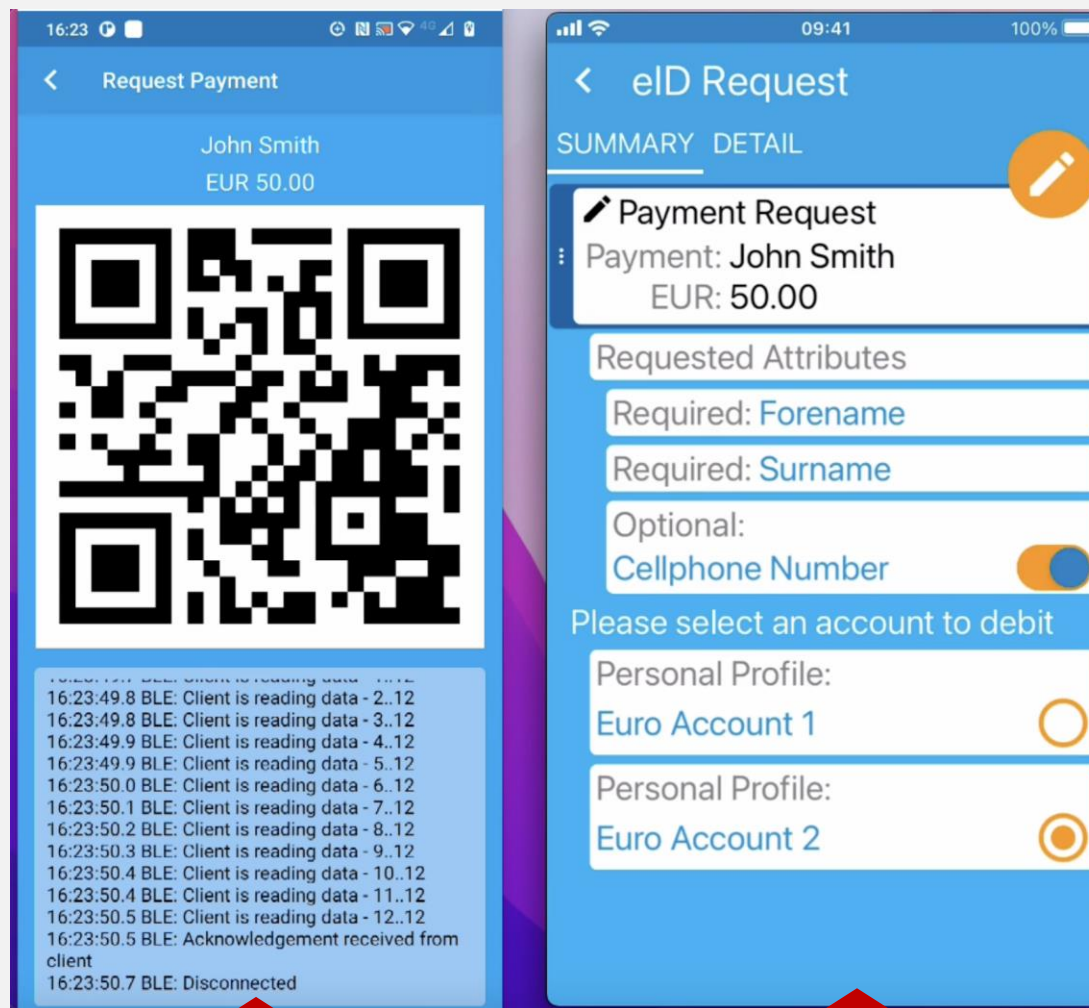
Attribute exchange (verifiable offline) can help 'cash like' CBDC transactions meet AML requirements whilst maintaining user privacy.

DEMO 2

[link to demo](#)

Person-To-Person Payment incl. Attributes

Proximity connection (offline)



PAYEE

[Extended] EUDI Wallet

PAYER

EUDI Wallet

Thank you for your attention

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