

## From eIDAS to eIDAS-2

*Austrian Experience, Opportunities and Challenges*

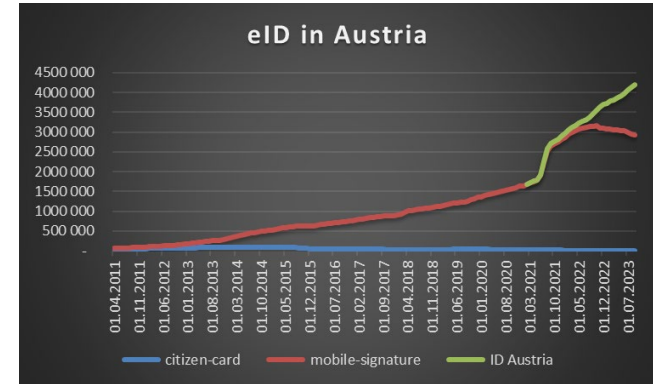


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- › What will eIDAS-2 Change?
- › Opportunities and Challenges?
- › Large Scale Pilot POTENTIAL
- › Summary

# Two main streams

- › eID (online) introduced 2005, which is
  - › technology neutral from its start
  - › voluntary and free of charge for both citizens and public/private services
  - › reached about 4 mio. mobile users
- › Identity platform (proximity) since 2022
  - › mobile driving license, age verification, further to come
  - › e.g., about 370 k mDLs issued



# eID Core Functions – *from the beginning 2005*

- › Unique and persistent identification
  - › rooted in Population Register or Supplementary Register
  - › sector-specific identifiers for enhanced privacy
- › Qualified electronic signatures
  - › already during login, but also for forms and transactions
  - › „Security Baseline“ of technical requirements
- › Electronic representation, mandates
  - › between natural or natural and non-natural persons
  - › bilateral or based on authentic sources

