

REPUBLIC OF KENYA



JUDICIARY

ICT REPORT PURSUANT TO THE ORDERS OF THE SUPREME COURT OF KENYA
DATED 28TH DAY OF AUGUST 2017 IN PRESIDENTIAL PETITION NO. 1 OF 2017

SUBMITTED TO THE
SUPREME COURT OF KENYA

THIS 29TH DAY OF AUGUST, 2017

Prepared by

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1. BACKGROUND AND CONTEXT

This report is prepared following the observations of the ICT team constituted as provided for in the order (iii) paragraph 73 of the presidential petition 1 of 2017. The team comprising an ICT officer designated by the court and two independent ICT experts appointed by the court and the Deputy Registrar, Court of Appeal Nairobi, on behalf of the Registrar Supreme Court supervised the access of the technology in paragraph 72 of the same petition and compiled this report. As per the order, the team is expected to supervise the access and report to court.

2. METHODOLOGY

The team through a consultative process, traversed through each order and developed a checklist to be acknowledged by both parties and the court representative. The team were to check how the concerned parties would comply with the orders. A report and the extent to which compliance of each order is generated and submitted as required of the team.

The parties accompanied by the ICT team visited the venue where the team supervised the access of the technology as provided for by the above-mentioned order and the countersigned against each provision of the order according to the compliance as agreed by both parties and witnessed by the team.

3. OBSERVATIONS

3.1. ORDER A

- a. Information relating to the number of servers in the exclusive possession of the 1st Respondent.

1ST RESPONDENT: Provided hardcopy and softcopy documents to the parties.

PETITIONERS: Requested for more information about the servers.

3RD RESPONDENT: Agreed on information provided.

COURT APPOINTED IT EXPERTS: Delivered by 1st Respondent as requested.

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3.2. ORDER B

- b. Firewalls without disclosure of the software version.

1ST RESPONDENT: Provided the schematic diagram and hardware model. They were not willing to provide configuration of internal or external firewall as this will compromise the security of their system. Said that the configurations for internal and external firewalls were identical. Disclosing one will compromise the other.

PETITIONERS: Requested to be provided with the configurations for the internal and external firewall.

3RD RESPONDENT: Internal configuration will affect the security of the system in relation to internal users.

COURT APPOINTED IT EXPERTS: 1st Respondent to provide configuration of internal firewalls as the request doesn't affect the vulnerability of the system. External Configurations should not be provided to the Petitioners as it will make 1st Respondent's Systems vulnerable. Requested information on internal firewall configuration was not delivered.

3.3. ORDER C

- c. Operating systems without releasing the software version.

1ST RESPONDENT: Document provided in hardcopy.

PETITIONERS: Documents received and requested additional information.

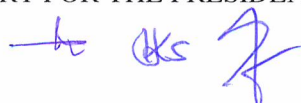
3RD RESPONDENT: Documents received

COURT APPOINTED IT EXPERTS: Document provided complies with the request.

3.4. ORDER D

- d. Password policy.

1ST RESPONDENT: Softcopy document provided.



PETITIONERS: Softcopy document received.

3RD RESPONDENT: Softcopy document received

COURT APPOINTED IT EXPERTS: Document provided complies with the requirement.

3.5. ORDER E

e. Password matrix.

1ST RESPONDENT: Softcopy document provided.

PETITIONERS: Softcopy document received.

3RD RESPONDENT: Softcopy document received

COURT APPOINTED IT EXPERTS: Document provided complies with the requirement.

3.6. ORDER F

f. System user types and levels of access.

1ST RESPONDENT: Softcopy document provided.

PETITIONERS: Softcopy document received.

3RD RESPONDENT: Softcopy document received

COURT APPOINTED IT EXPERTS: Document provided complies with the requirement.

3.7. ORDER G



- g. The IEBC Election Technology System Redundancy Plan comprising of its business continuity plan and disaster recovery plan. Presidential Petition No.1 of 2017

1ST RESPONDENT: Provided Disaster recovery plan document in softcopy.

