

ELECTION COMMISSION OF INDIA
NIRVACHAN SADAN, ASHOKA ROAD, NEW DELHI-110001

NO. 51/8/16/4/2017-EMS

Dated: 30th August, 2017

To

The Chief Electoral Officers Of
All States and Union Territories

Subject: Instructions on First Level Checking of EVMs and VVPATs (FLC)

Sir/Madam,

In supersession of the existing instructions in the subject matter, the Commission has directed that henceforth, the following instructions on the First Level Checking of EVMs and VVPATs shall be strictly followed:

OVERALL RESPONSIBILITY OF FLC → District Election Officer shall be responsible for overall FLC process and shall ensure strict adherence & compliance of FLC instructions. District Election Officer shall appoint an Addl./Dy. DEO fully trained with FLC process as FLC supervisor.

1. FLC when to be done:

1.1. FLC of EVMs and VVPATs shall be done before every bye-election and general election to State Legislative Assembly and House of the People (Lok Sabha) or in any elections where EVMs are used in future.

1.2. FLC of EVMs (Control Units and Balloting Units) and VVPATs shall commence

- (a) within one month of occurrence of vacancy in case of bye-election.
- (b) at least P-120 days in case of General Election to State Legislative Assembly.
- (c) at least P-180 days in case of General Election to Lok Sabha.

1.3. FLC is to be done sufficiently in advance so that all checks are carried out without any undue haste in the presence of representatives of political parties.

1.4. FLC of EVMs and VVPATs shall be completed, as far as possible, well before the issue of notification calling the election.

2 Schedule of FLC:

2.1. Depending on the number of EVMs and VVPATs to be checked in FLC, the CEO shall prepare a schedule for the FLC of EVMs in consultation with EVM manufacturers (ECIL & BEL).

2.2. The above schedule shall be made available to the Commission for approval by P-130 days in case of General Election to State Legislative Assembly and P-190 days in case of General Election to Lok Sabha.

3. FLC to be done in the presence of representatives of political parties:

3.1. The schedule for FLC shall be communicated to every national and state level recognized political party at the district headquarters under intimation to the parties at State headquarters, in writing by the DEO at least one week before the beginning of the FLC in the district.

3.2. On the day of the FLC, representatives of all national and state level recognized political parties authorized by the District President of the party shall be encouraged to be present.

3.3. A register shall be kept at FLC hall by the DEO in **Annexure -1** in which signatures of all political parties shall be taken every day as token of their presence.

4 Arrangements in the premises of FLC:

4.1. FLC shall be carried out in a large, well-lit, well ventilated and dust free hall. Non-heating high illumination LED lights may be installed so that each table is brightly lit.

4.2. The hall must be spacious to accommodate the EVMs and VVPATs to be checked, officials nominated by the DEO, engineers of BEL and ECIL and also representatives of political parties. The requirement of tables, chairs and labours shall be assessed in consultation with BEL and ECIL.

4.3. FLC area shall be barricaded and sanitized by police before the hall is used for FLC. It shall be ensured that the hall is free from any other electronic device or components of electronic devices, except those permitted by the Commission for the purpose of recording FLC process etc.

4.4. There should be adequate arrangement of fire extinguishers and fire alarm inside and outside the hall as FLC teams use highly inflammable thinners to clean the EVMs.

4.5. FLC area shall have the facilities of drinking water, toilet, first aid etc., including toilets for women.

4.6. There shall be only one entry and exit point to the hall, which shall be guarded by armed police force round the clock.

4.7. Every hall shall have a door frame metal detector (DFMD) & entry shall be permitted only through DFMD. Every person who enters the hall shall be frisked at every entry. If a person makes multiple entries in the hall, he/she shall be frisked each time the entry is made.

4.8. Entry to this hall shall be only on production of Identity Card of the authorized officials/passes issued by the District Election Officer.

4.9. Nobody will be allowed to carry any electronic device inside the hall including cell phones, camera and spy pens etc. Similarly, nobody will be allowed to carry anything out of the FLC hall. A collection center for electronics items like cell phones, camera etc. shall be made outside the hall. **Only two mobiles, to be used by the election officials nominated by the DEO, shall be allowed for marking of FLC-OK or FLC-Reject using Mobile App developed by the Commission for this purpose.** Security personnel will not allow any other equipment to be carried into the FLC hall by the engineers except those mentioned in FLC Standard Operating Procedure (SoP).

4.10. Arrangement of Web-casting/CCTVs/videography:

Web-casting must be done of the entire FLC process for monitoring by DEO/CEO/Commission only. The line feed of webcasting must be closely monitored at the Control Room at DEO and CEO level and report submitted to ECI.

4.11. A log book shall be maintained for entry and exit of every person including the officers, representatives of political parties etc.

4.12. A separate log book (i.e. duty roaster) shall also be maintained for armed police force deployed for FLC hall for recording the names, designation, shift duties, take over and handover charges etc.

4.13. The Commission will send an inspection team comprising of officers of ECI/CEO, alongwith engineers of the manufacturers to inspect the FLC hall and preparedness of FLC 3-5 days before start of FLC. DEO shall accompany this team to assess preparedness first hand.

5 **Manpower in FLC:**

5.1. FLC shall be carried out only by authorized engineers of BEL and ECIL. BEL and ECIL shall be fully responsible for the integrity, efficiency and competence of their engineers.

5.2. List of engineers deputed by BEL and ECIL for carrying out FLC will be randomized by the Commission for allotment of the State. District-wise allocation shall be done by CEO and this list alongwith engineers cell numbers shall be intimated to DEO.

