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## **STORK 2.0 e-Banking Pilot**

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# Presentation

The European Project STORK 2.0 and its e-Banking Pilot – How to establish cross-border online services using the electronic identity

# Overall principle

**STORK does not change the MS  
eID, but builds interoperability  
on top of it  
(*federation*)**

## One Interoperability Framework, Two Basic Models

STORK developed and piloted two interoperability models:

1. **Decentralized *aka* Middleware (MW)**
2. **Centralized *aka* Pan-European Proxy Services (PEPS)**

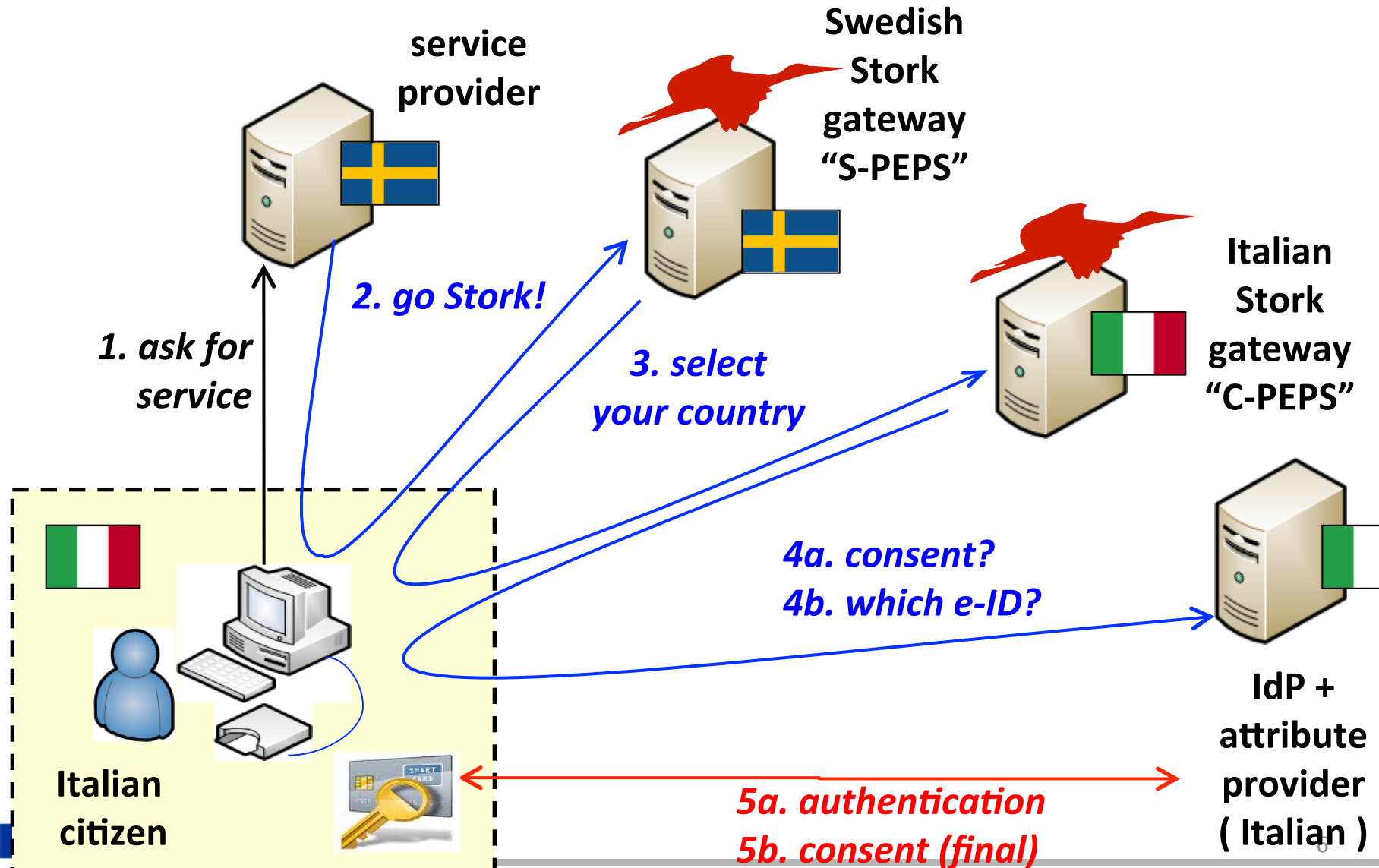
.. and combined them ( $MW \Leftrightarrow MW$ ,  $PEPS \Leftrightarrow PEPS$ ,  $MW \Leftrightarrow PEPS$ ,  $PEPS \Leftrightarrow MW$ )

Differences in deployment model, liability and data protection responsibilities

# STORK Technical

- Security levels:
  - QAA model: 4 levels (low ... high)
  - Compares to US OMB M-04-04 / NIST SP800-63
- Protocol:
  - SAML 2.0, Web SSO, HTTP POST
  - Extended by: QAA, Pilot-specific attributes