PETITIONERS: Document received.

3RD RESPONDENT: Document received.

COURT APPOINTED IT EXPERTS: Document provided complies with the requirement.

3.8. ORDER H

- h. Certified copies of certificates of Penetration Tests conducted on the IEBC Election Technology System prior to and during the 2017 General and Presidential Election including:
- (i) Certified copies of all reports prepared pursuant to Regulation 10 of the Elections (Technology) Regulations, 2017; and

1ST RESPONDENT: Provided test reports.

PETITIONERS: Cited that test reports were not certified as per Election (Technology) Regulation 10, 2017.

3RD RESPONDENT: The Commission can certify the reports.

COURT APPOINTED IT EXPERTS: Documents submitted were not certified: submission does not conform to Election (Technology) Regulation 10, 2017.

- (ii) Certified copies of certificate(s) by a professional(s) prepared pursuant to Regulation 10(2) of the Elections (Technology) Regulations, 2017

1ST RESPONDENT: Provided the Certificates in hardcopy to the Petitioners.

PETITIONERS: Cited that the Certificates were not certified as per Election (Technology) Regulation 10(2), 2017.



3RD RESPONDENT: The Commission can certify the Certificates.

COURT APPOINTED IT EXPERTS: Documents submitted were not certified: submission does not conform to Election (Technology) Regulation 10(2), 2017.

3.9. ORDER I

- i. Specific GPRS location of each KIEMS Kit used during the Presidential Election for the period between and including 5th August, 2017 and 11th August, 2017.

1ST RESPONDENT: Provided the GPS locations for the Polling stations and not for the KIEMS Kit

PETITIONERS: Requested for the correct report

3RD RESPONDENT: Requested for the correct report

COURT APPOINTED IT EXPERTS: 1st Respondent to provide the correct document.

3.10. ORDER J

- j. Certified list of all KIEMS Kits procured but not used and/or deployed during the Election;

1ST RESPONDENT: Document provided in a spreadsheet.

PETITIONERS: Document received.

3RD RESPONDENT: Document received.

COURT APPOINTED IT EXPERTS: Document for allocated and non-allocated was provided. Information on whether deployed or non-deployed kits was not comprehensive.

3.11. ORDER K

- k. Polling station allocation for each KIEMS Kit used during the Presidential Election;



1ST RESPONDENT: Document provided in a spreadsheet

PETITIONERS: Document received

3RD RESPONDENT: Document received

COURT APPOINTED IT EXPERTS: Document provided complies with the requirement.

3.12. ORDER L

- l.* Technical Partnership Agreement(s) for the IEBC Election Technology System including but not limited to: *a. List of the technical partners; b. Kind of access they had; and c. List of APIs for exchange of data with the partners*

1ST RESPONDENT: Agreements, list of partners, link of the API and the list of media houses invited to access the API.

PETITIONERS: Requested for a list of all APIs

3RD RESPONDENT: Document received.

COURT APPOINTED IT EXPERTS: Requested the Petitioners to clarify on their request. Document received as requested except for list of APIs.


3.13. ORDER M

- m.* Log in trail of users and equipments into the IEBC Servers.

1ST RESPONDENT: Provided predownloaded Logs in a hard disk.

PETITIONERS: Not agreeable on the softcopy logs provided. Requested that logs be accessed from the servers as they observed.

3RD RESPONDENT: Indicated that as long the logs were provided in softcopy they served the purpose.



COURT APPOINTED IT EXPERTS: 1ST Respondent was to demonstrate that the logs came from the IEBC servers by allowing all parties to have Read Only access and to copy the logs: alternatively, the 1ST respondent could access the information in the presence of the petitioners and provide copies as and when requested. Live access was provided on 29th August, 2017 at about 3.15pm without the ability to access the logs or even view them. Therefore, the request was not granted.

3.14. ORDER N

- n. Log in trails of users and equipments into the KIEMS Database Management Systems.

1ST RESPONDENT: Provided predownloaded Logs in a hard disk.