5.3. Manufacturers shall depute Sr. level engineers at State headquarters as well as each district headquarters to supervise FLC.

5.3a One manager shall be appointed by BEL/ECIL for 4-5 districts & this manager shall remain in the field for daily supervision & coordination.

5.4. No engineers, technicians or other technical staff except authorized engineers/technical staff of BEL and ECIL shall be allowed to enter the FLC hall.

5.5. Sufficient unskilled labour shall be deployed for cleaning, unpacking and packing EVMs and VVPATs. The requirement of labour can be assessed in consultation with the manufacturers.

6 **Work to be done during FLC:**

At the time of FLC, the following activities must be undertaken:

Cleaning of machines: Removal of address tags, Ballot Papers, cleaning of superscriptions on CU & BU, clearing of earlier poll data, dusting of CU & BU etc. These activities are carried-out in the secured place at the FLC venue under close supervision of FLC in-charge and Engineers deputed by manufacturers.

Visual Inspection of EVM & VVPAT: Physical inspection of Carrying Cases, EVM, VVPAT , Connecting Cable, Connector, Latches etc. to ensure no structural damage or breakage of plastic parts, latches, switches etc.

Full functionality checks:

- Checking of all switches in Control Unit, Balloting Unit, doors (flaps), sealing provisions, scratches on acrylic screen etc.

- Response of all switches, confirmation tests for efficacy of Control Unit, Balloting Unit etc. – BEL and ECIL engineers shall carry out test prescribed by the manufacturers as per the SoP to confirm that all components of the EVM are original.
- The plastic cabinets of both Control Unit and Balloting Unit of the EVMs shall be opened by the BEL/ECIL engineers in the presence of political party representatives at the time of FLC and the PCB and other components of EVMs will be shown to them. BEL and ECIL engineers will certify in **Annexure-2** that all the components of the EVMs are original.
- If any EVM is found to be defective, it will be kept aside and sent to the factory of BEL and ECIL for repairs **within 7 days** of completion of FLC in the district. CEO shall club despatches from more than 1 district to economise transport..
- No electronic repair of the machine shall be carried out in the field. Changing of electronic components of the machines in the field is strictly prohibited.
- Detailed Standard Operating Procedure (SoP) mentioning the step-by-step instructions of checking of the machine is attached at **Annexure-3**. Copy of this SoP shall be pasted prominently at FLC Hall. These instructions include a list of equipment and spares, which the engineers shall be allowed to carry with them in FLC hall.

Conduct of Mock Poll:

- Casting of **1 (one) vote against each of the 16 candidate buttons**, observation of result and clearing of mock poll data will be done for each EVM (BU+CU).
- Additionally, mock-poll in **1% of EVMs of 1200 votes, in 2% of EVMs of 1000 votes and in 2% of EVMs of 500 votes** shall be done and a printout of the results, as well as sequential print-out of every vote polled, shall be taken out and shown to the representatives of political parties.
- Representatives of political parties shall be allowed to pick machines randomly for the purpose of mock-poll. Signatures of representatives of political parties shall be taken in a register in **Annexure-4**, as a token of having seen the print out and confirmation that there is no discrepancy between the votes polled during the mock poll and results in the sequential print out.

- In rest of the machines, number of votes polled during the mock poll should be to the satisfaction of the representatives of political parties.
- Representatives of political parties shall be allowed to do the mock poll themselves, if they so desire.
- Signatures of representatives of political parties shall be taken in a register in **Annexure -5** as a token of having done mock poll themselves.
- In case of VVPATs, mock-poll with **6 votes against each of the 16 candidate buttons** shall be done, followed by observation of result and tally of electronic count and printed paper slips of VVPATs for each VVPAT.
- Signatures of representatives of political parties shall be taken in a register in **Annexure-6,** as a token of having seen the print outs and confirmation that there are no discrepancies between the VVPAT paper slips count and electronic count/print outs of EVM.

7 Sealing of plastic cabinet of Control Unit of EVMs with pink paper seal:

7.1 In order to ensure that the Control Unit of the EVM cannot be opened after First Level Checking of the EVMs, the Control Unit shall be sealed with the 'Pink Paper Seal' supplied by the Nasik Security Press, in the presence of the representatives of the Political Parties present at the time of FLC. The Pink Paper Seal shall be affixed on the portion between the Candidate Set Section and the Result Section of the Control Unit.

7.2 FLC Supervisor shall ascertain that the EVM (BU & CU) and VVPAT are checked properly and are FLC-OK in all respect before affixing his signature on the Green FLC-OK stickers to be pasted on the machines. Further, he must be fully satisfied with the FLC process before using Pink Paper Seal for sealing the FLC-OK CU.

7.3 After fixing the Pink Paper Seal, the Engineer of the Manufacturer shall put his signature on the Pink Paper Seal; the representatives of the Political Parties shall also be allowed to put their signature on the said seal with party name in abbreviation below the signature.

7.4 The representatives of the Political Parties present should be allowed to note down the serial number of the pink paper seal affixed on the Control Unit.

7.5 A register in **Annexure-7** shall be maintained to note down the serial number of the pink paper seal used on the Control Unit by clearly mentioning the unique ID number of Control Unit and the Pink Paper Seal number. Signatures of representatives of political parties will also be obtained on this register.

7.6 Photocopy of this register shall be given free of cost to all National and State level recognized political parties as soon as FLC is over.

7.7 Photocopy of this register shall also be given to all contesting candidates as soon as last date of withdrawal of candidature is over.

7.8 Photocopy of this register should also be available at the time of candidate setting and at the time of counting, and should be shown to candidates and their representative and acknowledgement taken on the register.

