



IDENTITIES USED IN DIGITAL LIFE



CITIZENS AND THEIR DIGITAL IDENTITY



Rational Level



Emotional Flaws



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

. . .

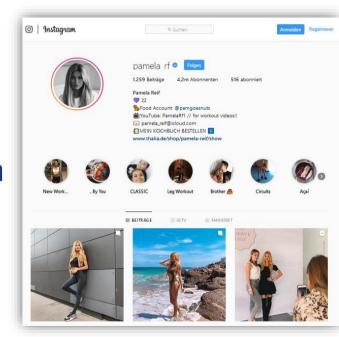
Connect me with others
Getting new friends and fans
Share my data
Increase data flow
Gain advantages
Impress others

. . .



MY SELF-CONSTUCTED 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





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





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 definded 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.





EID IS CORE OF DIGITAL IDENTITY







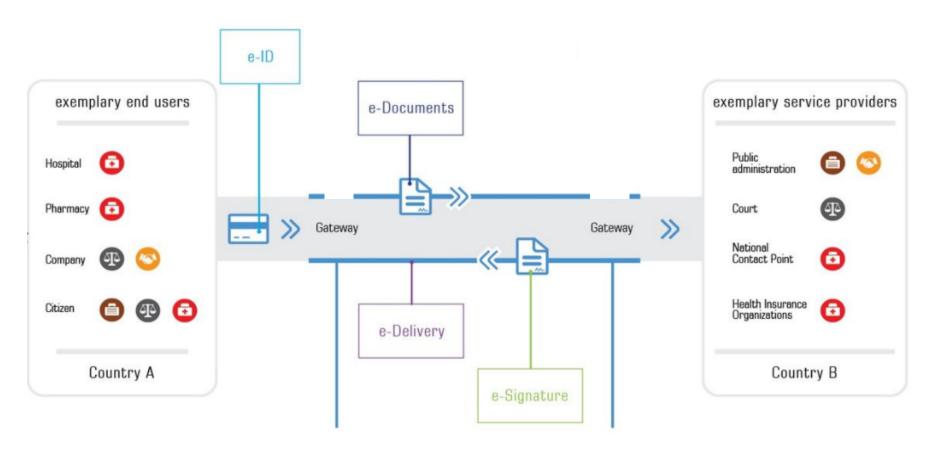














WHICH ID-SOLUTION?



THE WANTED DIGITAL IDENTITY

The Digital Swiss Army Knife:

- ✓ open
- √ efficient
- √ cross-border
- ✓ easy-to-use
- √ interoperable





NOT ACCEPTEABLE AT ALL?



| G Google | | | | |
|--------------------|---------|--|--|--|
| f Facebook | k | | | |
| OR | | | | |
| Email | | | | |
| you@example.org | | | | |
| Password | | | | |
| 按照按按按按按 | | | | |
| | forgot? | | | |
| more login options | Log in | | | |



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

















WHAT DOES A HAMBURGER WANT?





PAYING THE DOG TAX IN HAMBURG





REGISTER A CAR-PLATE IN MADRID



1927 Series, Valencia



1927 Series, Madrid

M·4583-MJ

1971 Series, Madrid

NA · 2260 + Y

1971 Series, Navarra (optional Basque sticker)





1971 Series with Euroband



2000 Series



2000 Series, Small size front plate



FOUND A COMPANY IN THESSALONIKI



ΕΠΑΓΓΕΛΜΑΤΙΚΟ ΕΠΙΜΕΛΗΤΗΡΙΟ ΘΕΣΣΑΛΟΝΙΚΗΣ



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
- **√** ...



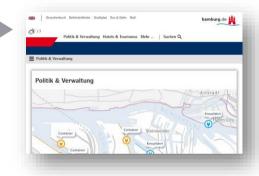
CITIZEN ACCOUNT



CURRENT VERIFICATION IN HAMBURG

- Login with user/pwd to city portal
- 2. Enter data into desired service
- 3. Put elD into a reader





- 4. Open eID-App and confirm
- 5. Receive a receipt



Desktop only!



THE HAMBURGID

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

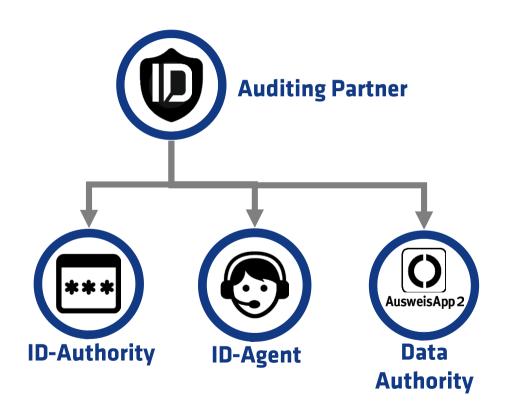
The ID's login token options are e.g.

