

VOTER REGISTRATION & ID SOFTWARE

WHITE PAPER

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Dohatec



Voter Registration and ID Software

Holding of credible and fair general elections has been taken up as a national priority as a part of the democratic governance process. There was total lack of transparency over the voters list and the demand for voter lists with photographs was universal in Bangladesh. The Caretaker Government decided to undertake the registration of all voters along with their photographs, finger print and signature. The Bangladesh Army drawing upon its experience at home and abroad commenced the process of creating a suitable people identification system to give the Voter registration process a head start.

Dohatec was invited by the Bangladesh Army to present their views on developing a solution to and formulating the electronic voter registration and ID software (VRID) as part of the Election Management System (EMS). The Army was open to all existing talent at home including academic institutions. International companies which offered their expertise also had easy access to them as well. The government set up a high powered committee which recommended gathering voter data on Laptops with web cam, finger print scanner and signature pad.

The objective was to produce a voter list based on the standard for voting eligibility with photograph following identification of citizens. Except non-citizens all including first-time voters will be registered to vote. Another key objective is to eliminate vote fraud, either on the part of individuals or on a larger scale.

Dohatec was the first company to develop the required solution and give shape to the imagination of the concerned authorities in a week's time. Within two weeks there was a system for the Army to try out. The Army gave demonstrations to University Professors and other professionals. The Dohatec solution involved development of the electronic voter registration and national identity software –VRID; the higher level matching software and the integration software.

There are 100 million voters to be registered in the country. The area is small but the seasons are fast and so is the change in climatic conditions. It rains and floods for months. The cities and towns are densely populated. But rural population is around 70%. The power shortage is endemic. The enrollment will be through government agencies and volunteers assisting the Election Commission and not through regular offices. This would mean that the voters have to be persuaded to register when the enrollment drive is on. The system is in Bangla language. There were huge challenges as nothing like this exists.



Figure 1: *Voter Registration and ID Software*

Milestones

8 February 2007	Requirement of integrated system to capture administrative data, image, signature and fingerprint with AFIS implementation AHQ
14 February 2007	Demonstrations to Army experts
1 March 2007	Demonstration at AHQ to Dean, Computer Engineering, BUET
14 March 2007	Presentation of the system to General in charge
22 & 25 March 2007	Independent field trials by the Army
3 April 2007	Demonstration to the Chief of Bangladesh Army
7 April 2007	Demonstration to Chief Election Commissioner
8 April 2007	Made public by the Bangladesh Election Commission
16 May 2007	Election Commission and Bangladesh Army demonstrated the Voter Registration and National ID System to the Media

- 26 May 2007 Demonstrated to the Chief Advisor other Advisors. Army Chief was present along with the Election Commission
- 10-30 June 2007 Sreepur Pilot Project

Some key considerations for efficiency in enrollment were:

- logic of the enrollment has been foremost.
- Ergonomics and user friendly
- speed of data collection
- economic and prevalent software.
- data gathering designed to minimize errors in key administrative data
- capture of the most suitable photograph is possible.
- fingerprint is gathered with checking for doubles first
- identification numbers can be unique and automatically generated
- several key features can be used to retrieve data on any individual already registered
- voter lists, ID cards, voter data printing is planned focusing speed and economy.
- procedures to be followed by the users are set out in most convenient manner
- to eliminate risk of misspelling of administrative units these are in combo boxes.
- User guide is contained in the program to be of assistance in each kit.
- the software is highly customizable in order to cope with the changes if any
- the present form has 41 fields and requires only 17 fields to be typed in and 24 can be selected from combo boxes.
- optimal maneuverability and flexibility to accommodate highest levels decisions

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
বাংলাদেশ নির্বাচন কমিশন - নিবন্ধন ফর্ম

ব্যক্তিগত পরিচিতি নং: 1957 33 2 86 01 000047 জোটের নং: 33 0394 00047

নাম: আব্দুল বারেক
Name: Abdul Barak
পিতার নাম: হুম্মেদ আলী ডুইয়া
পিতার নাম: হুম্মেদ আলী ডুইয়া
বিশ্ব: পুরুষ
বৈবাহিক অবস্থা: বিবাহিত
পেশা: ব্যবসা

