Report on

Biometric Verification Machines (BVMs)
Pilot Project

14th November, 2017

ELECTION COMMISSION OF PAKISTAN

ISLAMABAD

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BACKGROUND

Biometric voter verification represents means to accurately capture unique fingerprints of an individual in addition to demographic data of the voter. The intent of implementing this pilot project was to prevent multiple voter verification, as well as mitigating the incidence of voter fraud through biometrically verifying voters by BVMs. This document aims to highlight and address the results of the Pilot project.

As per **Section 103** *of Election Act 2017*, the Election Commission of Pakistan may conduct pilot projects for utilization of EVM and BVM in bye-elections in addition to the existing manual procedures for voter verification and casting and counting of votes to assess the technical efficacy, secrecy, security and financial feasibility of the EVM and BVM and shall share the results with the Government.

SCOPE

The Election Commission of Pakistan (ECP) has conducted pilot of Biometric Voter Verification System (BVS) in NA-120 constituency in Lahore to test the feasibility for the use of BVM in Pakistan electoral system futuristically. The pilot for the Biometric voter verification was held at 39 polling stations with 100 BVMs at designated 100 polling booths earmarked by the Election Commission of Pakistan (ECP). These 100 BVM's were manned by 50 ECP personnel and 50 Secure Tech Consultancy personnel.

The Biometric Voter Verification Machines were used as a Pilot Testing in NA-120 to verify voters at the polling stations with biometric fingerprints. The software application was installed in the Biometric machines and all the necessary information like electronic copy of the electoral rolls, biometrics data of the voters of that polling stations, polling scheme were also binded (copied) in the BVMs.

As per business rules and instructions of ECP, data of voters was loaded under strict Standard Operating Procedure (SOP). This means that every machine had the data of the entire voters of whole polling station, irrespective of the number of polling booths.

The numbers of registered voters in the 39 polling stations were 57,265, all of these voters had their photographs (Fingerprint in lieu of photograph of some female voters), however 5,327 voters did not have their fingerprints (This was the data as given by NADRA to ECP). A total of 482 voters without the

fingerprint data available came for verification on poll day. These voters could not be verified through their fingerprints (As their fingerprints were not given by NADRA). In the final analysis these have been taken out while calculating the percentage of voter that was verified through their fingerprints.

All the 100 biometric machines were configured and tested in ECP premises; the data included the master and secondary keys, the Fingerprints with their indexes in the HSM and the electoral roll data. This process was called "**Binding".** The binding process took approximately 60 to 80 minutes for each machine. A network switch was used and data copied (loaded) on 20 biometric machines simultaneously.

The verification process involved scanning or typing in the CNIC number, once the number is inserted, complete details of the voter including his/her photograph is displayed on the screen. The next screen displays the fingerprints data with a circle around those fingers whose data has been received from NADRA. The operator then selects one of the displayed finger/thumb and the voter's corresponding finger/thumb is placed on the scanner. The scanner also gives the quality of the fingerprint's that are captured live. These are then matched 1:1 with the corresponding fingerprint stored in the HSM (hardware security module, where FP received from NADRA are stored), the result is then displayed. If matched, a green light and buzzer indicates that the voter has been verified. If not verified then two more attempts are made using different fingers/thumb and if still the live Fingers do not match with the NADRA given fingerprints a photograph is taken. This photograph can be compared by the operator with the one as displayed on the screen (given by NADRA). This is called as *"Bypass"* for want of a better definition. In the Bypass scenario both the live photograph and the live captured fingerprints are stored for future use subsequently if required (Audit or for updating NADRA database). A sample photograph is attached as per Annexure A.