8 Supervision of FLC:

8.1. FLC shall be carried out under the direct and close supervision of District Election Officer.

8.2 The DEO shall nominate one officer not below the rank of Additional/Deputy DEO as FLC-Supervisor to supervise the entire process of FLC. This officer shall be present in the FLC hall for the entire duration of FLC. FLC Supervisor shall submit a certificate in **Annexure-8** to the CEO concerned through DEO before starting of FLC to the effect that all arrangements for FLC have been done as per ECI instructions.

8.3. District Election Officer shall invariably conduct a daily inspection of the FLC venue & FLC process to ensure that the FLC is being carried out as per the instruction of the Commission. The process of FLC shall be webcast & continuously recorded. Video CD will be kept in the custody of DEO.

8.4. Webcast cameras shall be installed in the FLC hall in such a manner that the process of FLC can be fully seen on webcast.

8.5. Control Room shall be set up at CEO office for monitoring through webcast whether FLC instructions & procedures are being fully followed.

8.6. CEO shall depute teams to conduct surprise inspection of FLC process in the districts from time to time. The report of such inspection undertaken by CEO shall be submitted to the Commission.

8.7. After completion of the FLC of all the BUs, CUs and VVPATs and updating of FLC-status in the ETS, DEOs shall submit a Certificate to this effect to the CEO in the format given at **Annexure-9** and CEO will submit a consolidated certificate for all the districts to the Commission.

9 Security measures for EVMs after FLC of EVMs:

9.1. Comprehensive arrangements should be made for round-the-clock security of the strong rooms having EVMs after First-Level-Checking.

9.2. Minimum one section of Armed personnel of State Police + State Armed Police shall be deployed for 24 X 7 security of Strong room having FLC done EVMs/VVPATs

9.3. The entry point of strong room having EVMs after FLC shall have 24 X 7 CCTV coverage round the clock.

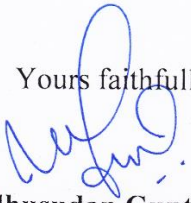
9.4. **There should be sufficient arrangement of fire extinguishers and fire alarm near and inside the strong room.**

9.5. A log book shall be maintained by the security personnel in which entry should be made about date, time, duration and name(s) of anyone entering near the strong rooms. This includes visits by the Observers or DEOs or SPs or Political Parties/candidates or their agents or any other person.

10 Recording of FLC Status in EVM Tracking Software:

FLC status (*FLC-OK or FLC-Failed*) of the BUs, CUs and VVPATs for which FLC has been completed by the Engineers, shall be updated in the ETS using 'Shifting/FLC/Randomisation' mobile-app on day-to-day basis. In respect of FLC-OK CUs serial number of the Pink-Paper Seal is also required to be entered, while entering serial number of Pink-Paper Seal, it should be ensured that only numerical number is to be entered **not** the alphabet pre-fixed to the numerals (i.e. if the serial no. of pink paper seal is X 123456, only 123456 will be entered as serial no. of pink paper seal). In case of VVPATs, the box number will always be '0'.

These instructions shall be brought to notice of all District Election Officers, State Political Parties and other stake-holders and strict compliance ensured.

Yours faithfully,


(Madhusudan Gupta)
Under Secretary

(Attendance Register for Political Parties-FLC Hall)

Name of State/UT:

Name of District:

Address of FLC hall:

Date:.....

S.No.	Name of National/State Party	Name of representative of political party with affiliation	Identity document No. with date	Signature of representative	Remarks, if any.

Note: If the representative of a party is absent the proof of due service of notice to the party should be pasted in the register.

(Name and signature of engineers of BEL/ECIL with ID No.)

(Name, designation, signature of officers nominated by District Election Officer)

(Certification of EVMs by BEL/ECIL)

Name of State/UT:
Name of District:
Address of hall:
Date:

It is certified that tests prescribed by BEL/ECIL to ascertain that all components are original were carried out on the EVMs listed below on..... (date). On the basis of these tests it is certified that all components of the EVMs listed below are original.

<u>CU Identification No.</u>	<u>BU Identification No.</u>

(Name & signature of BEL/ECIL engineers with ID No.)

(Names of Representatives of political parties with their party affiliation and signature)

(Name, designation, signature of officers nominated by District Election Officer)

**STANDARD OPERATING PROCEDURE FOR FLC
OF M-2 EVMs & VVPATs**

1. TOOLS TO BE CARRIED BY ENGINEERS

- a) Decoder Printer with accessories;
- b) Screw Drivers, forceps, nose pliers;
- c) Multi-meter;
- d) VVPAT AC-DC adapter;
- e) Symbol loading jig with Accessories (Power cable, 9 pin symbol loading cable and 9 pin PC interface cable); or PC / Laptop with preloaded symbol loading application; and
- f) RTC Jig for clock setting;

2. SPARE-PARTS AND OTHER MATERIAL TO BE BROUGHT BY ENGINEERS

- a) Flaps;
- b) Close Caps;
- c) Latches;
- d) Cables (BU, VVPAT & VSDU);
- e) Buttons (Ballot, Total, Close, Result, Clear & Candidate);
- g) [spare parts mentioned above (a) to (e) should be 20% of the number of EVMs/VVPATs to be tested]
- f) High Resolution Photographs of component side of CU-PCB and BU-PCB;
- g) FLC Stickers {FLC-OK (Green), FLC-Failed (Red)};
- h) Temper seals;
- i) VVPAT Stickers (Transportation, Working and Unlock before Switch ON);
- j) Coin Cells (RTC Battery); and
- k) Ballot Paper of Dummy symbols;

FLC OF EVMs (BU & CU)

3. **CLEANING OF MACHINES:** Removal of address tags, Ballot Papers, cleaning of superscriptions on CU & BU, clearing of earlier poll data, dusting of CU & BU etc. under close supervision of FLC in-charge and Engineers deputed by manufacturers.

