



REMCO VAN WIJK, ID
FIRST

Frankfurt, [19th of June 2019]

What if..

In 2008, as an implementation manager of SBR, I was happy with 2000 voluntary filings

Seeing these figures, one could say that the standardisation of semantic processes and technical interfaces for reporting in the Netherlands, was a success

However, it was mainly intermediary parties integrated SBR into their software packages, instead of 1.3 million companies and 8 million civilians

SBR 2018



42.8 Million SBR messages



11.5% increase in 2017



52 incoming message types



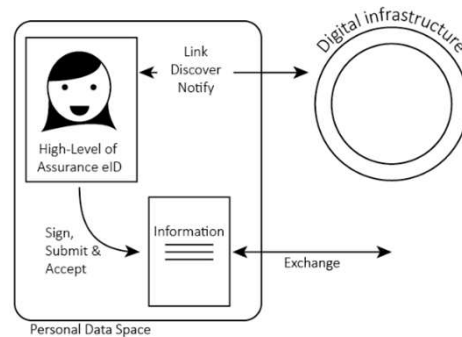
6 outgoing message types



117,260 Daily messages

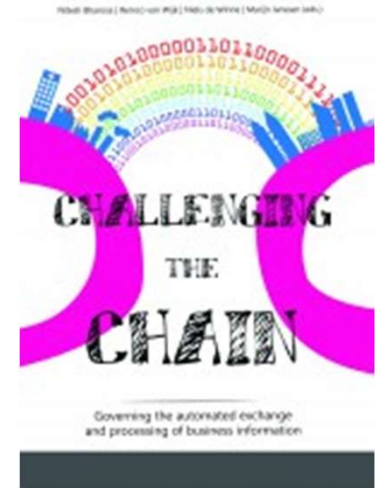


ID FIRST



What brought me to the conclusion of ID First?

- Remco van Wijk
- Background in eGovernment consultancy
- Close cooperation with TU Delft institute of Information Technology and Policy
- Main author of two books on Qualified Information Exchange
- Co-author of the 'Willeke' paper
- *When Willeke can get rid of paperwork: a lean infrastructure for qualified information exchange based on trusted identities*





IN CIVIL SOCIETY WE NEED TO IDENTIFY ACTORS

Something is “sameness” - A name or number represents only one certain actor with a potential capacity to act

How do we want or need to interact with this actor depends on the actor's characteristics:

- Actor Type - Natural Person, Legal Entity type
- Age (18+)
- Financial position
- Payment track-record - no guarantee but gives a 'chance'

Identification within this context: the act of finding out which actor we can or have to deal with as a startpoint for decision making

We want to keep the actor accountable for its acts.

WE RECORD ACTS AND CLAIMS FOR CERTAINTY; WE WANT TO HAVE PROOF IN CASE OF DISPUTES

Acts with legal effect:

- Offer
- Submission
- Acceptance
- Consent

Claims with legal meaning:

- Age claim
- Contractual Agreements
- Audit statement (assurance)

What is required is a comprehensive overview of our agreements and positions; 'signatures' play an important role in formalisation. Handwritten signatures are inherently bound to one identity



THE EMERGENCE OF ESOCIETY

We act and we record transactions online more than ever before

- We submit tax reports online
- We exchange information in order to apply for business loans or mortgages
- We give our consent for sharing financial data (PDS2)

However, online trust is an issue: electronic transactions and services often lack legal certainty

SO WHEN THE GOING GETS TOUGH, WE RELY ON PAPER



Lack of trust in electronic transactions causes the transactions we deem important to be settled with paper, leading to human errors, administrative burden, and general hassle



WHAT FUNCTIONS DOES PAPER FILL THAT DIGITAL SEEMINGLY CAN'T?

- A postal address gives some assurance about the authenticity of the actor;
- A wet signatures gives a high legal certainty; it is strongly legally binding with regard to unambiguous expression of will and archiving;
- The classical paper archive forms the basis for comprehensive archiving

THE LACK OF ONLINE TRUST IS RECOGNIZED ON A EUROPEAN LEVEL

- eIDAS

- Building trust in the online environment is key to economic and social development. Lack of trust, in particular because of a **perceived** lack of **legal certainty**, makes consumers, businesses and public authorities hesitate to carry out transactions electronically and to adopt new services.

WHAT IF EVERY EVERY PERSON WOULD BE ABLE TO USE A QUALIFIED ELECTRONIC SIGNATURE ONLINE

eIDAS: However, it is for national law to define the legal effect of electronic signatures, except for the requirements provided for in this Regulation according to which a qualified electronic signature should have the **equivalent legal effect of a handwritten signature**.

