DIGITAL IDENTITY
Service-Account for Hamburg‘s Citizens
IDENTITIES USED IN DIGITAL LIFE
CITIZENS AND THEIR DIGITAL IDENTITY

Rational Level

- Transparency about my data
- Protection of my data
- Interoperability of my data
- Right to forget
- Limit data flow
- ...

Emotional Flaws

- Connect me with others
- Getting new friends and fans
- Share my data
- Increase data flow
- Gain advantages
- Impress others
- ...

HamburgID
Single Sign-on Identity
MY SELF-CONSTRUCTED IDENTITY

- Presenting myself as advantageously as possible in social networks
- Self-staging, getting famous
- Data are often “owned” by the platform operator for further use
- User may be unable to delete his data

* As defined by philosopher Richard David Precht
MY ANONYMOUS DIGITAL IDENTITY

• To consciously protect privacy
• Important for Freedom of Speech
• Increases antisocial behavior of identity owner
• Leads to hate comments by others

* As defined by philosopher Richard David Precht
MY FORMAL DIGITAL IDENTITY

- ID card/Passport issued by official authorities incl. eID
- Used for e-gov, travel, payment, identification at various occasions
- Basis for employer identity

* As defined by philosopher Richard David Precht
LEGAL FRAMEWORK
LEGAL FRAMEWORK

Germany „Online Access Legislation“ (OZG) is in-line with EU regulations for the Digital Single Market and the eIDAS (electr. IDentification, Authentication Trust Services) regulation:

Latest by end of 2022 most e-government services in the EU need to be accessible online in an open, efficient, cross-border, easy-to-use and interoperable manner. The Once-Only principle applies where feasible.
EIDAS

One of EU's aims with eIDAS is to have Secure Digital Identities for consumers to ease the Digital Single Market:

EU citizen with a national identity (e.g. ID-Card, driver license) will use the eID to identify and/or authenticate themselves to access public services available in other EU countries.

To serve Once-Only a Single Sign-on eID is needed.

[Logo: go.eID.AS] [Logo: HamburgID]
EID IS CORE OF DIGITAL IDENTITY
exemplary end users

- Hospital
- Pharmacy
- Company
- Citizen

Country A

exemplary service providers

- Public administration
- Court
- National Contact Point
- Health Insurance Organizations

Country B

Gateway

e-ID

e-Documents

e-Delivery

e-Signature

HamburgID
Single Sign-on Identity
WHICH ID-SOLUTION?
THE WANTED DIGITAL IDENTITY

The Digital Swiss Army Knife:

✓ open
✓ efficient
✓ cross-border
✓ easy-to-use
✓ interoperable
NOT ACCEPTABLE AT ALL?
CHALLENGE: LEVEL OF ASSURANCE

Level of Assurance (LoA) for the eID according to eIDAS:

- **Minimal** (self given user name and pwd)
- **Low** (e.g. one factor by SMS)
- **Substantial** (e.g. two factors incl. ID-Card)
- **High** (qualifies for all governmental services, face-to-face)
CHALLENGE: PROOF OF ASSURANCE
10,848 MUNICIPALITIES IN GERMANY
WHAT DOES A HAMBURGER WANT?
PAYING THE DOG TAX IN HAMBURG
REGISTER A CAR-PLATE IN MADRID

- V·87939: 1927 Series, Valencia
- M·125357: 1927 Series, Madrid
- M·4583·MJ: 1971 Series, Madrid
- NA·2260·Y: 1971 Series, Navarra (optional Basque sticker)
- V·5543·EJ: 1971 Series with Euroband
- VA·6811·T: 1971 Series with Euroband
- 2417·GSM: 2000 Series
- 4801·FPK: 2000 Series, Small size front plate
FOUND A COMPANY IN THESSALONIKI
ID FOR 513 M EU CITIZENS NEEDED
MORE USE OF THE HAMBURGID

The HamburgID may also be used to identify a citizen for

✓ Bank account
✓ Utility account (power, water, gas, internet)
✓ Mobile and domain registration
✓ E-commerce and shopping websites
✓ …
CITIZEN ACCOUNT
CURRENT VERIFICATION IN HAMBURG

1. Login with user/pwd to city portal
2. Enter data into desired service
3. Put eID into a reader
4. Open eID-App and confirm
5. Receive a receipt

Desktop only!
THE HAMBURG ID

The basic parts of a citizen account are commonly:

- ID + verification
- E-Mail account
- Document safe

Payment and other modules are optional
INTUITIVE LOGIN TOKEN IS WANTED

The ID‘s login token options are e.g.