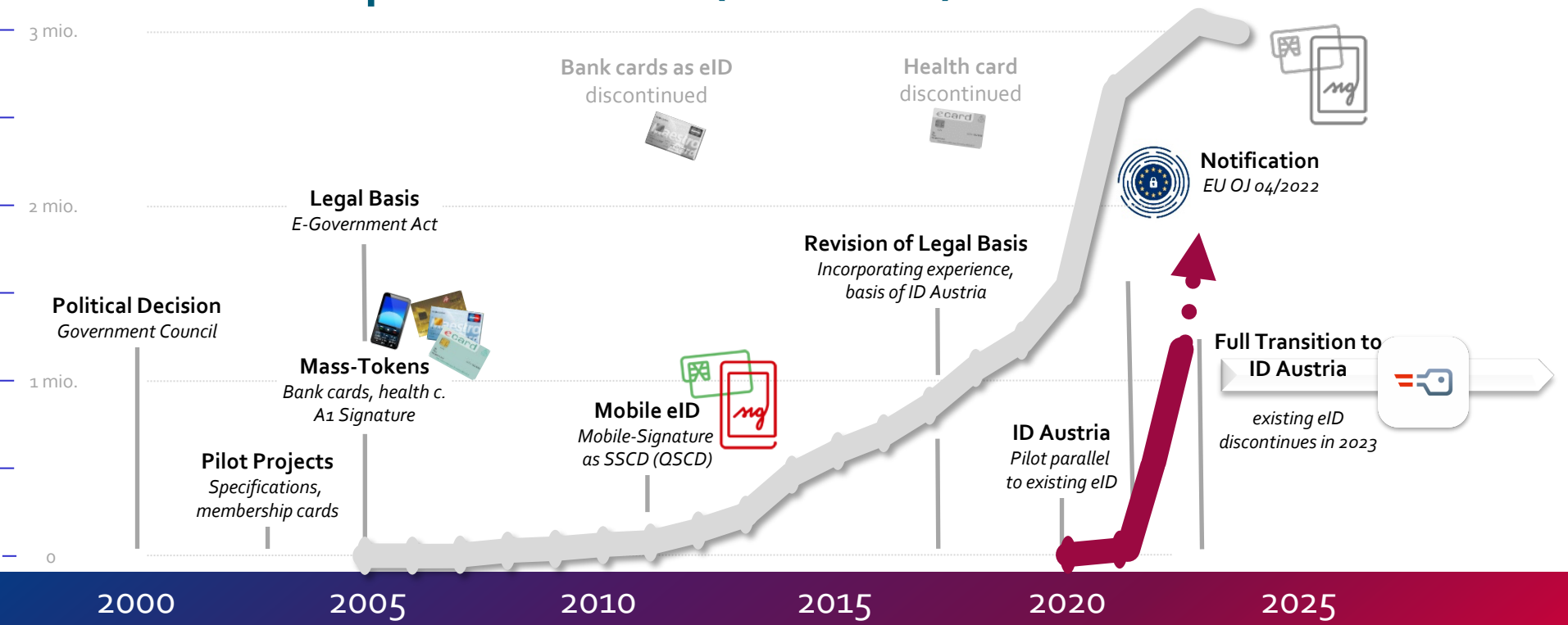


# Extended Functions *ID Austria* – since 2020

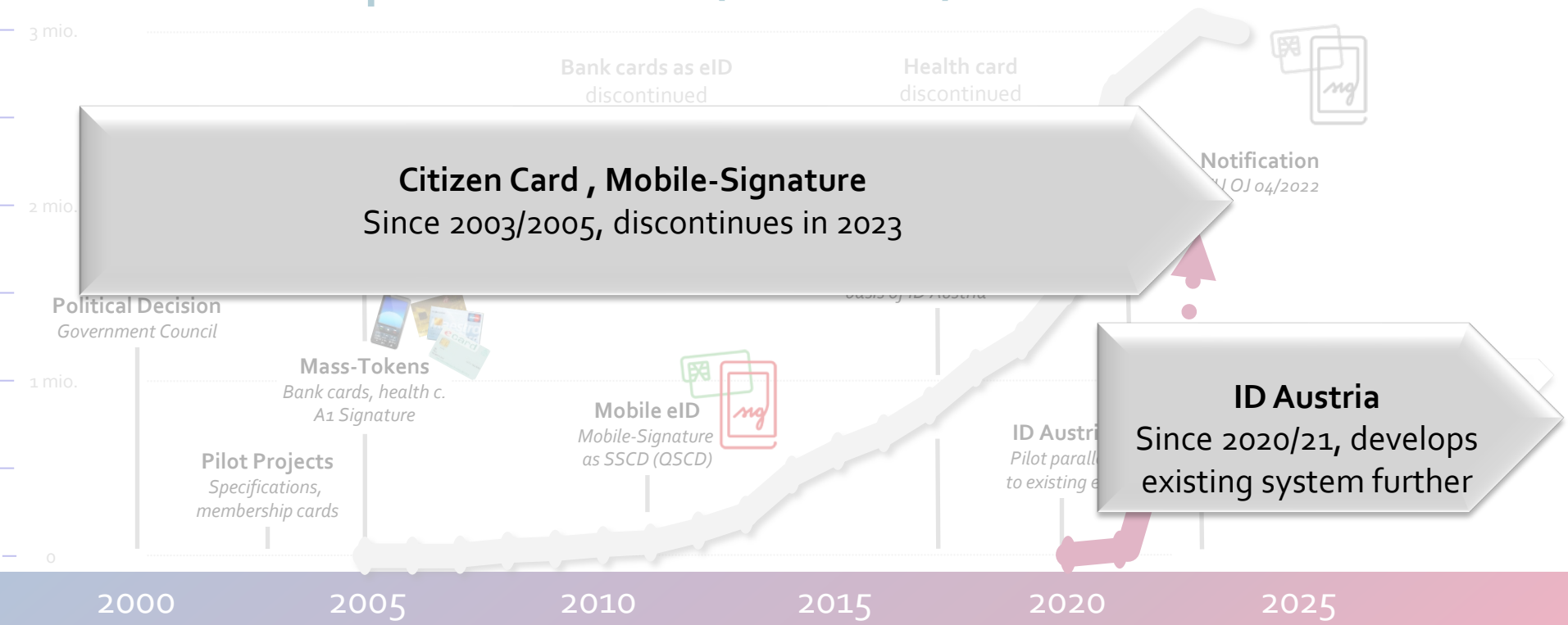
- › Emphasis on “Mobile First” Strategy
  - › continued focus on remote qualified signatures
  - › same-devices use, i.e. supporting mobile app processes
  - › but mindful of accessibility and inclusions, like PC alternatives
- › Extended Attribute set with once-only synergies
  - › freshly retrieved from authentic sources (registers)
  - › also a basis for loading proximity IDs like mDL
- › Notified under eIDAS at LoA high