4. VISUAL INSPECTION OF EVM & VVPAT:

- a) Open Carrying cases of Control Unit (CU) and Ballot Unit (BU) and take out the units. Remove all tags, pink paper seal, FLC stickers, wax seals and Ballot papers.
- b) Physically check all buttons, toggle switch, connectors, and doors, sealing provisions, display and plastic body of CU for damage / breakage. Replace the broken items with good items wherever possible and discard others.
- c) Similarly, check connecting cable, connector, latches, and flaps and slide Switch and plastic body of BU for damage / breakage. Replace the broken items with good items wherever possible and discard others.
- d) Open cabinet of CU and carryout visual inspection of PCB. Hidden components or unauthorized rework, if any, CU should be discarded and kept aside.
- e) Similarly, open cabinet of BU and carry out visual inspection of plastic parts and other and PCB for any damage, rework etc. and replace the damaged one if feasible. If any rework, BU should be discarded and kept aside.
- f) Check the number plate and number sticker pasted on the back of CU and BU for any mismatch.
- g) Record the serial numbers and defects of rejected units.

5. FUNCTIONALITY CHECK

a) Installation of Power Pack

i) Open Battery compartment of CU

ii) Insert power pack of EVM

iii) Align power pack connector with plug in CU, Press power pack after insertion

iv) Close Battery compartment

b) Cable Connections

- i) Open connector compartment of CU
- ii) Connect BU cable to BU interface connector of Control Unit
- iii) Set slide switch position of BU to 1. Unmask all 16 buttons in BU.

c) Power ON Display Sequence

- i) Switch ON EVM.
- ii) Observe Power ON LED glowing green in CU.
- iii) Observe the following series of display messages on CU during Power ON
 - EVM IS ON
 - DATE and TIME
 - SL NO of the Control Unit
 - NO OF CANDIDATES
 - BATTERY STATUS

During Power ON, if any of the following defect is observed in CU, then reject that CU.

- a) If one or more segments are missing or extra segment is displayed.
- b) Check Beep after Switch ON. In case of no beep or continuous beep.
- c) If Green LED is not glowing during Power ON.
- d) Check the serial number displayed in CU. If it is not matching with the number given on the number plate and Number sticker pasted on the back of CU.
- e) Check the Date and Time on CU display. In case of wrong Date and Time, set Date and Time with the help of time set jig as detailed in para-17.

6. CLEARING OF PREVIOUS VOTES

- a) Open the outer door of Result compartment and then open the inner door. Press CLEAR button to delete any votes stored in CU.



b) If CU displays INVALID, press RESULT button. If it still displays INVALID, press CLOSE button.



c) Once CLOSE display sequence is completed, press RESULT button and wait till CU displays “End”. Press CLEAR button. During Clear operation, observe CU displays “0” votes for all candidates.

7. CANDIDATE SET OPERATION

a) Press CANDIDATE SET button for setting candidates. Observe “SET CANDIDATE – “display in CU. Press 16th button in BU to set the number of Candidates to 16.



BALLOT OPERATION

- a) Press BALLOT button in CU. BUSY LED in CU shall glow RED and READY LED in BU shall glow GREEN.



- b) Press first candidate button in BU. Observe LED by the side of the button glow RED.



- c) Beep shall be heard. Observe Busy LED in CU and READY LED in BU goes OFF.
d) Follow the instructions “a” to “c” by casting votes for all 16 candidates in BU.
e) Press TOTAL. Check number of candidates 16 and total votes 16 in CU display.

8. CLOSE OPERATION

Press CLOSE button. Observe CU displays “POLL CLOSED”.

9. RESULT OPERATION

Press RESULT button and observe the votes cast against each candidate.

10. CLEAR OPERATION AT THE END OF POLLING

Press CLEAR button and wait till CU displays “0” votes for all the candidates. Press TOTAL to confirm Total Votes 0.

11. REJECTED UNITS

- a) Reject the units found defective during the functionality check.

- b) Identify the defects and isolate them.
- c) Record the serial numbers and defects of rejected units.

12. MOCK POLL ON EVMs RANDOMLY SELECTED BY POLITICAL PARTIES

1200 votes in 1% EVMs,
1000 votes in 2% EVMs; and
500 votes in 2% EVMs

shall be done and a printout of the results, as well as sequential print-out of every vote polled, shall be taken out and shown to the representatives of political parties.

