

# **Report on**

# **Electronic Voting Machines (EVMs)**

# **Pilot Project**

(NA-4 Peshawar-IV)



14<sup>th</sup> November, 2017

**ELECTION COMMISSION OF PAKISTAN** 

ISLAMABAD



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### BACKGROUND

Electronic voting Machine represents means to accurately capture electronic ballot vote of an individual along with audit trail. The intent of implementing this pilot project was to capture electronic vote along with paper evidence using voter verified paper audit trail (VVPAT), and to prevent tendered or challenged vote, as well as speed up the process through EVMs. This document aims to highlight and address the results of the Pilot project.

## INTRODUCTION

All 100 Electronic Voting Machines were dispatched under foolproof security to R.O's Office of NA-4, Peshawar from the ECP Secretariat Islamabad on Saturday, 21st October, 2017. Prior to this, the detailed briefings on use of EVMs as pilot testing were given to all the contesting candidates of NA-4 and the media people in the Press Club Peshawar on 19th October, 2017.

The EVMs were dispatched to the designated polling stations by the ECP and M/s Smartmatic jointly on 25<sup>th</sup> October 2017 night and were handed over to the EVM operators on 26<sup>th</sup> October 2017 which were then installed and operational. Almost 12,419 voters of designated 35 polling stations used EVM devices at the end of the polling cycle as per approved S.O.P. 78% of voters who casted their paper ballot, voluntarily participated in the mock pilot testing using the EVMs. It was observed that voters enthusiastically participated in the pilot testing of Electronic Voting Machines.

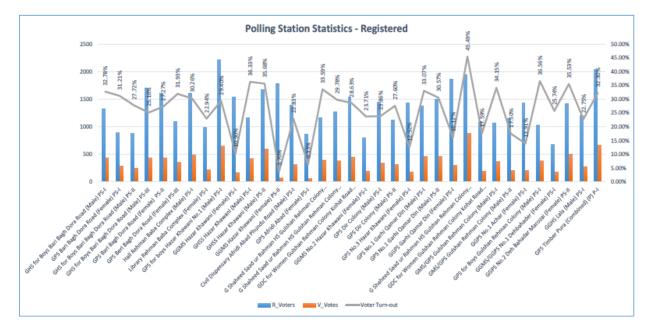


Figure 1. Comparison of voter turnout in constituency and turnout of voters to participate in the mock pilot

The pilot project achieved its key purpose of testing the Electronic Voting Machine capabilities and introduction of such technology in electoral process to gauge the participation of the voters by using the technology. The following is the list of Polling stations used for the conduct of EVM Pilot project:



#### Total Polling Stations Results Summary



P.S	Name & Location of The	Number of Voters assigned to polling station		
No	Polling Station	Male	Female	Total
1	GHS for Boys Bari Bagh Dora Road (Male) PS-I	1321	0	1321
2	GPS Bari Bagh Dora Road (Female) PS-I	0	894	894
3	GHS for Boys Bari Bagh Dora Road (Male) PS-II	873	0	873
4	GHS for Boys Bari Bagh Dora Road (Male) PS-III	1709	0	1709
5	GPS Bari Bagh Dora Road (Female) PS- II	0	1610	1610
7	GPS BeriBagh Dora Road (Female) PS- III	0	1090	1090
8	Hall Rehman Baba Complex (Male) PS-I	1606	0	1606
9	Library Rehman Baba Complex (Female) PS-I	0	981	981
10	GPS for boys HazarKhawani No.1 (Male) PS-I	2221	0	2221
11	GGMS HazarKhawani (Female) PS-I	0	1543	1543