# Development of (online) eID in Austria

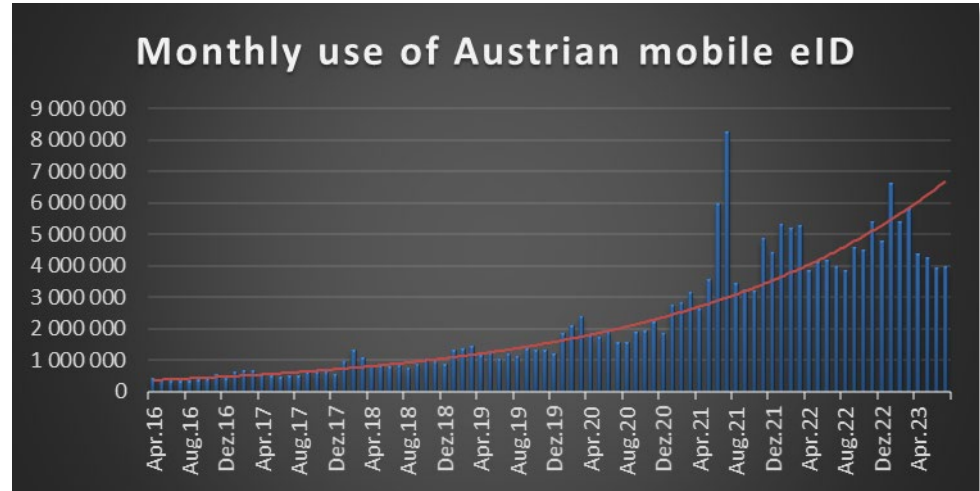


# Development of (online) eID in Austria



# Monthly Use of online eID

- › Highest activity in January to April
- › Peaks during Covid





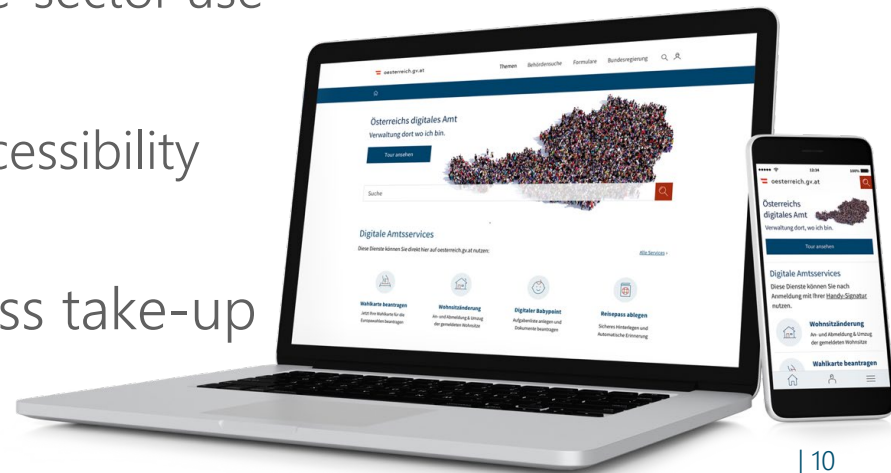
# Identity Platform (proximity)

- › Comprehensive architecture for mobile ID
  - › launched in 2022
  - › supporting proximity situations
- › Designed for arbitrary documents
  - › mobile driving licence since 10/2022 (370 k issued)
  - › age verification since 09/2023 (22 k issued)
  - › ... watch out for further to come soon
- › Particular focus on non-observability



