

30 October 2023

By email to: [REDACTED]

Dear [REDACTED]

OFFICIAL INFORMATION ACT REQUEST 2023/60

On 2 October 2023 you made a request under the Official Information Act 1982 (the Act) for the following information:

What is the name of the company who originally designed the Election Management System, being referred to on the Electoral Commission's website simply as the "EMS"

What database schema is in use, Oracle, SQL, or something else?

How many New Zealand citizens, organisations, other entities foreign or domestic, government departments (or their agencies) have access to any, some, or all parts of the EMS, in any capacity, at any level of login credential?

How many non-New Zealand citizens, organisations, entities foreign or domestic, government departments (or their agencies) have access to any, some, or all parts of the EMS, in any capacity at any level of login credential?

Are there any hardware, any firmware, any software, utilities, applications, or any components in the EMS purchased from, leased from, donated by, installed by, managed by or monitored by Dominion Voting Systems, Dominion Voting Systems INC, or any of its affiliates?

What is the registered name of the company who last audited the EMS

What date was this last audit completed

What was the invoice number for the audit work

What was the cost on that invoice

What are the names of the individuals who physically connected to the system to carry out audit checks

What written qualifications did they have to prove their ability to find problems, if any existed

Were they physically at the EMS central server room, or logged in remotely?

What parts of the system did they check?

What is the list of tests they conducted for each part.

How many total hours were the auditors on site, or logged in to conduct their tests

*Did they run a simulation through the system inputting their own
certificate of Count form E
certificate of Count form G
certificate of Count form H
EMS11-C
EMS11-P
EMS11-HQ*

Were the EMS82-FINAL results perfectly accurate based on the sample data entered for each and every one of the above forms when tested?

Were there any anomalies, defects, or performance issues discovered or reported

We have provided responses to each of your questions below.

- 1. What is the name of the company who originally designed the Election Management System, being referred to on the Electoral Commission's website simply as the "EMS"*

The Election Management System (EMS) is a purpose-built system developed in New Zealand for the exclusive use of the Electoral Commission. The Electoral Commission design, test and manage its development. Software development is performed by a New Zealand company CATALYST. NET LIMITED, NZ Company Number 952897. CATALYST is contracted to the Electoral Commission to help the Electoral Commission maintain the EMS. The EMS is hosted at New Zealand Government approved 'All-of-Government' data centres.

- 2. What database schema is in use, Oracle, SQL, or something else?*

Disclosure of this information would prejudice the Electoral Commission's ability to prevent and detect cyber security threats and may also result in exposure of the information to those who may use this information for improper gain. This gain or advantage could damage trust and confidence in the electoral system.

We are refusing under the following sections of the Act: 6(c) - to avoid prejudice to the maintenance of the law; 9(2)(k) - to prevent the use of official information for improper gain or improper advantage and this is not outweighed by other considerations which render it desirable or in the public interest to make that information available.

3. *How many New Zealand citizens, organisations, other entities foreign or domestic, government departments (or their agencies) have access to any, some, or all parts of the EMS, in any capacity, at any level of login credential?*

Access to the EMS is only granted to authorised Electoral Commission personnel and authorised CATALYST administrators to develop and maintain the EMS.

4. *How many non-New Zealand citizens, organisations, entities foreign or domestic, government departments (or their agencies) have access to any, some, or all parts of the EMS, in any capacity at any level of login credential?*

See the response to Question 3 above.

5. *Are there any hardware, any firmware, any software, utilities, applications, or any components in the EMS purchased from, leased from, donated by, installed by, managed by or monitored by Dominion Voting Systems, Dominion Voting Systems INC, or any of its affiliates?*

No, there is not.

6. *What is the registered name of the company who last audited the EMS*

For the purposes of answering the question we have interpreted the phase “audited the EMS” to include functional testing to ensure that outputs produced by the EMS are accurate, and penetration testing to ensure that the EMS is secure from outside interference.

Functional testing

The Electoral Commission engaged an independent, Department of Internal Affairs (DIA) approved vendor from the ‘Consultancy and Professional Services’ government channel to conduct functional testing of IT systems including the EMS.

The Consultancy and Professional Services channel covers services delivered by a professionally qualified individual or business. This includes architecture, building, engineering and ICT.

Functional testing is performed by a New Zealand company PLANIT SOFTWARE TESTING LIMITED, NZ Company Number 2250282. PLANIT is contracted to the Electoral Commission to help the Electoral Commission test the EMS.

