e-identity

"With the digital signature and the machine-readable ID card, we created the e-citizen."

Former President of Estonia — **Toomas Hendrik Ilves**

Unlike in many other countries, every Estonian, irrespective of his/her location, has a state issued digital identity. Thanks to this Estonia is years ahead of countries still trying to work out how to authenticate people without physical contact. In Estonia, every person using their ID-card or Mobile-ID can safely identify themselves, use e-services and give digital signatures.

Being a pioneer of digital services might seem discouraging at first glance, in reality the risks are no higher or lower than those of a paper-based society, they are just different. The key to guaranteeing digital security is not state-of-the-art technology but simply continuous discipline. To steadily resist the broad spectrum of cyber threats and earn users trust needs constant and deliberate prevention work that can ensure that systems function smoothly and swiftly.

Today, we can see that Estonians really trust e-solutions and are eager to use them to such an extent that modern IT-solutions have become an integral part of our daily lives.

Impelled course/ forced direction

A continuous effort to become a digitally advanced society was not an easy road — but for a country like Estonia, it was pretty much compulsory in order to achieve our ultimate ambition from scratch — become a competitive and modern European society.

Thanks to implementing our digital identity, Estonia can now enjoy many "firsts" with state-of-art technologies like digital signature, i-Voting, mobile-ID, and e-Residency. These solutions are easy to use for citizens and efficient for public governance, while helping to save energy, time and money. Digital signature alone saves for every Estonian five working days per year.

Never waste a good crisis

In the last days of August 2017 Estonian officials received an alarming message from scientists — most of Estonia's ID-cards were theoretically unsafe due to a chip manufacturing failure. A week later the PM stood up and announced the risk, the measures to resolve it and confirmed that Estonia will maintain its e-governance course.

Although solving the security risk was a great challenge and not everything went perfectly smoothly, theoretically the risk never became an actual security breach and within a few months the risks were removed. In short, the security crisis actually proved the strength of e-Estonia. It is inevitable that in a complicated IT-world sometimes things go wrong, but it is important to stick to a trustworthy Nordic approach and to talk about problems openly.

Questions & answers

How is the data related to an individual's electronic ID protected against hackers and against abuse by the state itself?

The data traceability function allows each person or company to monitor exactly who — for example which government agency - and how have used the data related to their electronic ID.

What can a citizen do with their e-identity?

Here are some examples how the eID is regularly used in Estonia:

- to prove identity when logging into bank accounts
- to give digital signatures
- to vote using i-Voting system
- to check medical records, use e-Prescription service
- to establish a company, submit tax declarations

Digital signature helps every citizen save 5 working days per year.   .

Facts

→ Thanks to electronic ID, Estonia was the first to
  - implement digital signature in 2002
  - conduct i-Voting in 2005
  - introduce an e-Residency programme in 2014
  - set up a cross-border data exchange with Finland in 2017
→ 1.4 billion digital signatures (2021)
→ 99% of Estonians have ID-card enabling use of their electronic ID

For more information: id.ee/en