# Summary of Austrian eID situation

- › Austria for a while has set into production ...
  - › an eID for online same-device and cross-device use cases
  - › a Wallet for offline/proximity use cases like mDL or age verification
  - › both for public-sector and private-sector use
- › ... with particular focus on
  - › data protection, inclusion and accessibility
  - › mobile environments
- › ... and enjoys good citizen/business take-up



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# New concepts eID-related

- › European Digital Identity Framework *aka* “EUDI Wallet”
  - › evident mobile focus (but not limited to that)
  - › both for online and offline/proximity use cases
- › Electronic attestations of attributes
  - › provided by a trust service provider or directly by an authentic source
- › Qualified electronic signatures
- › Turns a MS option to a citizen/business right to have and use
  - › MS to issue it, public and (many) private sector services to support it

# (Some) ARF Core Agreements so far

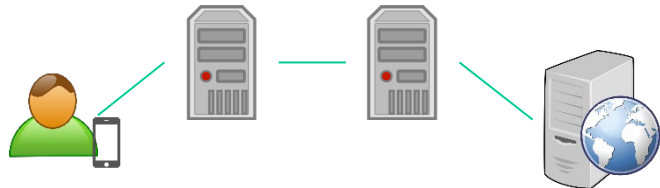
- › Support of three „Secure Element“ models
  - › On-device SE, external SE, remote HSM
- › Same-device and cross-device flows
- › Core standards
  - › OpenID4VP for online cases (+SD-JWT, etc.)
  - › ISO/IEC 18013-5 for proximity (+mdoc, etc.)
- › Two “configurations”
  - › Type 1 for PID at LoA high (+QEAA...)
  - › Type 2 for (Q)EAA presentation

Component	Requirement	Type 1	Type 2
Cryptographic keys management system - 1	EUDI Wallet Solution [...] rely on one of the following components to store and manage cryptographic keys: <ul style="list-style-type: none"><li>• Embedded Secure Element or Trusted Execution Environment (for mobile devices),</li><li>• reliance on an external device (Secure Elements / Smart Cards), and</li><li>• a backend (remote Hardware Security Module).</li></ul>	MUST	SHOULD
Attestation exchange Protocol - 2	The EUDI Wallet Solution [...] support the protocol detailed in the standard ISO/IEC 18013-5:2021 for <b>proximity flows</b> .	MUST	MAY
Attestation exchange Protocol - 3	The EUDI Wallet Solution [...] perform checks to enforce session binding (i.e., attribute request for PID).	SHOULD	MAY
Attestation exchange	EUDI Wallet Solution [...] support	MAY	MAY

# Some eIDAS / eIDAS-2 differences

## eIDAS eID so far

- › MS is free to notify (at any LoA)
- › Nodes de-couple MS-specifics
- › MDS (plus few optional attr.)
- › MS in charge
- › Peer-review



## EUDI Wallet

- › MS must issue (at LoA high)
- › Direct EUDI-RP interface
- › PID plus QEAA
- › MS *plus* QTSPs *plus* auth. sources
- › Mandatory certification
- › i.e. high degree of harmonisation



# How would AT and eIDAS-2 relate

## eIDAS-2

- › Wallet for citizens and businesses
- › Has a mobile emphasis
- › Supports online eID
- › Supports offline/proximity cases
- › Attributes as QEAA / auth. source
- › Qualified electronic signatures

## Austria

- › Citizens and electr. representation
- › Has a Mobile First strategy
- › ID Austria is a mobile online eID
- › Identity platform for mDL, etc.
- › Strong reliance on auth. sources
- › QES by default and free of charge

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# Some Opportunities seen

- › EUDI Wallet promises an far bigger eID footprint in Europe
  - › availability to all citizens
  - › Mandatory support by public and certain private services
- › Reaches beyond just authentication
  - › Attributes and qualified signatures to meet services/sector needs
- › Proximity use cases can meet citizen needs
  - › E.g. mobile driving licence, ePrescription, age verification, ID cards

