

Date: 11th July 2019

REPORT FOR I-VOTING IMPLEMENTATION COMMITTEE

1. BASIS OF i-VOTING IMPLEMENTATION COMMITTEE FORMATION

During the last JEXCA EGM dated on 1st March 2019, it was presented as an agenda whether i-voting should be introduced in subsequent JEXCA elections or not. The house underwent a thorough and long discussion. Respected Ex-cadet Brig A A K Mahbub Hasan (Retd) (1/13), Ex-cadet Sk Md. Maruf Hasan (10/603), President, JEXCA, Ex-cadet Abu Yusuf Md Abdullah (13/729), Ex-Cadet Zulfiquer Ahmed Amin (14/786), Ex cadet S M Moazzem Hossain (14/975), Ex-Cadet Abdullah Al Mamun (15/861), ex-cadet Kazi Ahmed Pervez (15/840), ex cadet S M Zillur Rahman (16/911), ex-cadet MohsinUddin Ahmed (17/977), Ex-cadet Rashed Al Mahmud Titumir (18/1043), ex-cadet Tanim Khan (30/1643) participated in the discussion. During the discussion it was revealed that there remain two important issues to be solved before implementation of i-voting, namely

1. Amendment of constitution has to be made and after that approval/acknowledgement has to be taken from the Department of Social Welfare, GOB.
2. Technical issues relating to implementation.

Therefore a trustworthy and efficient mechanism i.e. i-voting software has to be selected and developed in the most secured way. So, the house went for the motion that i-voting implementation committee will be formed by the EC and they will take care of all the issues and within December 2019. The relevant issue was proposed to be placed during the next reunion with required amendment of constitution, addressing all relevant legal issues and security hazards. It was also approved by the house, in the EGM, that i-voting will be effective from 2021 JEXCA election. JEXCAites living and travelling abroad during the period of election will be eligible for this purpose. That was the basis of formation of i-voting implementation committee.

Accordingly, i-voting implementation committee headed by Zillur/16th intake, Shakil/30th intake (Member Secretary), was formed by an EC resolution dated 24th May 2019. By the same resolution the EC also directed the convenor of the said committee to co-opt the members from the JEXCAites as per requirement. Consequently Mohsin/17th intake, Titumir/18th intake, Mohiuddin /22nd intake, Tanim/30th intake and Sayeed/32nd intake were co-opted as member of the said committee to shape it to an effective structure. Now on 14th June 2019, the 1st meeting of i-voting implementation committee was scheduled to be held. On the same day I, as convenor of i-voting Implementation Committee and Tanim as member of the same committee, sat for a meeting with honourable Election Commissioner ex-cadet Ahsan/12th intake. He requested us for the most optimistic timeline to implement i-voting and he instructed us to update him with requisite information as quickly as possible. On 15th June 2019, i-voting implementation committee sat for a meeting and over phone we informed our Election commissioner that we will require three months time to implement i-voting. We further informed that the schedule presented for implementation will start from the date of approval in the Emergency General Meeting.

2. OBJECTIVE:

Our objective is to facilitate not only the voting system among the JEXCAites globally but also promote active participation in all JEXCA events and activities.

3. BASIC PRINCIPLES OF THE SYSTEM:

The task of implementing i-voting was most critical and challenging for us. It was decided that the best possible secure way for i-voting system is going to be adopted. That's why the module or software will not be integrated with our existing JEXCA website/database. Voter eligibility list module will be operated by admin. (Election Commissioner). So that admin will be able to mark the members who are eligible for i-voting or voter registration or even. It will be possible to allow i-voting to a decided group of members (JEXCAites living abroad, Outside Dhaka etc).

4. VOTER REGISTRATION MODULE:

Eligible voters will have to register for i-voting within a prefixed time limit set by Election Commissioner.

5. VOTER REGISTRATION PROCESS:

- a. The voter will have to put his device MAC address /IMEI using which he will cast his vote. At the time of vote casting he will not be able to change his device.
- b. The voter will have to put his email address or mobile number where OTP will be sent during vote casting.
- c. The voter will have to take a photo of his own using mobile phone front camera or lap top camera during registration.
- d. The voter will have to mention his location from where he wants to vote.
- e. The voter will have to answer some personal questions mentioned in the registration form.
- f. The voter will have to upload a valid photo, photo ID along with proof of address and some other evidence mentioned in the registration form.
- g. The voter will have to accept phone call during or after registration.
- h. The voter may have to install simple application in mobile or android phone.
- i. The voter will have to pay 1000 BDT or equivalent for registration in i-voting.

6. VOTING MODULE:

- a. Voter will have to log in into the system, using 2FA (User ID, Password and as a 2nd factor OTP).
- b. Voter will get a fixed time duration (for example 10 mins) for casting his vote.
- c. Voter may have to answer very simple two or three questions that were uploaded during registration.

- d. Voter must have take a photo of his own during his voting using mobile front camera or lap top camera
- e. Voters may have to answer some multiple choice questions about the candidates in the vote.

7. VOTER DATA BASE INTEGRITY AND SECURITY :

- a. There will be tracking information who has voted. Total vote count will be same of total of candidates' received votes;
- b. There will be no tracking information about who has voted for whom (One way encryption will be used);
- c. Hosting password will be segregated among two to three admin people so that only one person cannot change any database configuration;
- d. Any time data base and code can be audited (In this case the candidate/valid member will have to bear the audit cost) and hosting password is recommended to be changed by Election commissioner which should not be less than 18 digit out of which 12 digit will be shared by two election commissioner and 6 digit will be possessed by the representative of EC. Candidate/Valid member can ask for audit before and within seven days after election.
- e. Before any election there will be a demo open vote where candidates/representatives will be present and ensure vote casting reflects the right person. Once the system is tested and the result is right, then the hosting password will be handed over to the election commissioners in segregated way.

8. CONFLICT OF INTEREST:

The module or software will not be taken from any JEXCAites or any of the JEXCA relatives or from any organisation where any JEXCA member is working as interest in any way.

9. ACTION PLAN AND TIMELINE:

Step 1: RFQ (Request For Quotation). Preparation for i-voting. (Time line 7 days)

Step 2: Call at least three vendor for RFQ discussion. (Time line 7 days)

Step 3: Vendor selection based on technical and financial proposal. (Time line: 7 days)

Step 4: Selected vendor will prepare SRS (System Requirement Specification) document. (Time line depends on vendor)

Step 5: SRS will be approved and signed off by committee. (Time line 5 days)

Step 6: Vendor will share the start date of software development. (Time line depends on vendor's current project and the available resource)

Step 7: Software development will be done and will be submitted for User Acceptance Test (UAT). (Time line 3 days)

Step 8: Committee will test and verify the software. (Time line 7 days)

Step 9: Based on the test result some modification might be required by software developer. (Time line 7 days)

Step 10: Software to go live. COST: The cost may be around three lakh for developing the software.

RECOMMENDATIONS:

- a. It would be really convenient if EC nominates two additional JEXCAites as assistant/additional Commissioner to assist the Election Commissioner,

And

- b. In future the responsibilities for appointment of election commissioner should be delivered to the members of Advisory Committee through required amendment of constitution.

Thanks and best regards.

I-voting Implementation Committee,

JEXCA