

# ELECON 9.0: Managing Assembly Elections in Bihar

**Polling party formation, deployment of patrolling personnel, tagging of booths with the polling party, Electronic Voting Machines (EVM) randomization, vehicle allotment to the parties - all through random number techniques as per Election Commission of India (ECI) guidelines were made possible with the extensive use of ELECON 9.0 (Election Confidential) at the recently concluded assembly elections in Bihar.**



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**E**LECON software, winner of 11th National e-Governance Award (Silver Medal) - 2008, was designed and developed by NIC Bihar State Center, the first in the country to extensively use ICT in the election processes. Feature rich ELECON, generates various MIS reports for the Returning Officers (RO) and Central Observers as well as incorporates Web GIS modules for better management and planning. The software is used to bring transparency & fairness in the poll practices, maintain data secrecy, and implement mechanism to weed out any kind of bias.

### WORK FLOW

A thorough analysis of ECI's guidelines and compendium of RO handbook was studied. Analysis revealed that in terms of computerized system, a workflow based system need to be developed covering all aspects of election processes like Polling party formation process, EVM Process, Force Deployment Process, Counting Process, Communication Plan, online monitoring of Model Code of Conduct etc. Keeping in view of the above ELECON 9.0 was developed and provided software solutions such as- **ELECON Ver. 9.0, EVM Randomization Ver. 2.0, Force Deployment Ver. 2.0, Counting Ver. 2.0, WebGIS for Election**

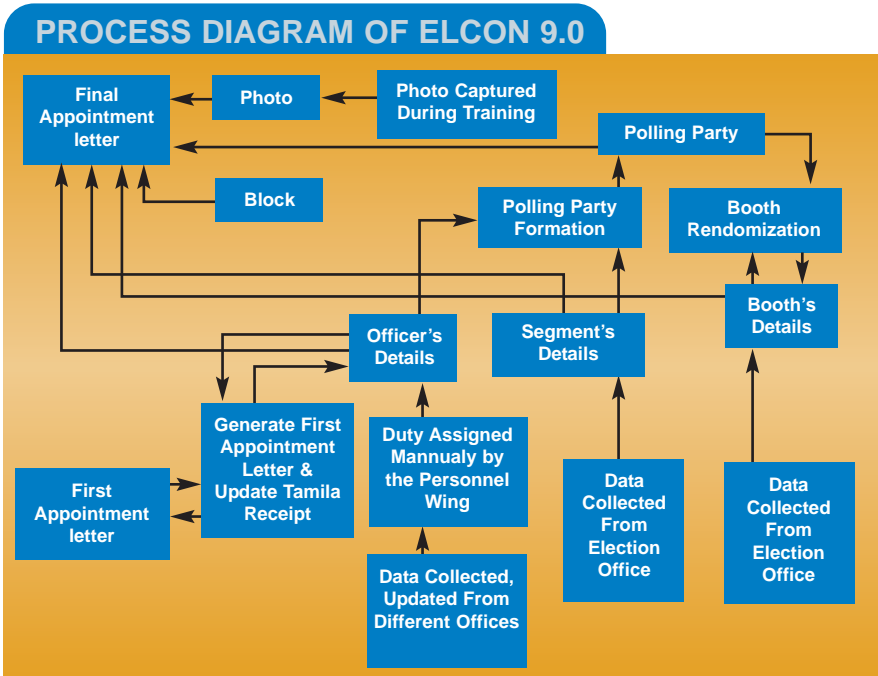
The Data Entry module provides PCCPs tagged booths, Micro-observers tagged booths, and Tamila delivered. Also unique Serial Number wise photo upload facility has been

provided to upload the digital photographs of the polling personnel. The Processing module incorporates Polling Party formation, Reserve Polling Party Formation, Counting Party Formation, Magistrate Party Formation, Reserve Magistrate Party Formation, Micro-observer Party formation, Reserve Micro-observer Party Formation, Cameraman Party Formation, Reserve Cameraman Party Formation, Booths Tagging (Polling Party), Patrolling Magistrate Booths Tagging, Micro-Observers Booths Tagging, Cameraman Booths Tagging, Counting Table Allotment.

“On account of greater acceptability of ICT tools in managing election processes, Bihar Assembly Elections has achieved many milestones in conducting free and fair elections

**Sh. Sudhir Kumar Rakesh,**  
 IAS & Chief Electoral Officer, Bihar

The Report Module generates appointment letters and other reports to facilitate the District Election Officer in taking informed decisions. The reports generated are first, second & final Appointment & Counting Letters, Assembly Segment Allotment Chart, Table Allotment Chart to Counting Personnel AC wise, List of Personnel AC/ Table wise, Duty wise Counting Personnel, List of Deputed Personnel (Duty wise), List of Deputed Personnel (Block/Duty wise), List of Personnel (Not assigned duty), Tour Advances etc.



**TECHNOLOGY**

ELECON 9.0 is a client/server architecture software developed for networked windows environment with SQLSERVER 2005/MS-Access as database. It was successfully used for 38 DEOs and 243 ROs of Bihar.

**EVM RANDOMIZATION VER 2.0**

- Follows ECI guidelines in letter and spirit.
- Two staged randomization deployment technique.
  - ▲ 1st Level Randomization for AC Allotment to Ballot Units (BUs) and Control Units (CUs).
  - ▲ 2nd Level Randomization for: Booth Allotment to BUs and CUs within AC.
  - ▲ Provision for 2nd BU (if necessary).
- Synchronization of Data with ELECON for reflection of BU,CU used at booths in the appointment letter of polling party.

**FORCE RANDOMIZATION VER 2.0**

- Follows the guidelines of Chief Electoral Officer, Bihar.
- Importing & exporting of police personnel data from/to other district.

- Allotment of police personnel depending on predefined requirement against each booth by picking up police personnel from the data base randomly.

**MIS REPORTS**

- Generation of computerized command for the police personnel.
- Multi-level data security at the level of Database, User & Observer.
- Automatic Application/Data integrity checking before start of work.
- Preparation of Polling Officers Identity card used during poll.
- Generation of Appointment Letters with Photo features.
- Generation of Telephone Directory of the personnel used at various booth for the poll day for easy communication.

**RO/ARO COUNTING VER 2.0**

- Flexibility in defining no of tables in counting Hall and number of candidate.
- Provision for Round wise Table wise Candidate wise count data entry.
- Provision for Round Wise Counting Sheet Report.
- Provision for Round Wise

Summary.

- Provision for Generation of Form-20 (Final Result Sheet) against each AC/PC.

**WEB GIS MODULE**

Web GIS module envisages establishment of Bihar State Election Spatial Data Infrastructure for Multi-Layer GIS for planning and e-Governance by taking advantage of existing & available data and ICT infrastructure resources.

This is largely meant to visualize MIS data spatially through thematic maps for making quicker and better decisions. This has been introduced to bring dynamism and transparency in the process in order to overcome problem related to planning, development, monitoring & decision-making during election process by Chief Electoral Officer, Observers, DEOs and ROs. District and Block wise maps, AC wise maps, Naxal Affected Areas mapping, Election Phases with timing, Mapping of Polling stations and linking maps with communication plan etc. GIS Division, NIC (HQ) actively supported in the process. This is accessible through <http://gis.bih.nic.in/>

**OTHER MODULES USED IN THE ELECTION PROCESSES**

Online Monitoring System for Daily Progress Report on Various parameters of Modal Code of Conduct, Uploading of Affidavits of Candidates, Electoral Rolls Enquiry and Support for Help Desk, Communication Plan for RO, ARO, Polling Stations, SMS Monitoring of Poll day preparations and poll day management.

**For further information**

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