বর্তমান ঠিকনা: ঢাকা, গাজীপুর, শ্রীপুর, পৌরসভা: শ্রীপুর পৌরসভা, 55
ইউনিয়ন/ওয়ার্ড: ওয়ার্ড নং ১, ক্যাঃ বোর্ড: শ্রীপুর, মৌজা/মহল্লা: শ্রীপুর, বাড়ার নং: শ্রীপুর উত্তর

জাতীয়তা: বাংলাদেশী
জন্ম তারিখ: 01/02/1957
বয়স: 55
জন্ম স্থান: গাজীপুর

বর্তমান ঠিকনা: ঢাকা, গাজীপুর, শ্রীপুর, পৌরসভা: শ্রীপুর পৌরসভা, 55
ইউনিয়ন/ওয়ার্ড: ওয়ার্ড নং ১, ক্যাঃ বোর্ড: শ্রীপুর, মৌজা/মহল্লা: শ্রীপুর, বাড়ার নং: শ্রীপুর উত্তর

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জন্ম স্থান: গাজীপুর

ভোটার এলাকা: 0394
শিক্ষাপত যোগ্যতা: ৮ম
দুস্থান সনাক্তকরণ টিক: নাই
রক্তের গ্রুপ: N/A

টি আই এন (TIN): N/A
জিইডিং লাইসেন্স নং: নাই
পাসপোর্ট নং: N/A
IRIS / DNA: N/A

ধর্ম: ইসলাম
জাতীয়তা: বাংলাদেশী
মৃত্যু তারিখ: / /

ছবি গ্রহণ
Cancel Signature
No Finger

Save Save Draft Verification Edit Form Preview Card Preview New Entry Close

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Figure 2: Voter Registration and National ID Form

Some the areas relating to voter registration management which were considered in the process of development are listed below

- Accuracy of voter information
- State-of-the-art reporting and query tools
- Complete Tracking
- Statistical Reports
- Voter List within a particular area
- Flexibility in assignment of constituency to Voter
- Search Capability of Almost Every Field on the Voter Registration Application
- The Solution has User Account Management Security Capabilities to Setup Roles
- Function Where Address Change can be made to Take Effect Immediately
- Function Where Mass Address Changes can be made.
- Provide Function Where Mass Upazila and District Changes can be made.

- Generate Bar Codes of Voter Identifier for Printing.
- Ability to Track All Voter Activities (e.g., Register, Address Change, Name Change)
- Ability to Display a Voter By Street that Includes District, PS,
- Ability to Inquire and Display Voters on a Particular Street, village (Individual Voter).
- Provide Automatic Assignment of Jurisdictions to Voter
- Provide the Ability to Import and Export database including images
- Grant Specific User Access to a Single Screen or Set of Screens
- All Changes are recorded in the System Audit Trail.
- Each Voter Assigned and Unique Identification Number or Unique Voter Identification (UVI).
- Voters Moving between Constituencies will have their Record Detected in Old Constituencies and Voter History will be appended. Original Unique Voter ID Remains the Same.
- Generate Lists by Constituency, District, City Corporation, Municipality, Upazila, PS. or Union
- Capability to Develop Ad-Hoc Reports, Queries and Analysis.
- Create Custom Reports.

The OS in the laptops is in Microsoft Windows XP . Already 1,000 laptops have been procured and another 8000 laptops are in the pipeline. The first level data processing is in SQL servers. Voter lists and ID cards are issued there. There is biometric data matching at this level. The demographic data is 20 kB and the biometric data is 80 kB.

Overseas governments and international agencies are supporting Bangladesh in this project. The UNDP is the coordinator of the international support. They have engaged a few consultants for the procurement.

