



REPUBLIC OF ESTONIA
INFORMATION SYSTEM AUTHORITY

Enabling Estonian eID for public services across Europe

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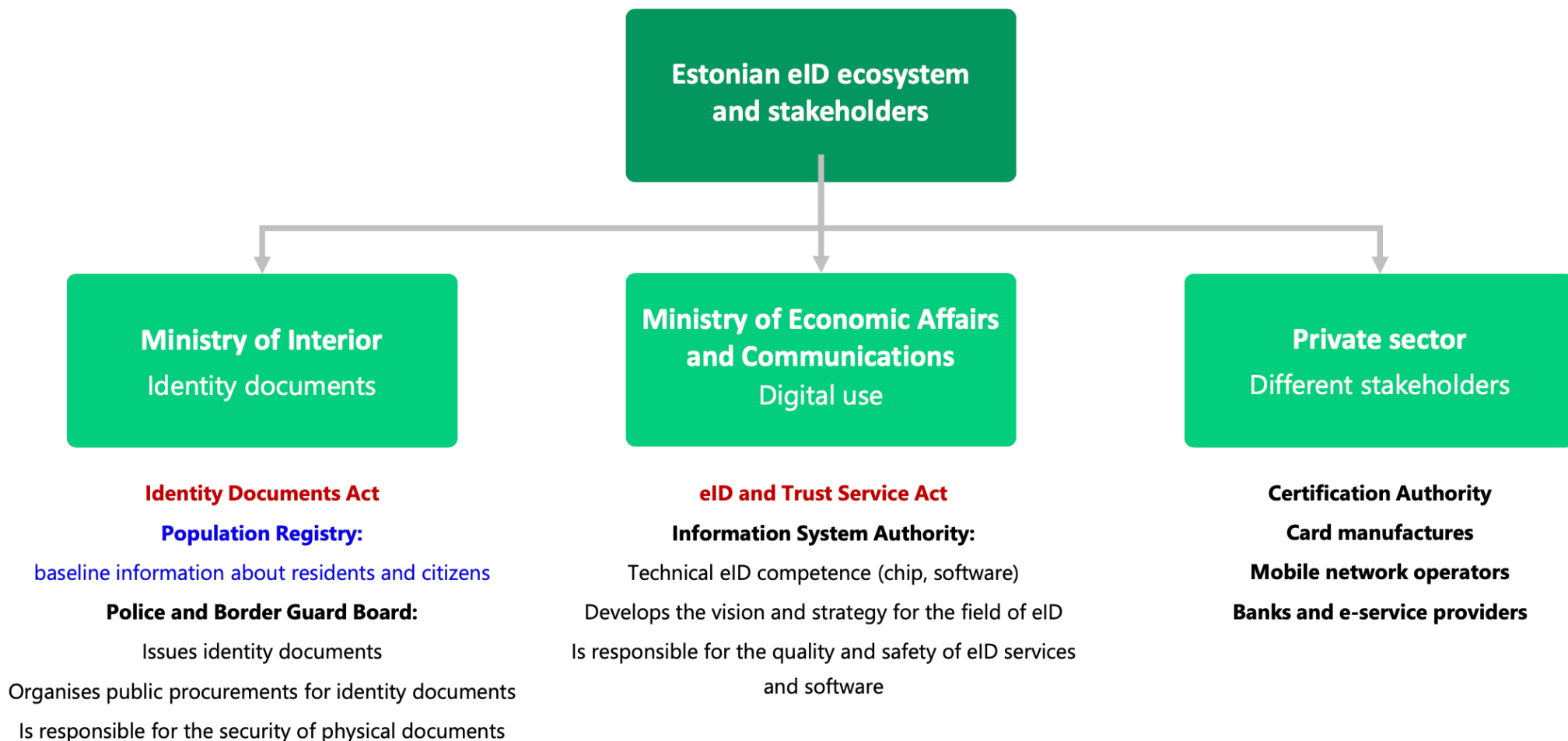
27.04.2023

e-Facts About Estonia

- State Issues 3 types of eID:
 - Accepted by public and private sector
 - Used for e-Signatures, Authentication and private data Encryption & Decryption
- 99% of population (1.3 mln) has eID
- 99% of public services are online