Further information about the Consultancy and Professional Services channel can be found at this link <https://marketplace.govt.nz/about-marketplace/whats-open-on-marketplace/consultancy-and-professional-services/>.

The Electoral Commission also carried out dress rehearsals which included the EMS to verify that the EMS was functioning correctly and providing accurate results.

Penetration testing

The Electoral Commission engaged an independent, Department of Internal Affairs (DIA) approved vendor from the 'Consultancy and Professional Services' government channel to conduct penetration testing of IT systems including the EMS.

The Consultancy and Professional Services channel covers services delivered by a professionally qualified individual or business. This includes architecture, building, engineering and ICT.

Penetration testing is performed by a New Zealand company LATERAL SECURITY (IT) SERVICES LIMITED, NZ Company Number 2105671. LATERAL is contracted to the Electoral Commission to help the Electoral Commission penetration test the EMS.

Further information about the Consultancy and Professional Services channel can be found at this link <https://marketplace.govt.nz/about-marketplace/whats-open-on-marketplace/consultancy-and-professional-services/>.

Penetration tests included application tests, network tests and code reviews based on the OWASP methodologies and guidance as described at <https://owasp.org>.

Further details of functional and penetration testing are withheld

We are unable to provide further details of functional and penetration testing as to do so might disclose aspects of our capabilities which could be of benefit to malicious actors. Under sections 9(2)(k) and 6(c) of the Act, copies of additional documentation are withheld as the release would increase the likelihood of compromise of the integrity of the security arrangements for elections and that this would be likely to prejudice the maintenance of the law. The withholding of the information is also necessary to prevent the disclosure or use of official information for improper gain or improper advantage and this is not outweighed by other considerations which render it desirable or in the public interest to make that information available.

7. *What date was this last audit completed*

Functional and penetration testing of the EMS was completed before the start of the Advance Voting period on the 2nd of October 2023.

8. *What was the invoice number for the audit work*

The following Posted Purchase invoice numbers include functional and penetration testing of the EMS (as well as some other IT systems):

PPI02866, PPI03012, PPI03346, PPI03362, PPI03530, PPI03887, PPI03997, PPI03998, PPI03999, PPI04070, PPI04598, PPI04599, PPI04600, PPI04675, PPI05325, PPI05935 and PPI06224.

9. *What was the cost on that invoice*

We are unable to provide this information under section 9(2)(b)(ii) of the Act where the withholding of the information is necessary to protect information where the making available of the information would be likely unreasonably to prejudice the commercial position of the person who supplied or who is the subject of the information and this is not outweighed by other considerations which render it desirable in the public interest to make the information available.

10. *What are the names of the individuals who physically connected to the system to carry out audit checks*

We are unable to provide this information under section 9(2)(a) of the Act where the withholding of the information is necessary to protect the privacy of natural persons and this is not outweighed by other considerations which render it desirable in the public interest to make the information available.

11. *What written qualifications did they have to prove their ability to find problems, if any existed*

We do not hold this information.

12. *Were they physically at the EMS central server room, or logged in remotely?*

There is no EMS central server room to physically access for functional testing and penetration testing. Testing is conducted by remote access to the EMS.

13. *What parts of the system did they check?*

See the response to Question 6 above.

14. *What is the list of tests they conducted for each part.*

See the response to Question 6 above.

15. *How many total hours were the auditors on site, or logged in to conduct their tests*

We do not hold this information.

16. *Did they run a simulation through the system inputting their own:*

- a) certificate of Count form E
- b) certificate of Count form G
- c) certificate of Count form H
- d) EMS11-C
- e) EMS11-P
- f) EMS11-HQ

Functional testing included the inputting of sample data from EMS11-HQ into the EMS.

17. *Were the EMS82-FINAL results perfectly accurate based on the sample data entered for each and every one of the above forms when tested?*

All EMS outputs including EMS82-FINAL results were verified as accurate during functional testing.

18. *Were there any anomalies, defects, or performance issues discovered or reported*

See the response to Question 6 above.

In the interests of transparency, we release responses to Official Information Act requests every 3 months. We will publish this response with your personal details redacted.

You have the right under section 28(3) of the Act to make a complaint to the Ombudsman if you are not satisfied with the response to your request. Information about how to do this is available at www.ombudsman.parliament.nz or by phoning 0800 802 602.

Yours sincerely



Paul Jepson
Chief Information Officer