REINERSCT

WHITEPAPER

RFID-Card Readers –

Basis for Security in eGovernment

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Site Content

Introduction

eGovernment continues to make headway. More and more national governments, authorities and public bodies all over the world understand the many and varied benefits of Internet services and are planning projects accordingly. They are offering citizens and companies alike an ever-increasing number of digital services – starting with just the provision of information, to electronic tax declarations, to the founding of companies online.

Thanks to eGovernment, citizens and companies can make use of these services from anywhere at any time. Not only does this simplify time management – the catchword is reduced compliance costs – it also relieves the pressure on administrators and their processes. eGovernment is also attractive in monetary terms – on average, savings of around one third are possible on current administrative costs.[1]

eGovernment increases the transparency of administrative processes. Individual steps become easier to understand. Today, eGovernment tenders are also a „must" in view of increasing cross-border employment and business relationships.

A number of success factors have become apparent in order for eGovernment tenders to be successful. Accordingly, eGovernment tenders must above all:

- be relevant to citizens and companies alike,
- be accessible to all users and easy to handle,
- be consistently user-orientated,
- be legally binding and secure
- and be completely digitised without media disruptions.

For eGovernment to work securely, reliable technologies that prevent misuse are required for all parties using the system. RFID card readers are an important element of this.

In this whitepaper, we provide an overview of the exciting projects that have already been implemented in other countries, how the trailblazing electronic ID card works in Germany and the advantages that our RFID card readers deliver.

We hope that you find this read informative.

Your
REINER SCT team

[1] Source: German Regulatory Control Council (Normkontrollrat), 2015, Digitisation of German TOP 60 Administrative Processes

Examples of international eGovernment measures

The government is systematically promoting the digitisation of administrative services and has created a legal framework for topics such as authentication, broadband provision, cross-border cooperation, online tenders and security.

Individual countries implement eGovernment projects with different priorities and at different speeds. The measures are always interesting, as our examples show:

In **Austria** for example, the ELAK (electronic file) forms a central element of the national eGovernment strategy and allows citizens to experience a „one-stop government". Citizens and companies don't need to know which administrative body is responsible for which affairs because matters are automatically directed to the responsible department. In Vienna, payment transactions can be conducted completely online.

In 2009, the **Czech Republic** introduced the „electronic letterbox" for communication between and with authorities. Since 2015 it has been mandatory for legal entities.

In **Estonia** it is possible to register births electronically and to submit digital applications for state social services. Tax declarations or votes can be submitted via the Internet, medical files or school grades can be checked online and companies can also be founded online. A judicial portal lists all court verdicts. In Estonia the Internet has become a basic right and can be used free of charge almost anywhere in the country. Hundreds of digital citizen services and online services can be called up at the central Internet portal. The electronic ID card enables citizens to prove their identity and to sign digital signatures – including via a smartphone while out and about. „eStays" are now also possible in Estonia – people from all over the world can get a digital identity. For all digital solutions, citizens retain ownership of their data – every citizen can see which data is retained, who has access to it and for what purpose, and can also demand an explanation as to why the data was accessed. Over 99 percent of the 2,400 state services operate online. Administrative processes work on a blockchain basis. The government is systematically promoting the digitisation of administrative services and has created a legal framework for topics such as authentication, broadband provision, cross-border cooperation, online tenders and security.

Denmark has been pursuing a consistent digitisation strategy for administration and society since 2001. There is now a nationwide central portal for all state services. Every citizen has a digital postal code for all communication with administrative bodies. Over 80 percent of Danes use it.

France: Two out of every three French citizens pay their taxes online, 93% request an extract from judicial records online and 80% of farmers apply for aid from the Common Agricultural Policy online. In terms of the digitisation of government services, France is in fourth place worldwide behind South Korea, Australia and Singapore.

In **Finland**, the combined electronic ID and health insurance card was introduced in 2004. Central government administration bodies share IT infrastructures and IT services that are provided via an internal government service centre. Since 2010, every Finn has had the right to a broadband connection.

South Korea is aiming for a transparent government that allows open data and citizens' participation in political decision-making processes. In 2012, a total of 1.24 million complaints, 111,239 civil applications and 1,007 political discussions went online. The number of online political discussions increased five-fold within two years thanks to a citizens' portal. Within a few years, the amount of administrative data publications should increase from 16 to 60 percent – measured against the total available source documents.