Main stakeholders in Estonian eID ecosystem



Historical path of eID solutions

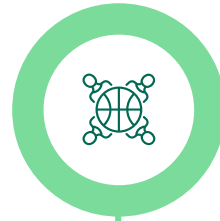
2002



2007



2010



2011



2017



ID-card

Authentication
e-Signature

Data encryption and
decryption

Mobile-ID

Private sector
initiative
Limited use and low
support in Public
sector services

Digi-ID

Additional token
For electronic use
only

**Government issued
Mobile-ID**

Government
Certificate Chain

Smart-ID

Private sector
solution
Accepted by public
sector

eID use cases

- State issued eID is accepted by all public services and most of private services
- **Authentication** (and not authorization)
 - Identifying the natural person only.
 - Powers and mandates are based on data in registries
- Legally binding **e-Signature** of a natural person
 - Qualified e-Signature: equal with handwritten signature
- Legally binding **e-Stamp** (e-Seal) of a legal entity
 - Same as for natural person but with legal entity certificate
 - Replaces rubber stamp from paper world
- File **encryption & decryption** for secure document delivery



Identity in Estonia



- Personal Identification Code **xYYMMDDyyyz**
 - **x** – century and sex
 - **YYMMDD** – date of birth
 - **yyy** – localization and sequence number at the registration day
 - **z** – control number
- Population Registry

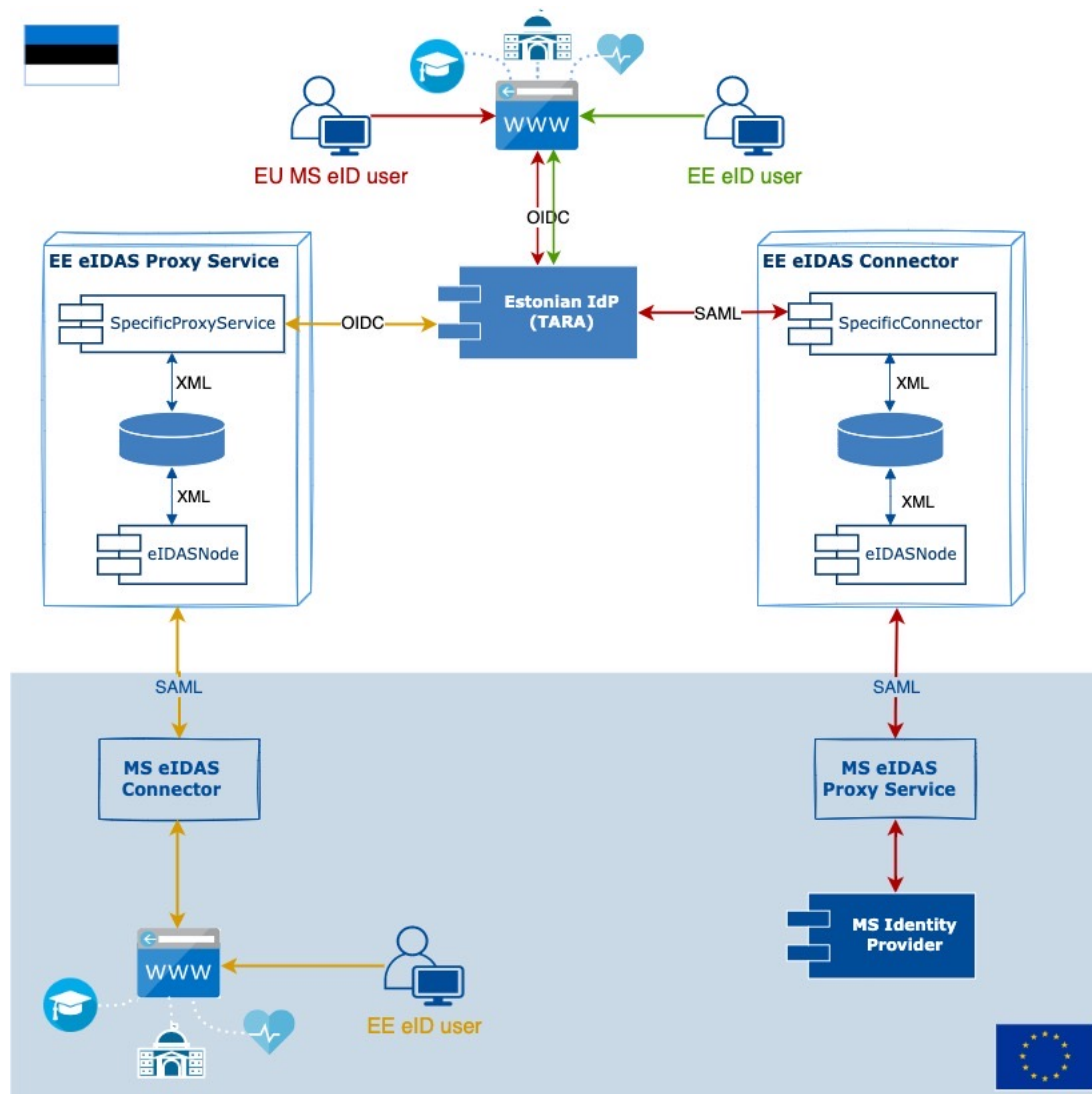
Contains baseline information about residents and citizens:

