

Controversy over the Movement of EVMs

What is the issue?

Ahead of counting of votes for the Assembly elections in five states, there were accusations on the ruling party of stealing votes as a truck carrying EVMs in Varanasi was intercepted.

What are EVMs?

- Electronic Voting Machine (EVM) is an electronic device for recording votes that consists of two Units – a Control Unit and a Balloting Unit.
- EVMs were first used in 70-Parur Assembly Constituency of Kerala in the year 1982.
- An EVM being used by ECI can record a maximum of 2,000 votes.
- In case of M2 EVMs (2006-10), EVMs can cater to a maximum of 64 candidates including NOTA.
- In case of M3 EVMs (Post 2013), EVMs can cater to a maximum of 384 candidates including NOTA.

How are EVMs stored during non-election period?

- All available EVMs in a district are normally stored in a treasury or a warehouse under the control of the District Electoral Officer (DEO).
- The warehouse is secured by a double lock, guarded round the clock by security guards, and is under CCTV surveillance.
- During a non-election period, EVMs cannot be moved out of the warehouse without specific instructions from the Election Commission.
- The first-level check of the EVMs by engineers is done here, in the presence of representatives of political parties.

How are EVMs transferred during the poll season?

- **First randomisation-** EVMs are allocated randomly to various Assembly segments through software in the presence of party representatives.
- From this point, the Returning Officer (RO) of the Assembly segment takes charge of the allocated machines and stores them in designated rooms.
- **Second randomisation-** EVMs are commissioned to specific polling stations in the presence of party representatives.
- After candidate setting, which is the process of preparing EVMs after names of candidates are final, the strong room is sealed in the presence of party representatives.
- Once sealed, the strong room can only be opened on a fixed date and time when the machines have to be handed over to the designated polling stations.
- Some reserve EVMs are also taken from the strong rooms and stored in a central place in the Assembly segment in order to replace the defective machines.

What happens when the voting ends?

- Once voting ends, the Presiding Officer is required to prepare an account of votes recorded in the machines.
- An attested copy of this is provided to each candidate's polling agent and the EVM is sealed.
- Candidates and their agents are allowed to put their signatures on the seals, can check for any signs of tampering and can travel behind vehicles carrying EVMs from the polling station to the strong room.
- Reserve EVMs should also be returned at the same time when the polled EVMs are returned.
- Once all used EVMs have arrived, the strong room is sealed and the candidate or representative is permitted to put their seals or locks.
- Once sealed, the strong room cannot be opened until the morning of counting day.
- Security forces are deployed in three layers around storage rooms with Central Armed Police Forces guarding the inner ring.
- On the day of the results, counting begins only after the candidate or her polling agent has checked the machine number and the unbroken seal.

How are EVMs said to be foolproof?

Voter Verifiable Paper Audit Trail (VVPAT) is an independent system attached with the EVMs that allows voters to verify the votes. It was first used in a bye-election from Noksen Assembly Constituency of Nagaland.

- **EVM hacking**- EVMs are standalone machines and are not connected to any network.
- EVMs and VVPATs are not connected to any external power cables and they operate on battery packs.
- The machine has no internet interface so the question of hacking externally doesn't arise.
- **Reprogramming**- Neither EVMs nor VVPATs have radio frequency transmission device features that can receive signals from the outside and hence cannot be reprogrammed.
- **Vote stuffing**- No votes can be cast after pressing the close button.
- **Variations**- The anti-tamper mechanism in the machine is so strong it detects even 100-millisecond variations.
- **Manufacturing**- Only two manufacturers - Bharat Electronics Ltd., Bangalore and Electronic Corporation of India Ltd., Hyderabad are involved in the manufacture of EVMs.
- At the manufacturing facility, operations are logged electronically so that all events can be traced easily.
- **Physical security**- Physical security is four levels and nobody can enter the EVM manufacturing facility where the programming is done unless they pass through a series of security measures.

References

1. <https://indianexpress.com/article/explained/evms-varanasi-akhilesh-bjp-7808041/>
2. <https://timesofindia.indiatimes.com/city/hyderabad/evms-foolproof-cant-be-tampered-with-says-former-ecil-chairman/articleshow/69125520.cms>
3. <https://eci.gov.in/faqs/evm/general-ga/electronic-voting-machine-r2/>



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