• tim.taler@id.hamburg (for all without email so far)
• taler.hamburg
• tim@taler.de
• timtaler.de (via DenicID)
• tim471@t-online.de (possible with existing email addresses)
HAMBURGID CERTIFICATION

Auditing Partner

ID-Authority
ID-Agent
Data Authority

AusweisApp2

IDAuthority
IDAgent
DataAuthority
SERVICE PROVIDERS

Auditing Partner: KPMG

ID-Authority:
- Hamburg Top-Level Domain
- 1&1

ID-Agent:
- IONOS
- AusweisApp2

Data Authority:

Auditing Partners could be e.g. T-System, DS-CERT, TÜVit, ...

ID-Authority: e.g. Denic Service, other Registries, Authorities, ...

ID-Agent: e.g. Registrars, other Service Providers

Data-Authority: e.g. Dataport, Governikus, ...
HAMBURG ID VERIFICATION + ID CREATION

- User
  - Application
  - Confirmation
- Data Authority
  - AusweisApp 2
- ID-Agent
- ID Authority
  - ID-Registration
  - DNS-Entry
  - Check DNS
HAMBURG ID OVERVIEW

Hamburg ID
Single Sign-on Identity

ID-Authority
ID-Agent
Mailbox
Docu-Safe

Data Authority
AusweisApp 2

Auditing Partner

Relying Parties
e.g. Administration, Banking, Shopping, ...
THE MODELS FOR AN ID4ME ID

Domain Model for domain name owners

taler.hamburg or muller.de host the txt-Records

Email model

tim.taler@id.hamburg is translated into an identifier which holds the txt-Records
FEEDBACK BY GOVERNMENTS SO FAR

„Using the DNS as established infrastructure is a very good idea“

„Storing data and logins at different providers creates less dependency“

„It's the best universal identity approach so far“

„It’s a beautiful and smart solution (tech-staff)“
# ID-AUTHORITY OPTIONS

<table>
<thead>
<tr>
<th>Single Authority</th>
<th>Single Authority</th>
<th>Shared Authority</th>
<th>Shared Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>DenicID</td>
<td>HamburgID</td>
<td>DenicID + HamburgID + BerlinID + BayernID + other German TLDs</td>
<td>geoTLDs like .paris .berlin .madrid .wien .zuerich (+ccTLDs?)</td>
</tr>
<tr>
<td>Existing</td>
<td>High costs</td>
<td>Shared costs</td>
<td>Shared costs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maximized potential</td>
<td>European Solution</td>
</tr>
</tbody>
</table>

**HamburgID**

Single Sign-on Identity
LET’S TALK ABOUT MONEY
FOLLOW THE EID MONEY

Local governments that have implemented Service-Accounts with eIDAS do

• pay for development, implementation, mailbox, ...
• pay for every verification:
  < EUR 1.00 for an automatic verification by eID reader and app
  > EUR 5.00 for face-to-face video-ident verification

Is the payment of ID fees by citizens likely?
PAYMENT BY CAUSER PRINCIPLE

European Union
National Governments
Local Governments
must pay for all the services

ID-Authority  ID-Agent  Data Authority  Mailbox  Docu-Safe
NEXT STEP ID4ME INFORMATION

➢ Information of relevant European Union officials.
➢ Get EURID (.eu registry) to implement ID4me.
➢ Get in contact with the responsible officials for the OZG in Germany.
➢ Create a testimonial case.
THANK YOU!
ANY QUESTIONS?

Dirk Krischenowski
+49 173 2339156
krischenowski@nic.hamburg
www.nic.hamburg

Hamburg Top-Level-Domain GmbH
Neuer Wall 10
20354 Hamburg
Deutschland / Germany