# Challenges

- › Sailing some uncharted waters
  - › some novel concepts, relatively new protocols with no large scale use
- › Availability of devices and take-up
  - › mobile platforms to a large extent do not originate in the EU
  - › unclear how market might react to specific requirements
- › Readiness for certification under Cyber Security Act
  - › no Wallet-specific scheme, those we have do not fit for mobile dynamics
- › Timeline to deploy a basic infrastructure

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# Large Scale Pilots

- › The idea is to test EUDI Wallets in real life use cases
  - › but in particular to also see where we might get stuck
- › Four LSPs get co-funded by the EC
  - DC4EU <https://dc4eu.eu/>
  - EWC <https://eudiwalletconsortium.org/>
  - NOBID <https://www.nobidconsortium.com/>
  - **POTENTIAL** (next slide) <https://www.digital-identity-wallet.eu/>

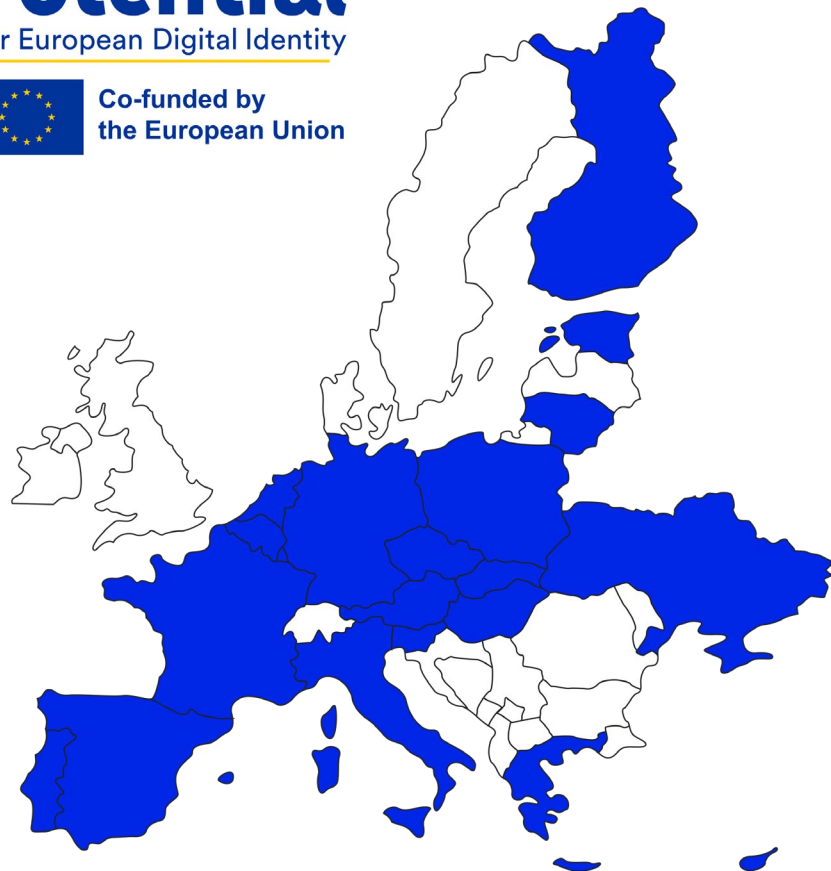
# LSP POTENTIAL

- › 19 EU MS plus Ukraine
  - › about 140 organisations
- › Pilots six Use Cases
  - › Identification in eGovernment
  - › Bank Account Opening
  - › SIM Registration
  - › Mobile Driving Licence
  - › Qualified Electronic Signature
  - › ePrescription

**Potential**  
For European Digital Identity



Co-funded by  
the European Union



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# Summary

- › The eIDAS Revision promises to lift eID to a new level
  - › available to all citizens and businesses and
  - › to be supported by many services
- › Austria already has a sound basis
  - › with its notified ID Austria and its mobile ID platform
  - › plans to seamlessly migrate these to an EUDI Wallet
- › Participation in the LSP POTENTIAL shall give experience needed

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