# Example Centralized - PEPS



# Integration model "MW country"

Service providers



STORK Layer (decentralized)

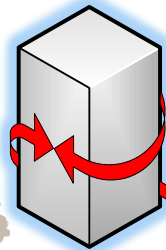
MS-specific connector

V-IDP

MS-specific connector

V-IDP

Foreign eID



PEPS

middleware



# The STORK 2.0 Pilots

eAcademia



eBanking



eGov4Business



eHealth



# Overall Pilot Scope & Technical / Business Goals

## Main Goals

- Establish a range of pan-European online banking services supporting national eIDs hence broadening eID acceptance within the community
- Enable businesses to establish bank accounts using mandates electronically across Europe thus supporting the creation of the digital single market

# We are building a tool for European banks

- Each MS has its own needs
- Each bank has its own needs:
  - The banks must be able to use the STORK bank pilot with their current process flows
  - The target for the STORK bank pilot is to be a tool for the banks - not to try to change banking in Europe



# Pilot Key Facts

## Participating Countries, Partners and Banks

- Austria ARGE (TUG) / DTI / Zveza Bank
- Belgium Rabobank
- Greece HMI / UAeGEAN / National Bank of Greece / Piraeus Bank
- Iceland Advania / Arion Bank
- Italy ABILAB / UBI Bank
- Portugal AMA / SIBS / MULTICERT / Bank Calxa Geral de Depositos
- Slovenia MPA / SETCCE / DIBA Bank
- Switzerland BUAS
- United Kingdom UKCO / YAP

# Pilot Key Facts

## Use Cases

- Opening a Bank Account online (eID)
- Logging on to Bank Account (eID)
- Business to Customer (e-invoicing)

# Overview of Pilot Use Cases

## Opening a Bank Account

This pilot service will provide a simple transparent and cross-border operational way to enable citizens of different countries participating in the banking pilot (and later potentially more countries) to register online with a bank, i.e. open an account in another country, that is, in a country in which they don't live or do not have a permanent residency

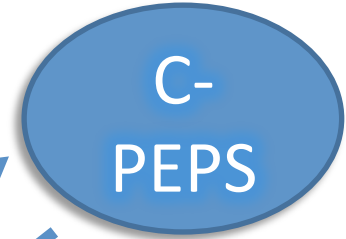
# Banking Pilot

User applies for bank account



2

User directed to C-PEPS for authentication for bank account



Bank Website

3

User then completes process online and uploads any supporting documents



6

Signature is verified by PEPS and process closes.

5

The user is asked to verify and sign the contract

4

The contract is presented to the applicant

# Overview of Pilot Use Cases

## Example of logging on to e-Banking platform

A company representative (or private person) with an eID from MS X, logs in to the banking platform in MS Y. By including additional attributes to those identity attributes available from the eID itself, the bank has trustable information on the person acting on behalf of the company. This increases the transparency and security of the interaction.

## Example: Benefits expected as a result of the Banking Pilot

- Multiplication of the number of targetable customers can be a very attractive benefit.
- Reduced burden for their own local customers
- Easier to register for online/direct banks as currently, in most member states, people have to be physically identified.
- With STORK the required personal identity data can be transferred automatically and securely to the bank using a nationally accepted electronic ID, which not only makes it more comfortable for the customer but also much less error-prone.