 - Identifier, Name and Address
 - relations between the people
 - Restricted and controlled access, but each person has right to see/know his/her personal data

eIDAS Regulation

- eIDAS establishes the requirements and conditions for all digital trust services and aspects of electronic identity and signature/stamping
- To simplify cross-border use of e-services
- Mainly addresses public electronic services
- Electronic identification schemes are classified according to 3 levels of assurance (degree of confidence in the claimed identity of a person)
 - Low, Substantial and High
- Digital signatures of EU citizens that are equal with nationally used digital signatures must be accepted
 - EU uses the term 'electronic signature' and divides the signatures into four levels of trust.
 - The highest of these, a signature equal with a handwritten-signature, is called a digital signature in Estonia.

Estonian cross-border authentication gateway



Estonian cross-border authentication gateway (TARA)

- Central authentication platform for Estonian public online services
- Simple API for implementation: OpenID Connect protocol based interface
- Provides a secure authentication with ID-card, Mobiil-ID, Smart-ID and European Union notified eID (eIDAS) in Estonian public e-services
- Enables electronic identification of EE citizens in EU public e-services with notified Estonian eID means under eIDAS - ID-card, Mobiil-ID
- No maintenance costs: central governance
 - Central Security management
 - Balanced change management - all changes are centrally managed
- Specifications available in GitHub: <https://e-gov.github.io/TARA-Doku>

RIIGIPORTAAL
EESTI.EE

Enter a search term



Log into self-service

SELF-SERVICE

Log in to the self-service environment to view your data and perform company-related operations.

Enter

ARTICLES

General information

Current topics

Republic of Estonia

Legal advice

Consumer protection

Environment

Citizen

Health and prescriptions

Pensions, social services
and allowances

Family

Work and labor relations

Disabled people

Citizenship and
documents

Submission of income tax returns for 2022

- Starting from **15 February** in the e-services environment of the Tax and Customs Board.
- [More information on submitting income tax returns](#).
- Take it easy. You have until 2 May.

Enter e-MTA

Life events



I have fallen ill

Here, you can find information and instructions on topics related to the health data of you and your family.