The German electronic ID card

The ID data is sent with end-to-end encryption and cannot be intercepted or looked at.

The electronic ID card was introduced in Germany in 2010 in bank card format. It has an online ID function – also known as an eID function (eID = electronic identity) – for use on the Internet. It enables the holder to securely and positively identify himself or herself online, at certain machines and at public terminals.

Before data is sent, the ID holder can see who will receive the data and that the recipient is also allowed to use the data. The ID data is sent with end-to-end encryption and cannot be intercepted or looked at.

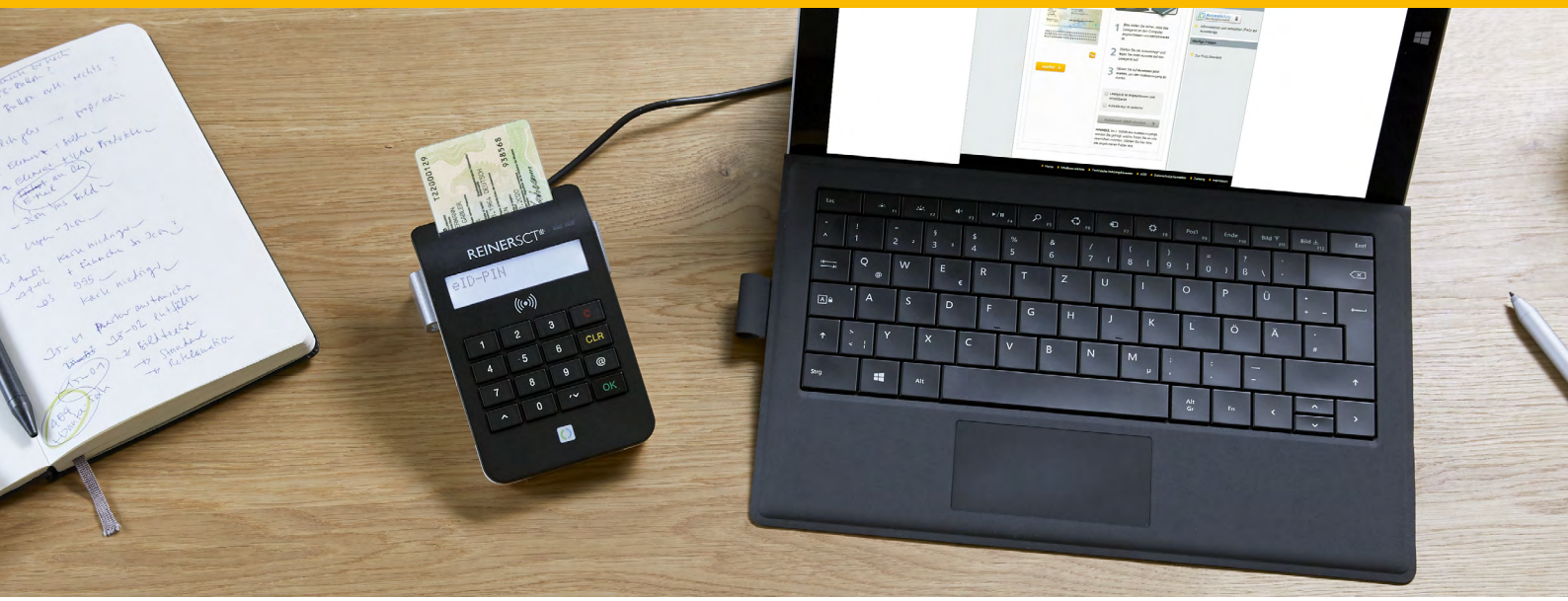
Every time the online ID function is used, a check is conducted as to whether the ID card is still valid and has not been blocked. This also makes it secure against misuse if the ID is lost.