Actors could give consent, sign important contracts, authorise third parties and could act in name or on behalf of their organisations with the same ease as we transfer funds

This would give many opportunities for all sorts of new business models

We can say goodbye to paperwork

We lower administrative burden

We decrease the risks of human error

We do not need physical presence anymore





eIDAS provides us with a framework

- Qualified Trust Service Providers
- Qualified eID's
- Qualified Services, including qualified electronic signatures

ACTOR

Hello, I am Me

Yes, here's my passport

Here is my public key. I am the only one with access to the matching private key.

I signed the request with my private key. Here is the signed request.

QTSP

Hello Me, can I check your passport?

Okay, you are "Me"

Thanks for your public key. Can you sign this request with your private key, so I can verify that the public key belongs to you.

Thank you. Here is your certificate. If you lose sole control over your private key, please contact us.



SO IF WE CAN, WHY DON'T WE?

- Qualified signing is not prescribed on many processes – yet. We accept lower standards for security, or we have a paper-based process in place
- Digital signing is perceived expensive, and most of the time the process to achieve a signing key pair is very tedious; physical presence is needed
- It is frequently user-unfriendly to use a smart card
- The techniques for qualified electronic signing are relatively unknown
 - The solution faces a chicken-and-egg problem concerning its market adoption





THE TIMES THEY ARE A-CHANGIN'

The pressure to be GDPR compliant for online processes involving large sets of (sensitive) personal data (e.g. medical data) asks for the highest consent and protection of actors. This means that qualified signing will be prescribed for a lot of digital processes

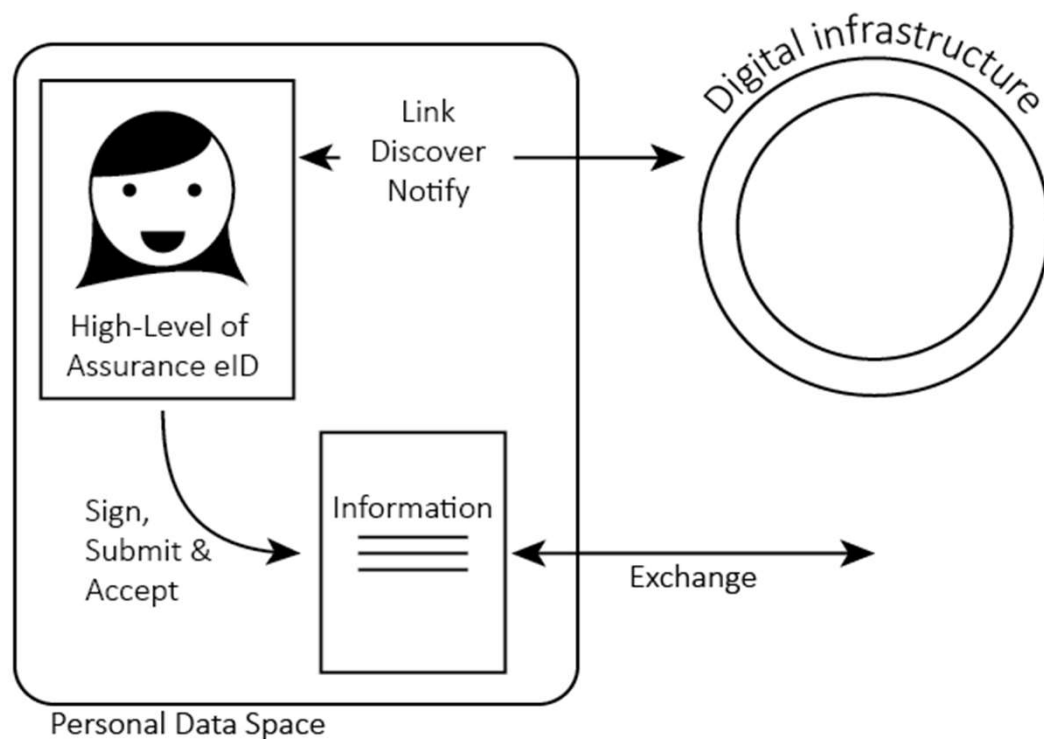
Physical registration of actors can be replaced by remote 24/7 processes with the same level of assurance (e.g. making use of live videoconferences) as the procedure of applying for a passport – but applying for a digital identity is easier

Cloud signing solutions based on e.g. apps make the distribution and use of keys much more userfriendly than smart card solutions.



In five years from now, 80% of acting citizens and companies will participate fully online using qualified electronic identities and electronic signatures

eIDAS provides a framework for developing a personal data space which enables legal entities and natural persons to act online





THE PERSONAL DATASPACE

- Allows for private parties to fully digitalize their services and offer new digitalized services
- Allows for collecting information from public instances
- Allows for submitting and accepting information
- Allows for archiving information
- Allows for taking a position with regard to information (signing!)

The personal dataspace operates within an ecosystem, which can be built upon the eIDAS framework. This enables actors to interact with each other, with a high level of assurance.

A VISION FOR THE (NEAR) FUTURE

