

## THE BSI-CERTIFICATE FOR ONLINE ELECTIONS



### The BSI-Certificate for Online Voting according to Common Criteria

Polyas online voting software was first certified by the German Federal Office for Information Technology (BSI) in 2016. Thus, Polyas CORE 2.2.3 is the first online voting software that has been certified according to Common Criteria Standards by the BSI.

### The Protection Profile for Online Elections

The certification is based on protection profile BSI-DSZ-CC-0862-2016 which formulates the systemic conditions for an online election system. The German Science Centre for Artificial Intelligence (DFKI) evaluated Polyas online election software with regard to functionality and trustworthiness.

**On 15 March 2016, the Polyas software CORE 2.2.3 received the internationally valid protection profile BSI-DSZ-CC-0862-2016.**

- 1 -

### Security Requirements for Online Elections

The basic security requirements for online voting services are linked to the common electoral principles: free, equal, secret, general and direct voting. Online elections with Polyas CORE 2.2.3 are secure according to BSI-requirements and fulfil the demands in regards to democratic voting rights.

#### The following criteria are satisfied with the Polyas online voting system CORE version 2.2.3:

- No conclusion to the identity of the voter can be drawn from cast votes.
- It cannot be possible for the voter to prove their voting choice to a third party
- Eligible voters must be reliably identified and authenticated so that in the electoral roll only registered persons can vote
- Voters can only vote once in each election
- Votes must not be changed, deleted or adjusted while transmitted in the network
- Votes must not be changed, deleted or adjusted in the ballot box after voting
- Interim results must not be counted

---

## THE BSI-CERTIFICATE FOR ONLINE ELECTIONS

---

### Results of the Certification

The evaluation is documented in the certification report and includes all sub-functionalities as well as the system architecture as a whole.

**The following statements about the Polyas online voting system were made in the certification report:**

1. The online voting system records all security related events for every sub-system in separate log files. The election committee can examine these recorded files in an understandable and readable manner.
2. Data integrity faults activate security warnings, which are recorded and then sent to the election committee via email.
3. The electoral roll, which knows the identity of the voter, is a separate system from the ballot box, which saves the votes of the voters.
4. The communication between voter and ballot box is encrypted so that only the actual voter has access. The vote itself is again encrypted and saved with a random variable.
5. Part of counting and archiving is creating an archive checksum, which is used as manipulation protection.

- 2 -

► **Find more about security in the link below:**

[www.polyas.com/security](http://www.polyas.com/security)

#### **Polyas – the election experts**

We are the leading provider of digital elections since 1996. Cooperatives easily and conveniently vote with us over the internet. Combine online voting with postal vote, ballot box voting or live voting at the annual general meeting.

By voting online, you will increase your voter turnout and save valuable time and money throughout the election process.

#### **Contact**

**POLYAS** GmbH  
Alte Jakobstraße 88  
10179 Berlin - Germany

[www.polyas.com](http://www.polyas.com)  
Tel.: +44 20 3695 81-65  
Mail: [info@polyas.com](mailto:info@polyas.com)