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12	GHSS HazarKhawani (Male) PS-I	1156	0	1156
13	GHSS HazarKhawani (Male) PS-II	1679	0	1679
14	GGMS Hazar Khawani (Female) PS-II	0	1783	1783
17	Civil Dispensary Afridi Abad Phundu Road (Male) PS-I	1397	0	1397
18	GPS Afridi Abad (Female) PS-I	0	869	869
21	G Shaheed Saadur Rahman HS Gulshan Rehman Colony (Male) PS-I	1161	0	1161
22	G Shaheed Saadur Rahman HS Gulshan Rehman Colony (Male) PS-II	1266	0	1266
23	GDC for Women Gulshan Rehman Colony Kohat Road (Female) PS-I	0	1544	1544
25	GGMS No.2 Hazar Khawani (Female) PS-I	0	797	797
26	GPS Dir Colony (Male) PS-I	1446	0	1446
27	GPS Dir Colony (Male) PS-II	1127	0	1127
28	GPS No.3 Hazar Khawani (Female) PS-I	0	1430	1430
33	GPS No.1 Garhi Qamar Din (Male) PS-I	1382	0	1382
34	GPS No.1 Garhi Qamar Din (Male) PS-II	1495	0	1495
35	GGPS Garhi Qamar Din (Female) PS-I	0	1861	1861
36	G Shaheed Saadur Rahman HS Gulshan Rehman Colony (Male) PS-III	1941	0	1941
37	GDC for Women Gulshan Rehman Colony Kohat Road (Female) PS-II	0	1080	1080
38	GMS/GPS Gulshan Rehman Colony (Male) PS-I	1066	0	1066
39	GMS/GPS Gulshan Rehman Colony (Male) PS-II	1154	0	1154
40	GGPS No.1 Achar (Female) PS-I	0	1438	1438
41	GPS for Boys Gulshan Rehman Colony (Male) PS-I	1023	0	1023
42	GGMS/GGPS No.1 Dehbahader (Female) PS-I	0	672	672
57	GGPS No.2 Deh Bahadar Marozai (Female) PS-II	0	1413	1413



63	GGHS Lala (Male) PS-I	1200	0	1200		
67	GPS Timber Pura (Combined) (P) P-I	1105	932	2037		
0.00						

SCOPE

The Election Commission of Pakistan (ECP) intended to conduct pilot of Electronic Voting Machine (EVM) in NA-4 constituency in Peshawar to test the feasibility for the use of EVM in Pakistan electoral system futuristically. The pilot for the Electronic Voting Machine was held at 35 polling stations with 100 EVM at designated polling booths earmarked by the Election Commission of Pakistan (ECP). These 100 EVM's were manned by 50 ECP personnel and 50 M/s Smartmatic personnel and tested on 26<sup>th</sup> October 2017.

The Electronic Voting Machine being used as a Pilot in NA-4 at the polling stations with electronic vote casting and counting along with VVPAT. The application installed in EVM captured all the necessary vote casting and counting information related to specific polling stations on the election day with dummy election contesting candidates and symbols. The operation execution of the pilot at NA-4 Peshawar covering activities performed follows:

The table below summarizes the activities that transpired to support the conduct of pilot election at NA-4 Peshawar.



No	Scope	Delivery Status	Remarks
1	Production	✓	Completed on 16 October 2017
2	Training	1	Completed on 20 October 2017
3	Delivery to ECP Regional Office Peshawar	1	Completed on 21 October 2017
4	Delivery to Polling Stations	✓	Completed on 25/26 October 2017
5	Re-Charging of Machines at Polling Station	X	Was not performed on 25 October 2017
6	Conduct of Elections	~	Completed on 26 October 2017
7	Consolidation of Results at the Regional Office	~	Completed on 26 October 2017
8	Operational Technical Support	1	Completed on 26 October 2017
9	Retrieval of Machines from the Polling Stations to Regional Office	~	Completed on 26 October 2017
10	Retrieval of Machines from Regional Office to ECP Islamabad	~	Completed on 31 October 2017

## PROJECT ACTIVITY TIMELINES ALONG WITH RESPONSIBILITIES

Major Timelines of this project are as follows:

ECP's Responsibility		Vendor's Responsibility	
Activity	Timeline (2017)	Activity (2	
IT Wing will supervise the EVMs	5 <sup>th</sup> Oct –	Submit the checklist (Technical	4 <sup>th</sup> October
data integration and lab testing	23 <sup>rd</sup> Oct	Benchmark criteria) of EVM	
activities and Admin Wing will		assessment.	
arrange refreshments, etc.			
Final list of Polling stations will be	9 <sup>th</sup>	Submit the Standard Operating	4 <sup>th</sup> October
provided to the vendor along with	October	Procedure (SOP) with regard to	
number of booths and Voters		Logistics, Training, Use of Machines	
Statistics.		inside Polling Stations etc	
Provide the list of dummy	9 <sup>th</sup>	EVM vendor will provide the logistic	4 <sup>th</sup> October
candidates along with dummy	October	and retrieval plan of these EVMs.	
symbols for data integration.			