13. SEALING OF CONTROL UNIT

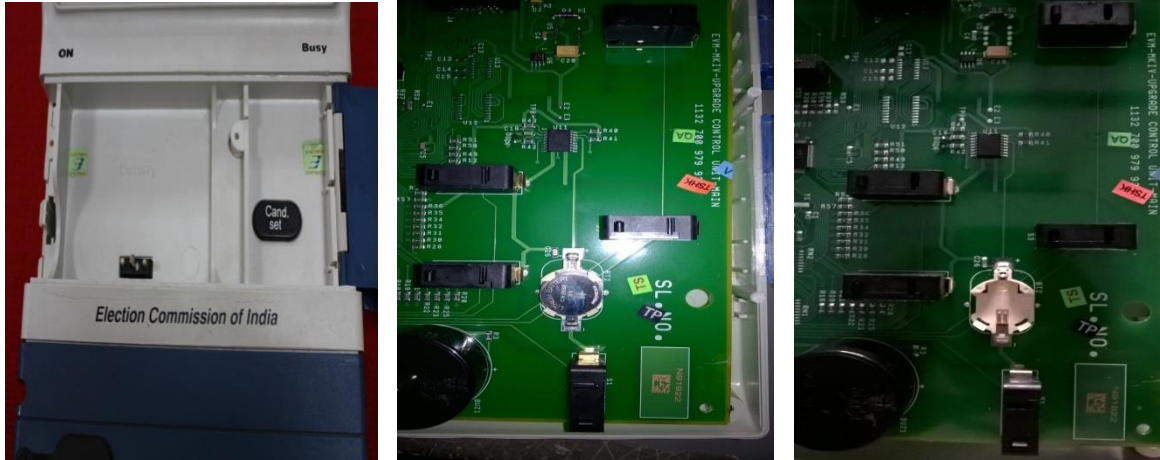
Seal the Control Unit with Pink Paper seal and affix signature of Engineer and representative of DEO. The Sl. No. of Pink Paper Seal is to be recorded along with Sl.No. of CU in a Register.

14. DOCUMENTATION

- a) Paste the FLC-OK (Green) sticker on back side of **FLC-OK** CU and BU. Record the Serial Number of Control Unit and Ballot Unit and affix signature on FLC sticker.
- b) Note down total numbers of CUs and BUs that are accepted after FLC in the prescribed format.
- c) Paste the FLC-FAILED (Red) sticker on back side of **FLC-FAILED** CU and BU. Record the Serial Number of Control Unit and Ballot Unit and affix signature on FLC sticker.
- d) Consolidate Serial numbers of defective units and defects observed in the prescribed format. Submit a copy of the same to FLC In-charge.

15. CHANGE OF COIN CELL

- a) Remove top cover of CU, replace the old RTC cell with new one and re-fix the cabinet.

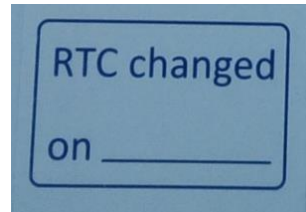


- b) Put the tamper sticker on four screws on top side. Fix the RTC cell sticker on the back of the Control Unit.
- c) Note down total number of Control Units in which RTC cells were replaced in the prescribed format.

Tamper Sticker



RTC cell sticker



16. TIME SETTING

- a) Bring the CU to “Result” mode. Hold simultaneously “Result” and “Print” buttons and switch ON CU. CU shall display “Set Time” mode.



- b) Connect the Time Set Jig with CU and press “Set” button in the Time Set Jig. Current Date and Time is set in CU.

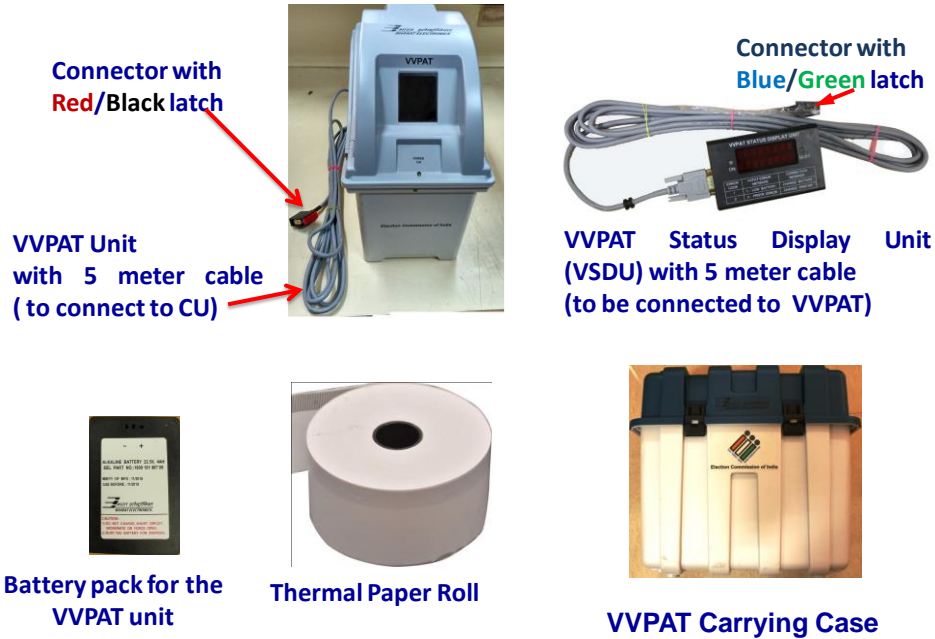
c) Switch OFF CU. Again, switch ON and confirm the Date and Time.



17. CLOSING OF FLC

Put all Units in respective carrying cases and, in turn, in bulk carrying cases and releases them for proper storage. Ensure that the rejected Units are identified with suitable stickers and kept separately.

FIRST LEVEL CHECK PROCEDURES FOR VVPAT



VVPAT AND ITS ACCESSORIES

18. PHYSICAL INSPECTION OF VVPAT

- Open the Ballot Slip Compartment and check for any ballot slips inside. If any old printed slips with election symbols is found, report to the FLC In-charge immediately.
- Remove previously placed address tag and FLC stickers from the VVPAT.
- Remove any paper slips from the VVPAT, if found inside. Remove battery pack from the battery compartment, if any, present in the VVPAT.
- Perform mechanical inspection by checking connector and battery compartment, LOCK-UNLOCK switch and latching/Unlatching of latches.

19. INSTALLATION OF BATTERY

- a) Open Battery Compartment of VVPAT by pressing both the latches together and pulling the door outwards.
- b) Observe the Battery Plug present inside Battery compartment.
- c) Insert the VVPAT Battery by plugging into the battery plug.
- d) Close the battery Compartment door.

