Being a digital society means being exposed to cyber threats and staying aware of their existence. With solid investments in its cyber security infrastructure, Estonia has developed extensive expertise in this area, becoming one of the most recognized and valued international cyber security experts.

Ensuring cyber security has three main components: the architecture of the information systems, user awareness, and established rules with full compliance. In order to ensure information security to the providers of vital services, it is particularly important to adhere to both awareness and security requirements. Compliance is monitored by the Information System Authority (RIA).

Through numerous training programmes and media campaigns, the RIA ensures that everyone is aware of cyber security issues. Estonia guarantees cyber security above all via the architecture of the information systems and the proper training of the professionals responding to incidents.

### Facts and figures

- E-solutions and robust cyber security require a functioning infrastructure and organisational structures. If any link in the chain fails, there needs to be an alternative way to provide that service.
- There are 1.3 million ID cards issued in Estonia, 70% of which are used regularly.
- There are 2749 e-services available for use in the public and private sectors.

### Questions & answers

**How can we ensure the security of the users of e-services?**

With the baseline national digital identity, which includes the national ID card and its additional tokens — mobile ID, residence card, digital ID, e-resident card. This ensures the uniformity of a person’s identity on the internet, and allows for authentication and digital signing.

**How is the overall cyber security of e-services ensured?**

A distributed architecture of data management, where the data is maintained by the owners of the databases and X-road allows the secure exchange of information between databases and registries. The data cannot be duplicated and there is no central database, the communication between databases is encrypted and sessions leave traces with evidential value. Communication with and between state institutions takes place in a national communications network, which the Information System Authority (RIA) monitors around the clock.

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