2 ( Litel July )			
P.R Wing will arrange Media briefings for awareness in Islamabad to educate voters with regard to EVM.	9 <sup>th</sup> October	Develop and prepare the video clipping on the use of EVM (in Urdu language) for voter education and awareness program.	4 <sup>th</sup> October
ECP will provide the list of 50 Polling Staff for training of EVM.	10 <sup>th</sup> October	Give the Functional Demonstration of EVM before the Hon'ble Election Commission.	6 <sup>th</sup> October
Admin Wing will issue the Temporary Passes to 50 EVM operators along with technical support staff of the vendor.	19 <sup>th</sup> Oct – 20 <sup>th</sup> Oct	Hardware / Software readiness and lab testing will be done by the EVM vendor.	8 <sup>th</sup> Oct – 19 <sup>th</sup> Oct
P.R Wing will arrange Media briefings for awareness in Peshawar to educate voters with regard to EVM.	19 <sup>th</sup> October	Data integration in the machines will be done.	16 <sup>th</sup> Oct – 20 <sup>th</sup> Oct
Meeting with DRO, RO and contesting candidates. Obtain undertaking (NoC) from candidates regarding pilot testing of EVM in NA-4 bye-election.	19 <sup>th</sup> October	Provide the list of 50 EVM operators, field technical support along with the other officials of the vendor.	20 <sup>th</sup> October
IT Wing will supervise the action plan that all tasks should be completed in time.	20 <sup>th</sup> Sep – 29 <sup>th</sup> Oct	Training Venue will be provided in Peshawar by Vendor.	19 <sup>th</sup> Oct – 20th Oct
Security while transporting EVMs will be provided (From Islamabad to Peshawar RO Office & from RO Office to Polling Station).	23 <sup>rd</sup> Oct – 25 <sup>th</sup> Oct	Provide the interactive trainings with manuals	19 <sup>th</sup> Oct – 20 <sup>th</sup> Oct
PEC / RO office will supervise the banner placement activity.	25 <sup>th</sup> October	Provide the Demo to DRO/RO, contesting candidates and the Media.	19 <sup>th</sup> October
Security while transporting EVMs will be provided by ECP.	26 <sup>th</sup> Oct – 27 <sup>th</sup> Oct	Transporting of EVMs will be provided (From Polling Station to RO Office Peshawar & from Peshawar to Islamabad).	26 <sup>th</sup> Oct – 27 <sup>th</sup> Oct
Based on the technical benchmark criteria, ECP will compare and gauge the machine's working and processes with conventional system.	26 <sup>th</sup> October	Vendors will dispatch the machines directly to the designated RO Office.	24 <sup>th</sup> Oct – 26 <sup>th</sup> Oct
IT Wing will supervise the working	26 <sup>th</sup>	Display of Banners Standies outside the	25 <sup>th</sup>
of EVM during poll day.	October	polling station.	October
Draft list of Polling stations will be	27 <sup>th</sup>	EVM vendor will compile the	27 <sup>th</sup>
provided to the vendor along with number of booths and Voters Statistics.	Septembe r	preliminary pilot project Report along with its statistics and events performed in the polling station(s).	October



66			
ECP along with vendors will	29 <sup>th</sup> Sep –	Submit the detail action plan for the	29 <sup>th</sup>
identify the polling stations for the 4 <sup>th</sup> Oct		conduct of Pilot in NA-4.	September
conduct of pilot using 100 EVMs.			
IT Wing will put up Final Pilot	31 <sup>st</sup>	EVM Staff will install EVM devices in	25 <sup>th</sup>
Project Report to the Competent October		designated polling stations and will put	October
Authority. i		it on charging after that they will hand	
		over EVM device to Presiding Officer.	
		Result will be consolidated by the	26 <sup>th</sup>
		vendor itself.	October



## CONDUCT OF THE PILOT PROJECT

#### **Training Of ECP Staff**

Specialized cascade training was conducted from 16<sup>th</sup> to 20<sup>th</sup> October, 2017 and all the 100 EVM operators were imparted training alongwith practical exercises. The training was conducted in 02 batches for total 50 ECP staff members.