20. INSTALLATION OF PAPER ROLL

- a) Open the Paper Roll compartment by opening the side latches and by lifting the top cover. Observe the Paper Roll Compartment which holds the Paper roll.
- b) Remove “Spindle” from its position by pulling towards upward direction.
- c) Insert “Spindle” into “Thermal Paper Roll”.
- d) Place the “Thermal Paper Roll” with “Spindle” into its position (i.e Paper Roll compartment) and press it towards down.
- e) Insert “Thermal Paper Roll” edge into the “Guide -Paper Entry”. Ensure that the plain paper should be on the top surface and the printed band should be on the lower Surface of the Paper.
- f) Move the paper into the slot by rotating the paper feed knob clockwise.



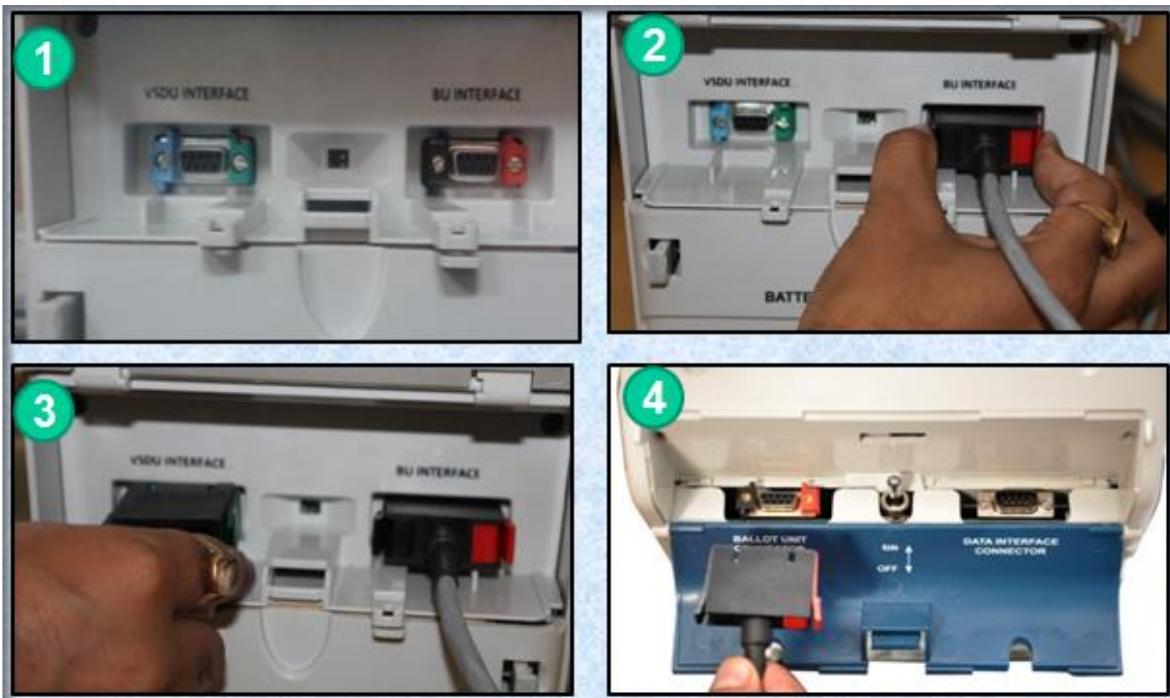
Paper Roll Installation steps

21. SYMBOL LOADING

Dummy symbols prescribed for FLC and demonstration purpose shall be loaded using Laptop/Computer/Symbol Loading Jig for 16 candidate buttons.

22. CABLE CONNECTIONS

- a) Open connector compartment of VVPAT.
- b) Connect cable from Ballot Unit to BU Interface connector matching the coloured latches (red/black connector).
- c) Connect cable from VSDU to VSDU interface connector matching the coloured latches (blue/green connector).
- d) Connect VVPAT cable to BU interface connector of Control Unit matching the coloured latches (red/black connector).



23. Testing Process:

- a) Test Preparation
 - 1 BU, VSDU and CU are needed.
 - The VVPAT should be initialized and loaded with 16 dummy-symbols.
 - Make connections and operate the VVPAT.

- The test has to be performed under standard conditions where a new battery (Voltage > 22 V) and a new paper roll are used.

- i. Ensure Lock-Unlock switch at the back-side of VVPAT is in unlock (Vertical) position.



- ii. Switch on the CU.
- iii. After the VVPAT is turned on, the POST slip and five self-diagnostics reports are printed. In this case, the Diagnostics report should only be checked for PASS/FAIL status as self-diagnostics test would have been carried out on these units.
- iv. Before proceeding for mock-poll, check the status of each sensor in the diagnostics reports. Proceed to next step only if the status of each sensor is shown as “PASS” in the diagnostics report.
- v. If the status of Battery in Battery report is indicated as “FAIL”, change the battery pack and start the test again.
- vi. Put the CU in clear state
- vii. Press Ballot Button on CU and verify that the Busy LED glow Red on CU and VSDU. Ready LED on BU glow Green indicating BU is ready for Voting.
- viii. Cast vote for first candidate on BU. On the selection of candidate, VVPAT prints the selection on ballot slip.
- ix. The ballot slip is displayed behind a transparent window of VVPAT for 7 seconds. Verify the candidate number, symbol and name of the candidate in the slip. After that, ballot slip will automatically cut and fall into the Ballot slip compartment.
- x. Repeat steps from vii to ix for all the other candidates on the Ballot Unit. Check whether VVPAT prints the selected candidate information.

