

EVM-VVPAT Randomisation in Elections

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Why in News?

First randomisation of EVM-VVPATs completed for Assembly Elections in Assam, Kerala, and Puducherry.

- **EVM Randomisation** - It is a **digital process of randomly allocating EVMs and VVPATs** to constituencies and polling stations to eliminate human bias.
- **Aim** - Ensure free, fair, and transparent elections.
- Prevent tampering, bias, or pre-determined allocation of machines.
- Maintain neutrality and credibility of electoral process.
- **Electronic Voting Machine (EVM)** - EVM is a device used to electronically record and count votes, designed to replace traditional paper ballots to make the voting process faster, more accurate, and more secure.
- **Voter Verifiable Paper Audit Trail (VVPAT)** - Modern EVMs are often paired with VVPAT, which prints a paper slip showing the voter's choice for 7 seconds so they can verify their vote before it drops into a sealed box.
- **Introduced in** -
 - **EVM** - First introduced in 1982 (Kerala); Full Nationwide use: 2004 General Elections
 - **VVPAT** - First introduced in 2013 (Nagaland); Full Nationwide implementation: 2019 General Elections.

*Elections in India are conducted under **Article 324 of the Constitution.***

- **Legal Basis** - EVM randomisation is based on ECI guidelines (procedural safeguard).

- **Conducted by** - Election Commission of India (ECI).
- **Process - Two Stage Randomisation**
 - **Stage 1: District → Constituency**
 - EVMs randomly allocated from District warehouses → To Assembly Constituencies
 - **Stage 2: Constituency → Polling Station**
 - EVMs further randomized: From constituency level → To specific polling booths
- **Features -**
 - **Electronic Voting Machine (EVM)** - Consists of
 - Ballot Unit → Voter presses button
 - Control Unit → Controlled by polling officer
 - **VVPAT (Voter Verifiable Paper Audit Trail)**
 - Provides paper slip verification of vote
 - Slip visible for 7 seconds to voter
 - **First Level Checking (FLC)**
 - Only EVMs that pass FLC are used
 - Conducted by engineers of *Bharat Electronics Limited and Electronics Corporation of India Limited*
 - **Digital System**
 - Randomisation carried out using *EVM Management System (EMS) software*.
 - **Transparency Measures** - Conducted in presence of *Political party representatives* and lists are shared with: Political parties and Contesting candidates
 - **Storage and Security -**
 - Stored in *Strong Rooms*
 - Security features: Sealed rooms, CCTV surveillance, Guarded by CAPF and Monitoring by candidates/representatives
 - **Counting Safeguard** - VVPAT verification done in: *5 randomly selected polling stations per constituency*

References

1. [PIB | EVM VVPAT](#)
2. [India Today | EVM VVPAT](#)
3. [ECI |EVM VVPAT](#)



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