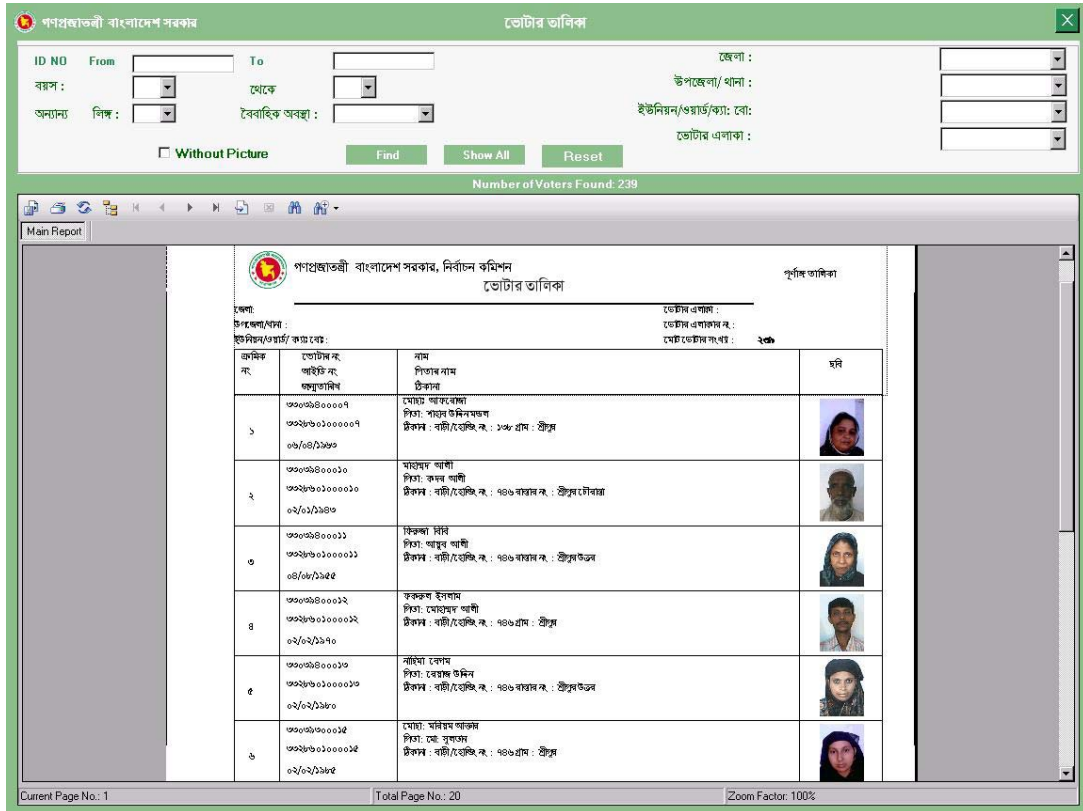


Figure 3 : Voter List with Pictures

Microsoft has provided substantial support to Dohatec in implementing the project. There were discussions on various technical aspects of the Project. Specialists from Microsoft and Intel have flown in to discuss with the Bangladesh Army and the Election Commission on the best possible solution. There were many conference calls and input from Microsoft experts who have also introduced PwC to input as well.