Training pack included:

- 1. Presentation.
- 2. Training Videos explaining the different scenarios.
- 3. User Manual.

The ECP staff/field operation personnel was taught in detail about the Standard Operation Procedures (SOPs). A User Manual of EVM was also provided along with demonstration of Electronic Voting Devices to ensure that they are fully equipped and ready in every manner to fulfil their duties during polling hours.

The ECP field operation staff was able to operate the EVM easily after the training. Furthermore Smartmatic experts were assigned with each ECP staff operating EVM in polling stations to provide any kind of support that they may require. Contacts of Smartmatic supervisors managing the EVM elections at PEC Headquarters in Peshawar were also provided to ECP staff to contact directly in any of any support required including troubleshooting, operational help and closing of devices after elections.

Training	Date	Candidates Trained	Certified
Batch 1 – EVM Operators	16 Oct 2017	34	29
Batch 2 – EVM Operators	17 Oct 2017	32	28
Batch 3 – EVM Operators	18 Oct 2017	31	31
Batch 4 – ECP Polling Officers	19 Oct 2017	42	42
Batch 5 – ECP Polling Officers	20 Oct 2017	35	35



The following issues and observations were noted:-

- i) IT team working on RMS, RTS and EVMs projects had faced difficulties due to non cooperation of RO office. Some serious administrative and operational (logistic) difficulties were observed due to his non-cooperation.
- ii) The batteries of Control Unit and VVPAT got drained very fast resultantly speedy power lost affected the smooth functioning of the whole processes. The power extensions were not provided to operators by the M/s Smartmatic.
- iii) The paper slip of VVPAT got stuck on majority of VVPAT after cutter due to static charge. This was major flaw or error in the system resulting breach in privacy of voter and violation of secrecy of vote principle;
- iv) The sensor of voting pad was difficult to press that is why old male or female voters were not able to press button gently because much force was required to cast a vote using EVMs;
- v) In some cases, the EVMs became slow and giving lagging time;
- vi) The project poorly coordinated and executed by the EVM vendors (M/S Smartmatic and Kestral) due to lack of coordination.

	Issues Identified in EVM Pilot Project NA-4 Peshawar IV				
S.No	Nature of Errors being faced	Number of Issues Faced			
1	Battery drainage issue (Control Unit + Ballot Unit)	29			
2	Paper stuck during printing of Ballot paper	28			
3	Voting Pad Sensor	20			
4	Software hanging issues	7			
5	Diagnostic Issue	6			
6	Damaged VGA Cable	2			
7	Error during consolidating votes by USB	1			









## CONCLUSION AND RECOMMENDATIONS

- The overall performance of the Electronic Voting Machines was not up to the satisfactory level and requires some improvements. In terms of percentage, about 50% EVMs performed successfully.
- The enthusiasm of voters to use EVM was commendable, especially as these EVMs were placed after the completion of voting cycle, there was no hindrance or problem reported inside the polling stations during the poll.
- > Average time taken by a voter was approximately 15 seconds.
- The maximum area of NA-4 (Peshawar-IV) constituency was actually consists of rural areas and suburbs of Peshawar city wherein most of the voters population were illiterate who casted their votes by using these EVMs as well during pilot testing.
- The Section 103 of Election Act 2017 recommends that ECP may conduct multiple pilots and assess the performances of EVM machines, feedback of the voters, and quality of EVMs hardware and software along with data, processes and procedures.
- It is worthwhile to mention here that as per world best practice and international standards, we may gradually increase the magnitude of the project to minimize the failure rate and increase success rate near to 100% and this can only possible when all the stakeholders participate with responsibility and make the whole electoral technological system near to foolproof and acceptable by all.
- It would be more appropriate and wise to keep conducting multiple pilot projects in urban as well as rural areas of the country by engaging all the voters of that constituency to make the overall system robust, speedy, reliable and accurate.
- It would be better, if ECP also looks for all the available technologies and prototypes to be tested in mock or pilot projects to gauge the best available technology for the Pakistani voters in terms of social and economical behavior.
- The Election Commission of Pakistan is technology progressive organization which is striving to achieve goals by engaging all the stakeholders keeping the World's Best practices and enforcing the International Standards in the field of Electoral Technology.

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