

AUDIT REPORT SUMMARY

Client: ACT Electoral Commission
PO Box 272 Civic Square
ACT 2608

Manufacturer IVE Group Pty Ltd

Product Name: IVE Scanning Software including ReadSoft ICR

Date of Issue: 24/09/2020

BMM Project Number: ACTEC.1005

BMM Test Report: ACTEC.1005.01 2020 Scanning

Standards Tested to: N/A

Issues/Observations: None

Auditor Rodney Li

Signed: 

Signed:

Johnathan Shaw, Senior Consultant, BMM Testlabs

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1. Purpose

The ACT electoral Commission (ACTEC) requested BMM to audit changes to the IVE (formerly SEMA) ballot paper scanning software for 2020 requirements.

2. Description of System

Trained operators perform scanning of batches of ballots into the IVE system. The IVE system uses ReadSoft intelligent Character Recognition (ICR) technology to interpret voter selections on the captured images. The software checks scanned selections for validity and reports any anomalies.

The scanning changes for 2020 are to update the software compatibility to operate with new hardware and Operating System. However, the hardware changes are not implemented in the source code.

The changes to the software are to

- Update to use SHA-2 (256) instead of MD5 checksum calculation algorithm
- Update to be compatible with new OS Microsoft Windows 10
- Minor Software Enhancements

3. BMM Evaluation Performed

ACTEC provided FTP upload containing code and documentation for ACT October 2020 Scanning.

BMM reviewed the design documentation and performed a code review of the IVE software. The review focussed on changes made since the previous audit in 2016.

4. Source Code Evaluation

The 2020 source code provided from the FTP upload was compared to the 2016 source code to identify all changes to modules.

Each changed module was checked. It was not the purpose of the review to verify that the code works correctly, but rather to verify that changes to the code were consistent with documented scope of the change and that no malicious code had been introduced that could insert, alter or delete ballot information unlawfully.

5. Conclusion

As a result of this evaluation BMM is satisfied the IVE Ballot Scanning System server (version 1.3.0.0) is suitable for use in the 2020 elections.