In Germany, the ID card can be used online for many applications. These include:

- Concluding insurance contracts
- Opening bank accounts
- Registration and authentication with De-Mail
- Logins to customer portals
- Self-declarations for communal services
- Online applications (e.g. student grants, planning permission, emissions stickers, birth certificate or certificate of good conduct)
- Online checks (e.g. community service file, pension account, credit rating or driving license penalty points)
- Change notifications (e.g. new address after a move)
- Submissions (e.g. petitions received by the German Parliament)
- Registrations (e.g. registering a business or re-registering a car)

Anyone wishing to use the Online ID function requires the following:

1. Their **ID card** (the online ID function must be activated)
2. A 6-digit **PIN**
3. Some **software** for the secure connection between the ID and the computer
4. A **card reader** (see next page for more information)



The RFID card readers from REINER SCT

Chip card readers deliver a high level of data transfer security.

Card readers make an important contribution towards conducting secure online business with banks, insurance companies or Web shops, secure communication in social networks and secure online paperwork. The combination of chip card and card reader is more reliable than the common authentication methods involving a user name and password or a PIN and TAN.

The readers from the market leader REINER SCT are particularly recommended. That's because they are the only units in the world that have been certified by the German Federal Office for Information Security (Bundesamt für Sicherheit in der Informationstechnik - BSI) in accordance with TR-03119, that have been approved by TÜV-IT in accordance with the German Electronic Signature Act (Signaturgesetz - SigG) and the German Digital Signature Regulations (Signaturverordnung - SigV), and that are consequently regarded as being particularly trustworthy. The REINER SCT comfort unit is even unique – it is the only reader in Germany to have a keypad for entering the PIN.

Whether it's for online banking, Internet shopping, digital paperwork or confirming Internet transactions – chip card readers deliver a high level of data transfer security.

Our RFID card readers:

cyber*Jack*® RFID komfort

Our Comfort readers are suitable for cards with both contactless and contact chips. It has provision for the qualified electronic signature. The unit has a very wide range of functions. For example, it supports applications such as online banking via HBCI / FinTS, Secoder and EBICS, as well as cash cards. When used in conjunction with the AusweisApp, it can read out data from the German electronic ID card. The reader has a large illuminated LC display on which the communication is displayed, as well as its own large keypad for entering the PIN or confirmations.

cyber*Jack*® RFID standard

The standard reader too has an illuminated display and its own keypad. This unit is suitable for cards with a contact chip (conforming to ISO 7816), for example for the electronic health card, or cards with a contact chip for the qualified electronic signature.

cyber*Jack*® RFID basis

Basic readers have no keypad and no display. The PIN is therefore entered via the connected computer's keyboard. Unfortunately there are software programs that can log these entries. These „keyloggers" can be malware used to steal personal data. The operating system, anti-virus program and firewall of the PC being used should therefore be updated regularly if a basic reader is used. The ID card should also be removed from the reader immediately after use.

cyber*Jack*® wave

This reader is the first Bluetooth/RFID reader on the market. It is small and flat, which makes it practical for when you're out and about. A highlight is the three-centimetre colour TFT display that allows completely new visualisation options, along with the Touch keypad. The reader can be used with stationary devices via the USB interface, or can be connected to mobile terminal devices via the Bluetooth interface. The unit operates with an integrated battery that is charged via the microUSB interface. The electronic ID card can be used in conjunction with the AusweisApp2. Data transfer is via secure Bluetooth and RFID. Both contactless and contact chip cards can be used. The Secoder standard and Security Class 3 guarantee a high level of protection.

REINER SCT WHITEPAPER

In future, our whitepapers will be providing regular information about hot topics in the field of online security, time logging or other current trends, and will provide valuable expert tips that are easy for both companies and private individuals to implement.

You can find our whitepapers here: **reiner-sct.com/whitepaper**

About REINER SCT

REINER SCT specialises in security in the digital world. This includes readers for chip cards – particularly for secure online banking, terminals for retailers and tradespeople for girocard payments and access protection on PC workstations. With its readers for the electronic ID cards, REINER SCT is regarded as a trailblazer for innovative IT applications in the public sector. Another of the company's key areas of business is intuitive time logging and access control systems for small and medium-sized companies.

REINER SCT has been developing and manufacturing in Germany since 1997, and provides all services from a single source - from sales right through to end customer service. The company operates globally, and is part of the REINER Group that has been in family ownership since 1913. It is based in Furtwangen in the Black Forest and employs 45 people.

Further information: **reiner-sct.com**

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