The pilot project achieved its key objective of verifying voters through Biometric Voter Verification Machines successfully with **hit ratio of 88% with use of just 100 machines which is smallest sample size for pilot testing.**

PROJECT TIMELINES

Major Timelines of this project are as follows:

RFP SUBMISSION DATE	JULY 12, 2016
LETTER OF AWARD TO SECURE TECH CONSULTANCY (PVT) LTD	JANUARY 05, 2017
DELIVERY OF 100X DEVICES AT ECP HEADQUARTERS	JUNE 14, 2017
TRAINING OF ECP STAFF FOR PILOT PROJECT AT NA-120	SEPTEMBER 12, 2017
NA-120 PILOT	SEPTEMBER 17, 2017
SUBMISSION OF PROJECT REPORT	SEPTEMBER 21, 2017

ROLES & RESPONSIBILITIES

The following stakeholders were involved with the execution of Pilot Project on Election Day:

- Secure Tech responsible for operating 50X BVMs on Election Day and supervising the overall performance of the biometric machines.
- Election Commission of Pakistan Resources responsible for operating 50X BVMs on Election Day.

CONDUCT OF THE PILOT PROJECT

Training Of ECP Staff

Training to the Polling Staff was conducted at PEC Headquarter, Lahore on September 12, 2017. The training was conducted in 02 batches for total 50 ECP staff members.

Training pack included:

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

The training included the following:

1. Introduction to various parts of BVVM along with their functional description
2. Operation of device with on-hands experience included:
   a. Starting and shutting down of device.
   b. Login/Logout.
   c. Voter Verification Process using CNIC and Fingerprints.
   d. Scanning of CNIC.
   e. Fingerprint Capturing.
   f. Re-Verification Process if not verified.
   g. Bypass Scenario.
   h. Picture Capturing.
   i. Data Saving.
   j. View the verified results.
   k. Data Submission Process.
   l. Close of Voter Verification Process.
   m. Health check / Heartbeat.
3. Battery changing and device charging process.
4. Basic Troubleshooting and Precautions.
5. Support via Supervisor.
6. Technical support information.

7. Basic Maintenance Functions on polling day.

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

The ECP field operation staff was able to operate the BVM easily after the training. Furthermore, Secure Tech experts were assigned with each ECP staff operating BVM in polling stations to provide any kind of support that they may require. Contacts of Secure Tech supervisors managing the biometric elections at PEC Headquarters in Lahore 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.

Poll Day Operations

Polling Station wise device allocation

Device allocation to polling staff was done smoothly, as each device contains data to specific polling station. All devices sent to desired pooling station without any issue.

Each device had unique identifier sticker which also contains details of allotted polling station and data of block code. Stickers pasted on both device box and also at the back side of each device for identification.

Polling staff Roll call

All BVM polling staff was present at their desired polling booth well before start of polling.

BVM Monitoring

For BVM monitoring two types of teams were formed:

BVM Control Room Team

Control room was made available for monitoring of BVM Devices during the poll. Real time device battery status, any anomalies in software or hardware of BVM device.

Field Monitoring Team

Purpose of this team was to visit different polling stations and get on ground status of activities. To monitor behavior and performance of BVM staff along with Voters attitude towards biometric verification. Voters were much keen about the biometric verification and providing very positive response and cooperation with our BVM polling staff.

Both control room and on spot teams were in close coordination with BVM operators during the polling day.

Closure of Election

All BVM polling staff was trained very well on closing the elections on device through a feature provided in BVM machine. All BVM operators timely closed the elections on the machine as soon as the polling was over after gathering necessary information from concerned Presiding Officer.

Control team was keenly monitoring the close polling activity. Execution of closure of polling was done smoothly by all BVM staff.

Packaging of BVM devices

Packing and inventory check was the last part of the polling day operations. Each of BVM operating staff was briefed about inventory check and packing of devices after closure of polling at the end of polling day.

All BVM devices safely moved back to Provincial Election Commission office and submitted to competent authority.