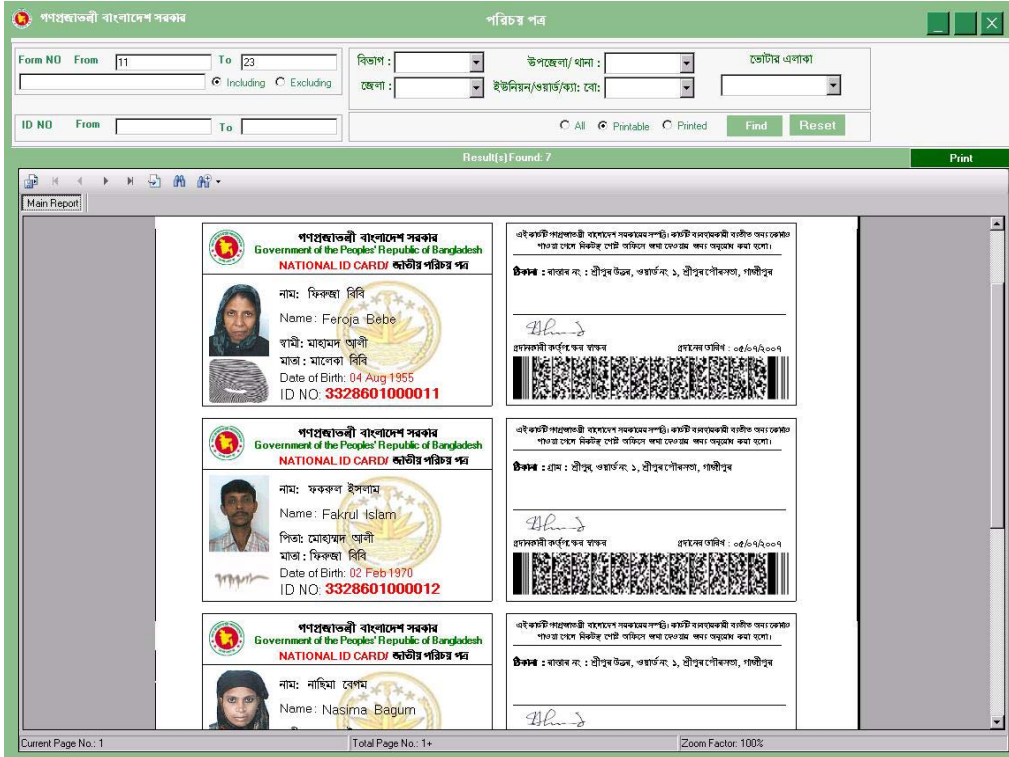


Figure 4 : ID Cards

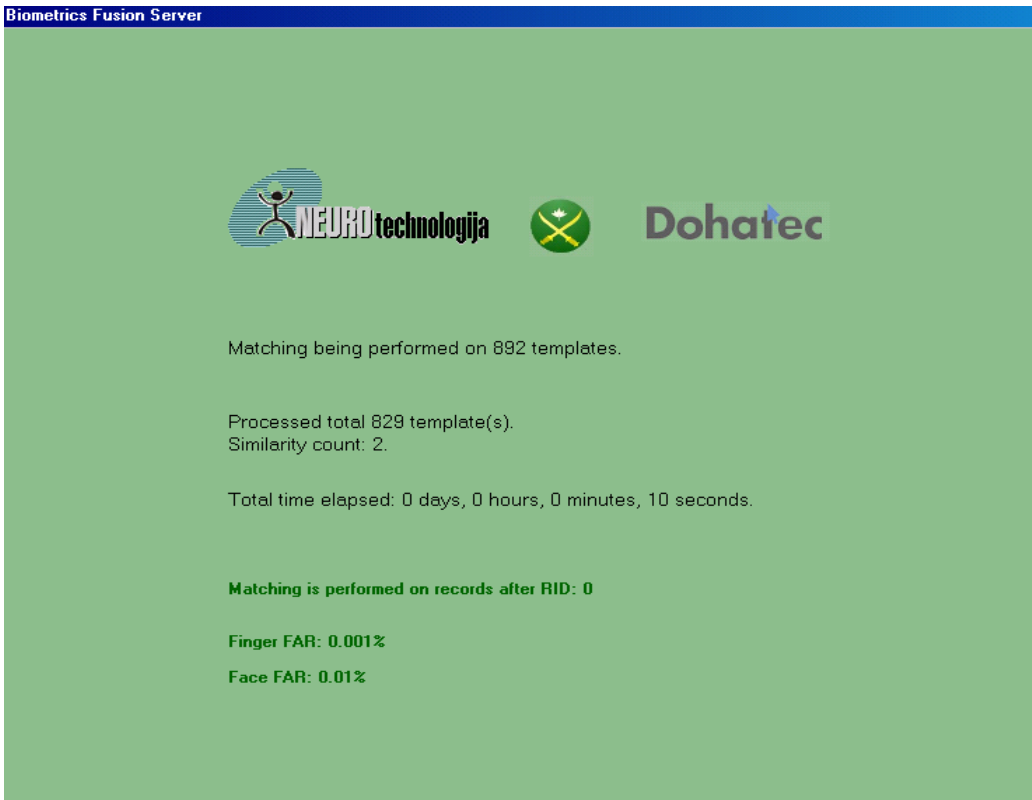


Figure 5 : Dohatec Biometric Fusion Server