Read more



Having a baby

Here, you can find information and instructions on activities and allowances related to the birth of a child.

Read more



Getting married

Here can be found all the information and guidelines related to contracting marriage, from submitting the application for marriage until the exchange of documents when changing the name.

Read more

I am changing my
residence

Here, you can find information on registration of residence, concluding contracts for electricity, water, and waste transport, changing your family physician, etc.

Read more



RIIGI AUTENTIMISTEENUS

ID-card

Mobile-ID

Smart-ID

EU eID

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European Union member state's eID

To log in to **eesti.ee** please select the country of your eID and click "Continue". You will be redirected to your country's identity provider for authentication.

[Continue](#)[Return to service provider](#)[More about the state authentication service](#)



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Belgium



Croatia



Czech Republic



Denmark

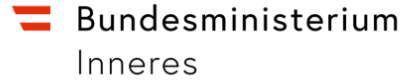


Germany

[Return to service provider](#)

German

English



Login at „a Service-Provider in Estonia“

By logging in, the following data about you, on „a Service-Provider in Estonia“ are transmitted, if available: your name, your date of birth, your bPK, ... [Show details](#) ✓

[Privacy Policy of „a Service-Provider in Estonia“](#)



ID Austria login

What is ID Austria (Proof of Electronic Identification)?

Cross-border access to e-services in EU with Estonian notified eID

- ID-card, Mobiil-ID
- eIDAS LoA High
- 23 countries: Austria, Belgium, Spain, Netherlands, Croatia, Italy, Greece, Lithuania, Luxembourg, Latvia, Malta, Norway, Poland, Portugal, France, Sweden, Germany, Slovakia, Slovenia, Finland, Denmark, Czech Republic, Ukraine





Coming to Denmark

You will have to address practical issues - start here



Living in Denmark

Your guide to practical things you need to know



Leaving Denmark

Before leaving you need to address relevant things



Online self-service

NemID self-service

Notification of change of address

View your holiday allowance

Claim your holiday allowance

Select how to log in

X
Luk

Please select your digital ID

NEM ID

NemID

Log in with your Danish digital ID



Other ID from EU/EEA

Log in as EU/EEA-citizen with your digital ID

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Denmark

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ings



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Which country is your ID from?

Select country and then sign in with your national ID.

 Austria 	 Greece 	 Netherlands 
 Belgium 	 Hungary 	 Norway 
 Bulgaria 	 Iceland 	 Poland 
 Croatia 	 Ireland 	 Portugal 
 Cyprus 	 Italy 	 Romania 
 Czech Republic 	 Latvia 	 Slovakia 
 Estonia 	 Liechtenstein 	 Slovenia 
 Finland 	 Lithuania 	 Spain 
 France 	 Luxembourg 	 Sweden 



RIIGI AUTENTIMISTEENUS

ID-card

Mobile-ID

ID-card

An ID-card reader and a valid ID-card is required to log in to **RIA eIDAS-Node**. Insert your ID-card into the card reader and click "Continue".

[Continue](#)[Return to service provider](#)[Help from id.ee](#)