Poll Day Operations
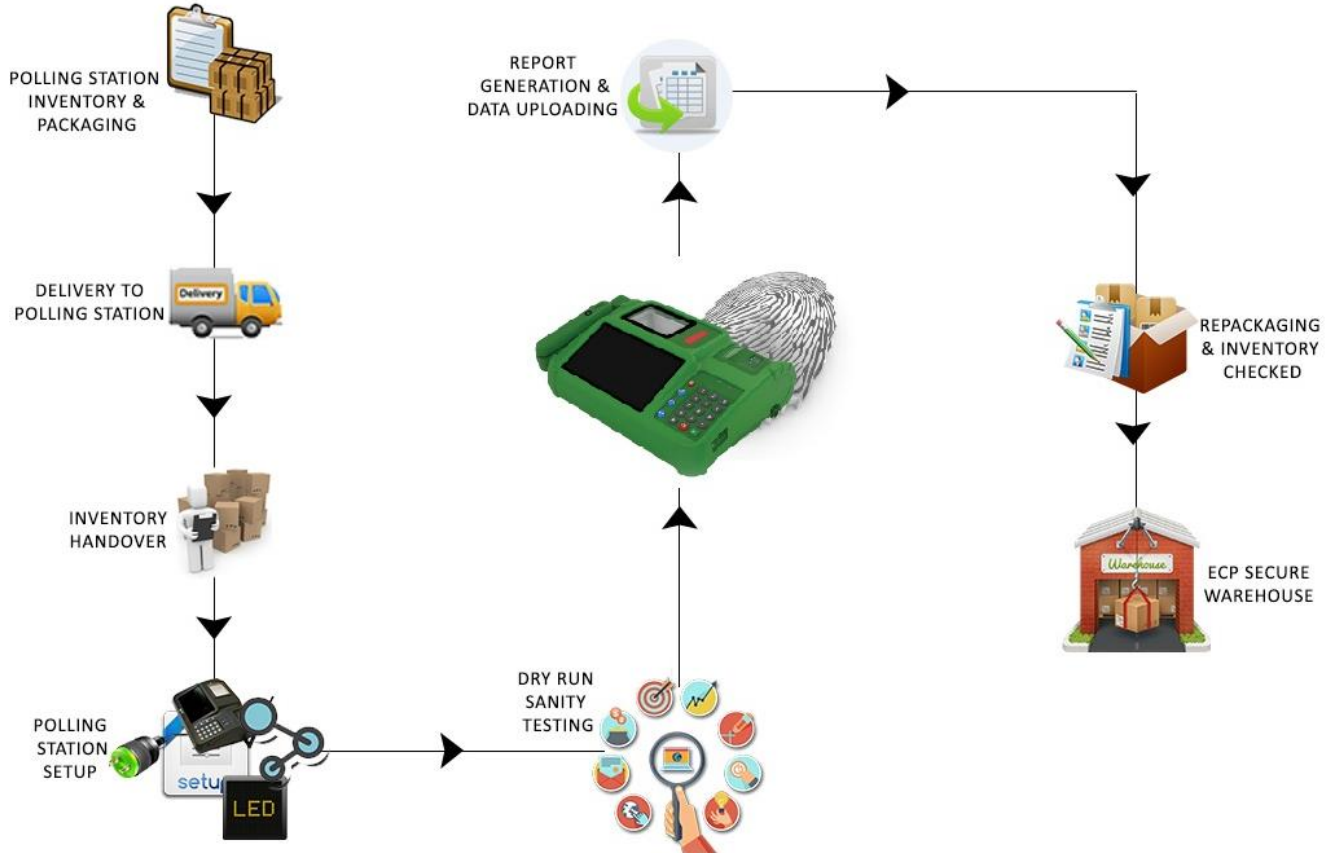
BVM Device Assessment

Following major components of BVM devices were under close observation during the poll day:

Sr#	Component	Observations
1	Battery performance	Average time of BVM device battery was above 30% at the time of polling closure.
2	HSM	There was not a single instance of HSM malfunction reported
3	FP scanner	No issue reported
4	ID card scanner	Scanning issues were observed where ID card quality was poor
5	Camera performance	2 instances were reported malfunction of Photo Camera out of 100

Overall BVM device performance was excellent during voter verification.