PETITIONERS: Not agreed on the softcopy logs provided. Requested that logs be accessed from the servers as they observed.

3RD RESPONDENT: Satisfied with information provided.

COURT APPOINTED IT EXPERTS: 1ST Respondent was to demonstrate that the logs came from the IEBC servers by allowing all parties to have Read Only access and to copy the logs: alternatively, the 1ST respondent could access the information in the presence of the petitioners and provide copies as and when requested. Live access was provided on 29th August, 2017 at about 3.15pm without the ability to access the database and/or database logs. This request was not granted.

3.15. ORDER O

- o. Log in trails of users and equipments into the KIEMS Database Management Systems. Presidential Petition No.1 of 2017 -41- (o) Administrative access log into the IEBC public portal between 5th August 2017 to date.

1ST RESPONDENT: Provided predownloaded Logs in a hard disk.

PETITIONERS: Not agreed on the softcopy logs provided. Requested that logs be generated from the servers as they observed.

3RD RESPONDENT: Satisfied with information provided.



COURT APPOINTED IT EXPERTS: 1st Respondent was to demonstrate that the logs came from the IEBC servers by allowing all parties to have Read Only access and to copy the logs: alternatively, the 1st respondent could access the information in the presence of the petitioners and provide copies as and when requested. Live access was provided on 29th August, 2017 at about 3.15pm without the ability to access the database and/or database logs. This request was not granted.

3.16. ORDER P

- p. The information listed in (m), (n) and (o) above shall be issued in soft copy to the petitioners and 3rd respondent.

1ST RESPONDENT: Provided predownloaded Logs in a hard disk.

PETITIONERS: Did not agree to receive predownloaded logs in softcopy. Requested that logs be accessed from the servers as they observed.

3RD RESPONDENT: Satisfied with information provided

COURT APPOINTED IT EXPERTS: 1st Respondent was to demonstrate that the logs came from the IEBC servers by allowing all parties to have Read Only access and to copy the logs: alternatively, the 1st respondent could access the information in the presence of the petitioners and provide copies as and when requested. Live access was provided on 29th August, 2017 at about 3.15pm without the ability to access the logs or even view them.

3.17. ORDER Q

- q. Certified photocopies of the original Forms 34A's 34B's and 34Cs prepared at and obtained from the polling stations by Presiding Officers and used to generate the final tally of the Presidential election, and pursuant to such production leave be granted for the use of an aid or reading device to assist in distinguishing the fake forms from the genuine ones.

All parties were in agreement that this order was not to be handled by this team.

h. UKS J

3.18. ORDER R

- r. Forms 34A 34B and 34 C from all 40,800 polling stations.

All parties were in agreement that this order was not to be handled by this team

3.19. ORDER S

- s. Scanned and transmitted copies of all Forms 34A and 34B.

Scanned and transmitted copies of all Forms 34A and 34B were not made available to this team. However read only access was provided to individual 34A forms (Scanned copies and text).



4. CONCLUSIONS

The 1st Respondent agreed to provide Read Only live access to the servers at about 11.00am today (29th August, 2017). Partial read only access was provided at about 3:15pm but with no copy capability, access to system/database logs was not provided.

The 1st Respondent indicated that they had a number of technical challenges in complying with the server Read only access order including but not limited to: -

- Setup of the VPN tunnel to the server
- Connectivity challenges when accessing the cloud
- Security protection measures that need to be upheld because we are still in the election period.

Partial access became available after the meeting had been called to close at 5:30pm, notably the 1st Respondent had indicated that if granted more time they would have been in a position to provide more comprehensive access.

NAME: Prof. Elijah I. Omuenga TITLE: SC ICT Appointed expert SIGN:  DATE: 29./8/2017

NAME: José L. Sevilla TITLE: Court Appointed Expert SIGN:  DATE: 29/8/2017

NAME: Janet Kademyi TITLE: ICTO SIGN:  DATE: 29/8/2017

5. ANNEXURES

5.1. ANNEXURE ONE: ORDER A

A - h Ks