RIIGI AUTENTIMISTEENUS

Identified person

Personal code: 60001017869

Last name: TESTNUMBER

First name: EID2016

Date of birth: 01.01.2000

Personal data will be forwarded to **eIDAS EE Proxy Service**

Accept

Reject



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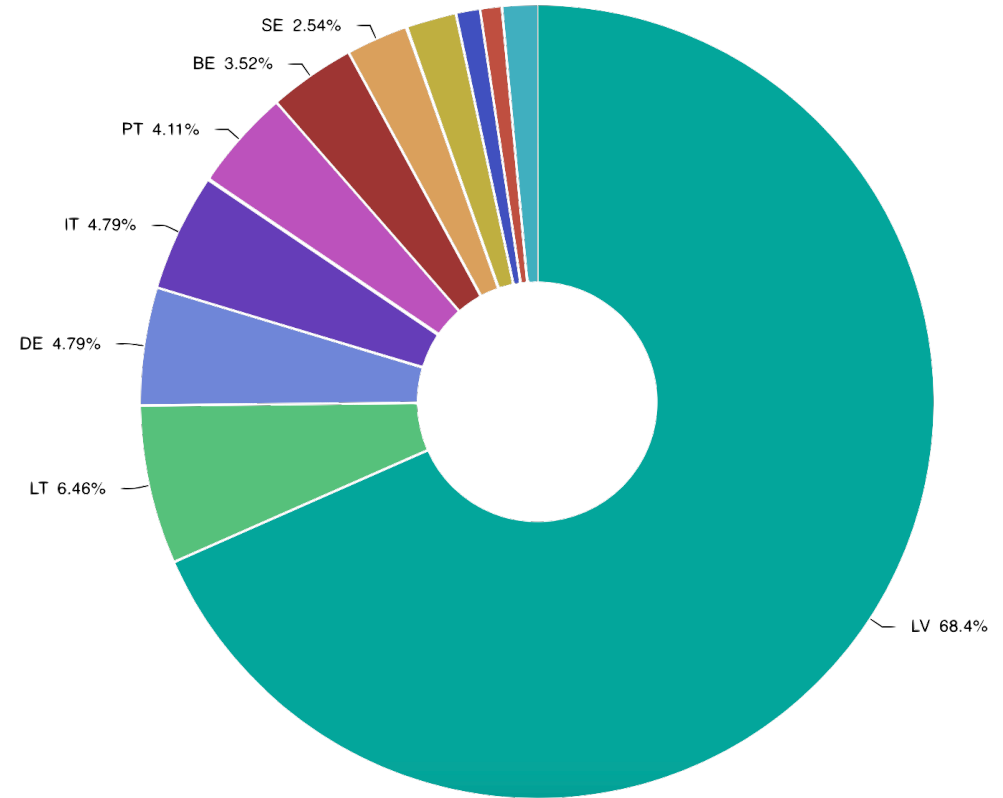
Notification of change of address

View your holiday allowance

Claim your holiday allowance

Cross-border authentication statistics

- ~8700 monthly authentication requests with EE eID in EU e-services per month
- ~1000 monthly authentication requests with EU MS eID in EE e-services



Cross-border challenges

- Lack of common semantics
 - Different structures of unique identifier
 - Domestic ecosystem can't handle foreigner ones
 - Missing central record matching process for e-Services
 - Limited access to attributes for enabling automated processes in e-Services
 - Need for a cross-border data exchange platform and regulation
 - Solution: SDG & OOTS
- Missing functionality for e-Signature
 - Not all EU countries support digital signatures
 - e-Services that require commitment by signing can't be used

Record matching and persistent identifiers

- Implementation of SDGR and OOTS requires MS to be able to identify the users in a reliable way and match the returning users in the data available in registers
- Nordic and Baltic countries have a persistent ID number for all citizens, which would enable reliable matching, but not all the MSs in EU can ensure that
- eIDAS identification forms the basis, but
 - eIDAS mandatory attributes only can't be trusted as the only reliable identification attributes
 - Possible solution: extending the eIDAS mandatory set of attributes
- Record matching and persistent identifiers are an important part of the eIDAS revision in order to improve the eID interoperability in EU.

Revision of eIDAS Regulation

- All EU Member States are required to notify at least one eID to the European Commission
- Personal identifiers (PID) must all be persistent
- All Member States must be able to issue and recognise EU Digital Identity Wallets by 2025
 - User identification - online and offline access to public and private services across the EU with High Identity Assurance Level
 - Digital signing – Qualified Electronic Signature (QES)
 - Storing credentials e.g. mobile driving licence, professional licences, e-prescriptions or educational credentials.



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Thank You!

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