Battery Depletion Graph

The battery depletion graph indicates that the battery was about 40% at 1600 hours, by and large the operators used their own discretion to replace the battery with the given spare battery to ensure no stoppage at the rush hours expected prior to closing.
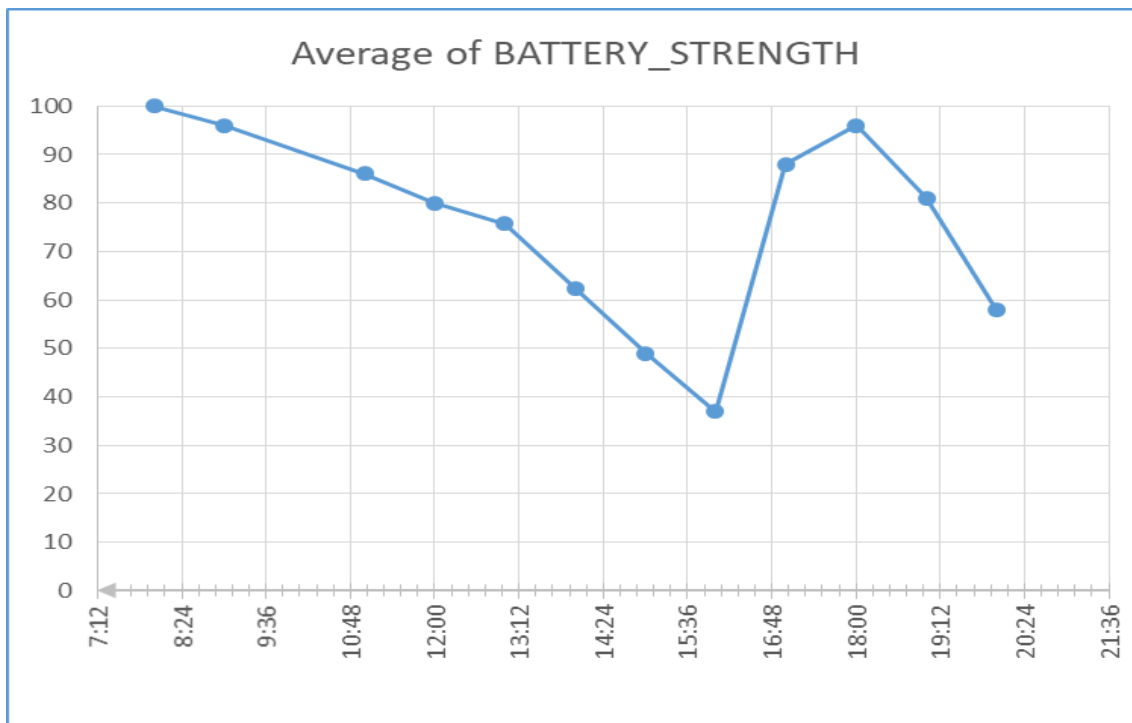
Biometric Voter Verification Application Assessment

Android based Biometric voter verification Application was installed in BVM devices. Performance of the application was observed both by Control Room and on spot monitoring teams, no issue observed in application of BVM devices.

Reporting/ Portal

A Reporting Portal along with Live Dashboard was developed to analyze the status of all devices and records of voters in real time including Heartbeat/ health check of devices (to analyze their operational status and actual situations of various types of verifications of voters).

All the proceedings of system was being updated after every 10 seconds (which was configurable). It also allows to download the results in MS Excel form for analysis of data including many details including total attempts, total non-verified voters, total verified voters, total bypass voters, duplications, timings, User CNIC, CNIC of voters, gender of voters etc.