- xii. Continue polling for minimum of 96 votes i.e. by giving 6 vote to each candidate button. Note down the Ballot voted.
- xiii. Press Close button on CU to Close the Poll and note down the Result by pressing Result Button on CU.
- xiv. Takeout the printed ballot slips from drop box (ballot slip compartment) and segregate candidate-wise.
- xv. Count the candidate-wise printed ballot slips and note down the count.
- xvi. Tally CU result with the ballot slip count.
- xvii. Clear the votes by pressing Clear button in CU. Check whether Total Votes displayed is '0'.

b) FLC OK CRITERIA

The VVPAT is FLC OK, if all of the following are achieved

- i. The total number of votes polled as displayed on the CU screen indicates equal to number of votes cast, when TOTAL key is pressed.
- ii. "PRINTER ERROR" "CHANGE PRINTER" should not be displayed on VSDU during the mock-poll.
- iii. "1-LOW BATTERY" "CHANGE BATTERY" should not be displayed on VSDU during mock-poll.
- iv. After conduct of mock-poll, the **FLC-OK (Green) Sticker** duly signed by the Engineer and representative of the District Election Officer shall be pasted on the **left side of VVPATs** whose results are obtained as 'PASS'.

NOTE-1: IF ANY VVPAT DO NOT PASS THE ABOVEMENTIONED CRITERIA, FLC-FAILED (RED) STICKER SHALL BE AFFIXED ON THAT VVPAT.

NOTE-2: PASTE THE FOLLOWING STICKERS, ON ALL VVPATs

1. "Transportation" 2. "Working" and 3. "Unlock before Switch ON"



MAXIMUM NUMBER OF CANDIDATES TEST

i. Purpose

The purpose of this test is to verify that the VVPAT is working properly with maximum number of candidates i.e. 64. The purpose is to test that the communication protocol between VVPAT, CU and BUs.

ii. Test Applicability

This test is applicable to VVPAT along with CU and BUs connected as a system. This test is an extended test of polling test and is performed only on 1% of the VVPAT lot.

iii. Test Preparation

One VVPAT with 64 symbols loaded, 4 BUs, 1VSDU and 1CU are needed. Make connections and operate the VVPAT. This test can be conducted with used Battery pack and used Paper roll (should be sufficient for printing 64 ballot slips).

iv. Test Procedure

- i. Press BALLOT key to enable the Ballot and vote for any candidate in the first BU. A total of 4 votes to be casted by voting to one candidate in each BU.
- ii. Press Close button on CU to Close the Poll and note down the Result by pressing Result Button on CU.
- iii. Tally CU result with the ballot slip count.
- iv. Remove all the ballot slips from VVPAT and clear the votes by pressing Clear button in CU. Check whether Total Votes displayed is '0'

v. Acceptance Criteria

The test is successful if the following conditions are met:

- i. No error message is displayed on CU during the balloting process.
- ii. "PRINTER ERROR" "CHANGE PRINTER" is not displayed on VSDU during the test.

Note: - Since the test is performed with a used Battery pack, the VSDU can display "1- LOW BATTERY" "CHANGE BATTERY" during the polling of 96 votes. In that case change the battery pack and start the test again.

SAMPLE REPORT FORMAT

NOT TO BE COUNTED
VVPAT UNIT POST REPORT

Version No: 10. 42

Candidate set: 16

SI.No: 107152 Session:22

- 1.VVPAT Error History: Absent
- 2.Paper Under Head:Present
- 3.Printer Head Temperature:Ok
- 4.Ploten:Closed
- 5.Length Sensor Std:Passed
- 6.Fall Sensor Std:Passed
- 7.Contrast Sensor Std:Passed
- 8.Deplete Sensor Std:Passed



NOT TO BE COUNTED
DEPLETE DIAGNOSTICS REPORT

SI.No: 107152 Session:22

Deplete Sensor
Emitter Min Typ Max
TX Cur(mA) 5 11.00 35
Measured(mA): 9.35
Result: Pass

Detector Min Typ Max
White(mV) 380 400 420
Measured(mV): 384
Result: Pass

NOT TO BE COUNTED
CONTRAST DIAGNOSTICS REPORT

SI.No: 107152 Session:22

Contrast sensor
Emitter Min Typ Max
TX Cur(mA) 5 12.00 35
Measured(mA): 13.92
Result: Pass

Detector Min Typ Max
White(mV) 300 315 330
Measured(std)(mV): 304
Measured white(mV): 284.7
Measured Black(mV): 9.6
Measured CR: 29
Pass Limit: >=20
Result: Pass

NOT TO BE COUNTED
FALL DIAGNOSTICS REPORT

SI.No: 107152 Session:22

Fall sensor
Emitter Min Typ Max
TX Cur(mA) 5 30.0 40
Measured(mA): 22.24
Result: Pass

Detector Min Typ Max
No Paper(mV) 380 400 420
Measured With Paper(mV): 1
Measured No Paper(mV): 390
Measured Differ(mV): 389
Pass Limit(mV): 100
Result: Pass

NOT TO BE COUNTED
LENGTH DIAGNOSTICS REPORT

SI.No: 107152 Session:22

Length Sensor
Emitter Min Typ Max
TX Cur(mA) 5 11.00 35
Measured(mA): 11.67
Result: Pass

Sensor Min Typ Max
White(mV) 380 400 420
Len(mm) 095 099 103
Measured White(mV): 408
Measured Black(mV): 21
Measured Contrast: 19
Measured Len: 99 mm
Contrast Pass Lt: 10
Res: Cntrst:Pass.Len:Pass

NOT TO BE COUNTED
BATTERY REPORT

SI.No: 107152 Session:22

Battery
No_load Full_load Diff
Volt(V): 22.5 21.0 1.5
Cur(A): 0.01 1.60 1.59
Measured Impedance(ohm): 0.95
Pass Limit(ohm): 2.00
mAh for Postslip: 0.84
Result: Pass

ERROR CODE : 2 -PRINTER ERROR

On press of Ballot key on CU, if the error code 2 displayed on VSDU along with sequence of messages, then switch off CU. Note down the error code observed for Printer error in the Test format.