- 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

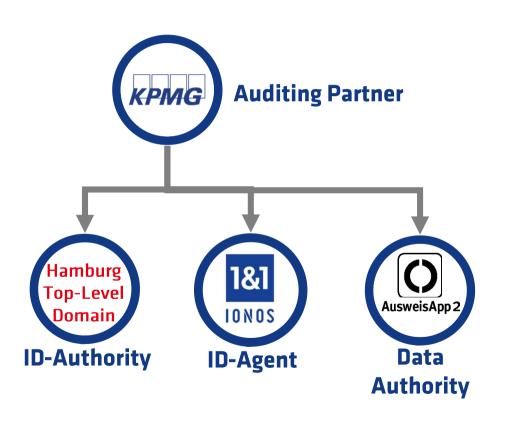






SERVICE PROVIDERS

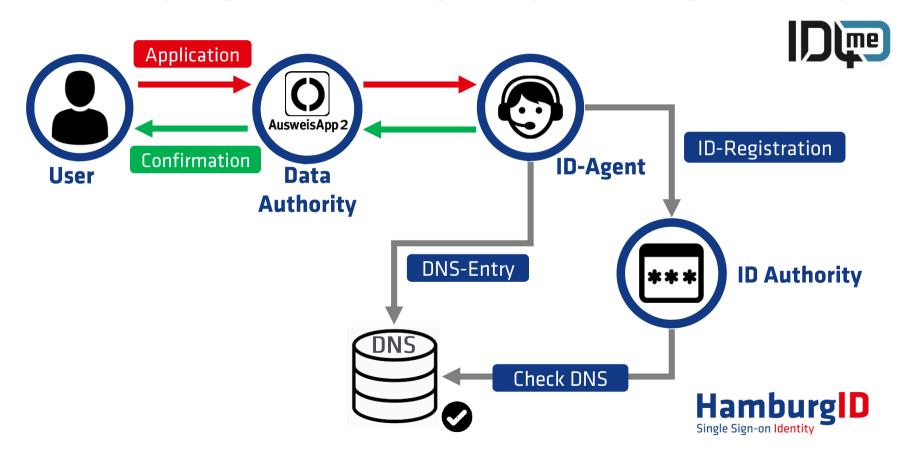




Auditing Partners could be e.g. T-System, DS-CERT, TÜVit, ...
ID-Authority: e.g. Denic Service, other Registries, Authorities, ...
ID-Agent: e.g. Registrars, other Service Providers
Data-Authority: e.g. Dataport, Governikus. ...



HAMBURGID VERIFICATION + ID CREATION



HAMBURGID OVERVIEW













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"

"Its the best univeral identity approach so far"

"It's a beautiful and smart solution (tech-staff)"



ID-AUTHORITY OPTIONS

| Single Authority | Single Authority | Shared Authority | Shared Authority |
|------------------|------------------|---|--|
| DenicID | HamburgID | DenicID + HamburgID + BerlinID + BayernID + other German TLDs | geoTLDs like .paris .berlin .madrid .wien .zuerich (+ccTLDs?) |
| Existing | High costs | Shared costs Maximized potential | Shared costs European Solution |



LET'S TALK ABOUT MONEY



FOLLOW THE EID MONEY

Local governments that have implemented Service-Accounts with eIDAS do

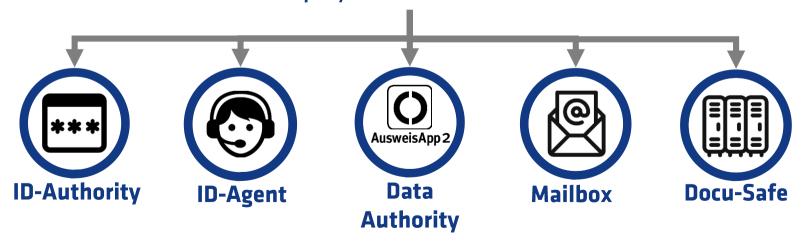
- pay for development, implementation, mailbox, ...
- pay for every verification:
 - < EUR 1.00 for an automatic verification by eID reader and app
 - > EUR 5.00 for face-to-face video-ident verification

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



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 testimonal case.



THANK YOU! ANY QUESTIONS?