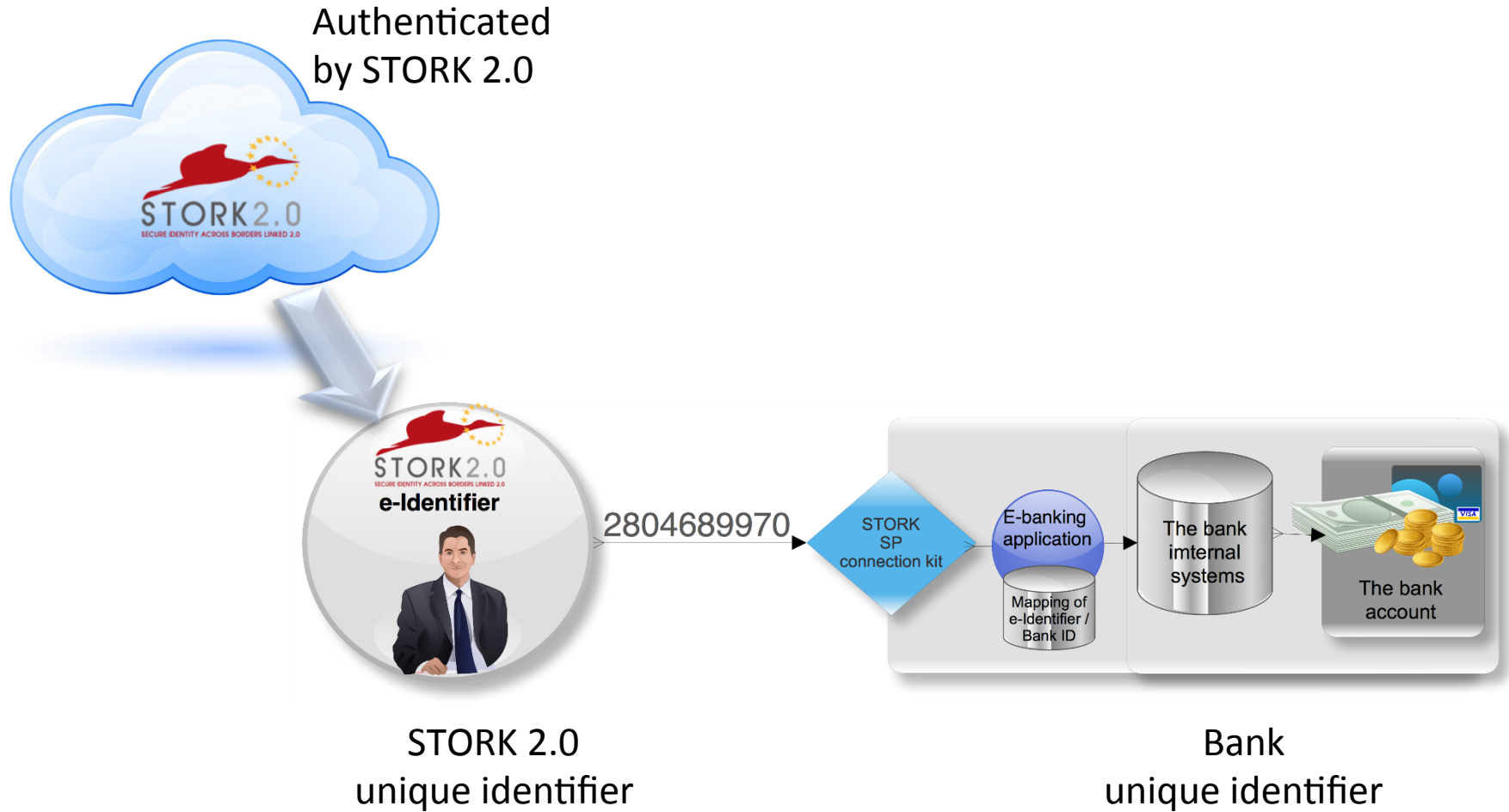


# Example: Benefits expected as a result of the Banking Pilot

- Critically, a customer physically attending a bank will no longer be necessary.
- By offering the service of logging in, using national eIDs, a bank can increase the confidence in electronic banking as well as the usability of the same by requiring just the eID instead of various username/password/tan combinations.
- The integration between the backend certified systems can be made using various means.



# Logging on to Bank Account (eID)



## Example: Benefits expected as a result of the Banking Pilot

- It will improve the customer delivery process in terms of the log-in process, which is more secure and comfortable.
- Providing cost reduction, whilst increasing the quality of service provided to customers.
- Bringing about fraud reduction, by being able to process electronic information properly signed by the customer (for instance the contract for opening the bank account) and in this sense overcome the inefficiency of dealing with paper-based workflows.
- Integration with the Know Your Customer process for Retail and Business Banking and Anti-Money Laundering process support



# Business to Customer (e-invoicing)

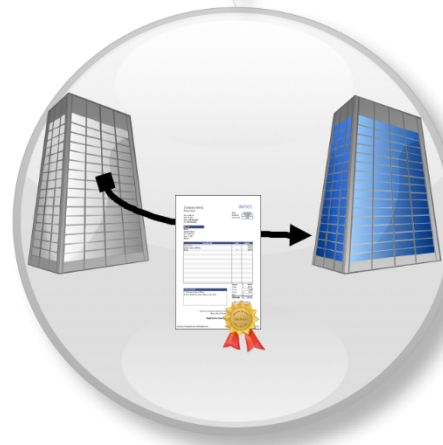
1. Issuing an e-invoice: this step is performed by e-invoice issuing service provider on behalf of the issuer. In most cases this step will produce an invoice equipped by a qualified electronic signature (QES).

2. Delivery of an invoice into the bank's e-invoicing channel: This step is typically performed by a single e-invoice delivery operator or by a chain of e-invoice delivery operators. It is recommended the use of ISO20022 xml standard format with a qualified electronic signature (QES).

3. Receive. Receiving the e-invoice and checking its authenticity: the banks client receives the e-invoice into his e-banking application and is able to verify the authenticity of the e-invoice message and of the e-invoice issuer.



1  
Signature



2  
Delivery



3  
Verification

# Issues and Challenges

- Main issue is legal (e.g. face-to-face constraints, money laundering regulation)
- Limited acceptance of eID by national financial authorities
- Banks remain unconvinced of business case for eID in eBanking



*Thank you for your attention!*

[www.eid-stork2.eu](http://www.eid-stork2.eu)