Error code details are given below:

- Printer Error 2.1 – Abnormal Head Temperature
- Printer Error 2.3 – Printer Timeout Error
- Printer Error 2.4 – Printer Low Voltage Error
- Printer Error 2.5 – Printer Incorrect Command Error
- Printer Error 2.6 – Cutter Error
- Printer Error 2.7 – Fall Error
- Printer Error 2.8 – Printer memory Error
- Printer Error 2.9 – Contrast Error
- Printer Error 2.10 – Length Error
- Printer Error 2.12 – Platen Open Error
- Printer Error 2.13 – No Paper Error
- Printer Error 2.14– Deplete Error

**SAMPLE OF FIRST LEVEL CHECK REPORT FORMAT OF EVMs
EVM FAILED REPORT**

Date:

Place:

District/State:

Sl.No.	Unique ID of BU/CU	Reason for Rejection	Remarks

Signature:
Name:
(BEL/ECIL Engineer)

Signature:
Name:
(DEO's Representative)

SAMPLE OF FIRST LEVEL CHECK REPORT FORMAT FOR VVPAT

FIRST LEVEL CHECK REPORT - VVPAT	Date:
	Place:
	District / State:

S.No.	VVPAT Serial Number	Visual inspection Ok / Not Ok	Post/ Diagnostic report Ok / Not Ok *	Symbol Loading Ok / Not Ok	Link Check Ok / Not Ok	Votes Polled (96)	PASS / FAIL	In case of Failure, Defect observed (Value of parameter causing failure)
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								

Signature:
Name:
(BEL/ECIL Engineer)

Signature:
Name :
(DEO's Representative)

(Mock Poll certification during FLC of VVPATs)

Date:.....

Name of State/UT:
Name of District:
Address of hall:

It is certified that the **results of the printed ballot slips of VVPATs** (*list of unique ID of VVPATs attached*) **have been tallied with the electronic result of the respective Control Units.** There are no discrepancies between the electronic count of the Control Units and count of printed ballot paper slips of VVPATs.

S.No.	Name of National/State Party	Name of representative of political party with affiliation	Identity document No. with date	Signature of representative	Remarks, if any.

Name of Engineers of BEL/ECIL (Signature)

- 1.
- 2.
- 3.

(Signature).....
 Name of FLC-Supervisor.....
 Designation.....

(Sealing of Control Unit of EVMs using Pink Paper Seal)

Name of State/UT:
Name of District:
Address of FLC hall:
Date:

It is certified that the sealing of the Control Units using Pink Paper Seals has been done in my presence. I have put my signature on the Pink Paper Seals after sealing of the Control Units and I am satisfied with the sealing of the Control Units.

Sl.No.	Unique ID No. of Control Unit	Pink Paper Seal Number

S.No.	Name of National/State Party	Name of representative of political party with party affiliation	Identity document No. with date	Signature of representative

(Name, designation, signature of officers nominated by District Election Officer)

(Certificate on arrangement for FLC by DEO)**Name of State/UT:****Name of District:****Address of FLC hall:****Date:.....**

S.No.	Particulars	(Yes/No)
1	Whether FLC hall is sufficiently large to accommodate the EVMs and VVPATs to be checked, officials nominated by the DEO, engineers of BEL and ECIL and also representatives of political parties.	
2	Whether FLC Hall well-lighted, well ventilated and dust free.	
3	Whether FLC area has been barricaded and sanitized by police	
4	Whether adequate arrangement of fire extinguishers and fire alarm has been made inside and outside the hall.	
5	Whether hall is free from any other electronic device or components of electronic devices	
6	Whether facilities of drinking water, toilet, first aid etc are available	
7	Whether there is only one entry and exit point to the hall and guarded by armed police force round the clock.	
8	Whether door frame, metal detector are installed	
9	Whether arrangement for frisking has been made	
10	Whether Identity Cards for entry into the FLC hall to the authorized officials/Representatives of political parties have been issued by the District Election Officer	
11	Whether arrangement of webcasting have been made	
12	Whether log book to record entry of every person has been kept at FLC hall	
13	Whether a separate log book (i.e. duty roaster) to be maintained for armed police force deployed for FLC hall has been kept at FLC hall	
14	Whether all required registers and formats are ready and kept in FLC hall	
15	Number of Armed Police Personnel in each shift	

I have personally inspected the above arrangements.

(Name and Signature of District Election Officer)

(Certificate on completion of FLC process)

Name of State/UT:
Name of District:
Address of FLC hall:

Date:

It is certified that FLC process has been completed on(date) as per instructions of the Commission on First Level Checking of EVMs and VVPATs. I personally inspected FLC on following dates:

The status of EVMs and VVPATs after completion of FLC is as under:

Name of District	Available in the District			FLC Ok Quantity			FLC Reject Quantity		
	BU	CU	VVPAT	BU	CU	VVPAT	BU	CU	VVPAT

The defective EVMs and VVPATs shall be shifted to the manufacturer (BEL/ECIL) on.....i.e. within 7 days from the date of completion of FLC process in the district.

(Name and Signature of District Election Officer)