Few important status visible on portal/live dashboard are as under:

1. Total number of devices in the field
2. Total Active devices
3. Total Inactive devices
4. Status of HSM
5. Status of Fingerprint Scanner
6. Total enrolled voters in Polling Station
7. Total attempts
8. Total Verified Voters (with independent statistics of Verified voters via Biometrics)
9. Total Non-Verified Voters
10. Total Bypass Voters (with Photograph and fingerprint capturing)
11. Status of battery as %age
12. Visibility of devices based on each Polling Station
13. Number of Polling Booths available in every respective Polling Station along with type of booth (i.e. Male, female or combined)
14. Status of devices with respect to define time interval based on Heartbeat/Health Check received.
15. Verification Summary as Pi Chart and Bar Chart.

Contents / Headings On Live Dashboard

1. User:

User tab defines the following:

> User Rights are defined for different types of users to access portal including the following:
> a. Admin have all access.
> b. Heartbeat User can only view the heartbeat of devices.
> c. Device User can only Login into the device.

Then based on different roles, various access levels are assigned to each user. It is customizable according to user requirement.

2. POS Management:

It is used to manage the BVVM including the following:

a. Add/bulk upload
b. Configure the devices
c. Make the devices active and inactive.

Polling Schemes:

Polling Schemes tab is used to create and manage Polling Schemes including polling stations. Here we define the respective Block Code in each Polling Station, Polling booths and counts of voters in each Polling Station.

a. Polling Scheme Workstation:

By virtue of Polling scheme Workstation tab we can map the respective devices with each Polling Station.

3. Voters:

Voters data is managed by this tab. Here we can upload data of voters as per the election scheme and voter list being provided by ECP.

Verification Summary:

Verification is the quick summary of system including devices, their status, verification details, counts of various kinds etc.

SAMPLE SCREEN OF LIVE DASHBOARD IS GIVEN BELOW:

68% - indicates battery status

198 - indicates Verified Voters

15 - indicates By-passed Voters

0 - indicates Not Verified Voters

✓ - indicates election closing

PORTAL DISPLAY AT CLOSE OF VOTING

DATA ANALYSIS REPORT

General statistics of the PILOT project at NA-120 is given below:

TOTAL VOTERS	321,786	**POLLING STATIONS**	220
BIOMETRIC VOTING MACHINES	100	**POLLING STATIONS SELCTED FOR PILOT**	39
BOLLING BOOTHS SELCTED FOR PILOT	100	**TOTAL BLOCK CODES**	294
ECP STAFF TO OPERATE	50 BVM	**STC STAFF TO OPERATE**	50 BVM

Data received by ECP from NADRA was analyzed by STC and the following results were observed with respect to the fingerprint images that would be used to verify the voters on Election Day. It was observed that fingerprints against 29,607 CNIC numbers did not exist in the data received.

The ECP had selected 39 polling stations for the conducting of the Pilot project and the Fingerprint data not received for voters in these polling stations was 5,327 as shown in the table below:

	SELECTED FOR BIOMETRIC PILOT	OTHERS	Grand Total
NO Finger Print	5,327	24,280	29,607
FINGER PRINT DATA RECEIVED FROM NADRA	51,938	240,241	292,179
Grand Total	**57,265**	**264,521**	**321,786**

Photographs against all 321,786 voters was received by NADRA.

The gender wise distribution for the data received by ECP is shown as below:

	SELECTED FOR BIOMETRIC PILOT	OTHERS	Grand Total
NO FINGER PRINT	**5,327**	**24,280**	**29,607**
Female	2,945	14,098	17,043
Male	2,382	10,182	12,564
FINGER PRINT DATA RECEIVED FROM NADRA	**51,938**	**240,241**	**292,179**
Female	20,959	104,142	125,101
Male	30,979	136,099	167,078
Grand Total	**57,265**	**264,521**	**321,786**

VOTER VERIFICATION RESULTS

On Poll day (Sep 17, 2017) a total of 22,181 voters (out of the total 57,265 register voters) presented themselves for biometric verification after casting their vote at the designated 39 polling. This represented a voter turnout of 39%. The result of the biometric verification is summarized below:

SUMMARY:

TOTAL REGISTERED VOTERS	57,265		
	Voters with FP images from NADRA	**Voters without FP images from NADRA**	**TOTAL**
TOTAL BIOMETRIC VERIFICATION ATTEMPTS	21,699	482	22,181
BIOMETRICALLY VERIFIED	19,520	-	19,520
SUCCESS RATIO (HIT RATIO)	**90%**	**0%**	**88%**
BYPASSED DUE TO NON-MATCHING OF FINGERPRINT AFTER TAKING PICTURE (**See Annexure A showing pictures of voters taken at the time of verification along with the picture provided by NADRA.**)	2,164	482	2,646
NOT VERIFIED DUE TO NON-MATCHING OF FINGERPRINT	15		15
TOTAL BYPASSED / NOT VERIFIED	2,179	482	2,661

Gender Wise Distribution of BVM Result

Gender wise distribution of the BVM results is given as below:

Row Labels	VERIFIED	BYPASSED	NOT VERIFIED	NO FP DATA	Grand Total	
Female	6,398	880	5	270	7,553	
Male	13,122	1,284	10	212	14,628	
Grand Total	19,520	2,164	15	478	22,181	

Performance of BVM Operators

The performance of the 50x STC and 50x ECP operators is given below:

Row Labels	VERIFIED	BYPASSED	NOT VERIFIED	NO FP DATA	Grand Total
ECP	8,075	1,034	5	294	9,408
STC	11,445	1,130	10	188	12,773
Grand Total	19,520	2,164	15	478	22,181

Polling Station Wise Distribution

Polling station wise details are given below:

POLLING STATION	VERIFIED	BYPASSED	NOT VERIFIED	NO FP DATA	Grand Total
20	802	63		13	878
21	540	14		18	572
22	374	60		4	438
35	651	28		8	687
36	270	21		11	302
37	404	32	1	12	449
38	323	52	2	6	383
63	596	46		2	644
64	266	33	1	8	308
65	532	78	1	15	626
108	740	54		9	803
109	319	60	2	11	392
110	805	59	1	10	875

POLLING STATION	VERIFIED	BYPASSED	NOT VERIFIED	NO FP DATA	Grand Total
130	508	83		9	600
131	314	58		7	379
134	490	33		7	530
135	222	39		4	265
136	236	29		4	269
137	779	125		13	917
138	445	54		20	519
139	330	36	1	5	372
140	581	53	1	12	647
141	293	32		17	342
142	530	48		15	593
143	287	42		11	340
146	580	56		13	649
147	360	51		7	418
148	534	38		9	581
149	311	37		17	365
150	722	92		12	826
151	387	101		20	508
161	896	61		15	972
163	447	74		12	533
166	775	34		14	823
167	406	49		28	483
187	753	119	3	15	890
188	425	87	2	25	539
213	809	85		14	908
214	478	48		30	556
Grand Total	19,520	2,164	15	478	22,181

Gender Wise Polling stations Details

Gender Wise Polling Stations details are given below:

POLLING STATION	VERIFIED	BYPASSED	NOT VERIFIED	NO FP DATA	Female Total	VERIFIED	BYPASSED	NOT VERIFIED	NO FP DATA	Male Total	Grand Total
20						802	63		13	878	878
21	540	14		18	572						572
22						374	60		4	438	438
35						651	28		8	687	687
36	270	21		11	302						302
37	133	12		6	151	271	20	1	6	298	449
38	97	17		2	116	226	35	2	4	267	383
63						596	46		2	644	644
64	266	33	1	8	308						308
65	182	24		9	215	350	54	1	6	411	626
108						740	54		9	803	803
109	319	60	2	11	392						392
110						805	59	1	10	875	875
130						508	83		9	600	600
131	314	58		7	379						379
134						490	33		7	530	530
135	222	39		4	265						265
136	82	19		4	105	154	10			164	269
137						779	125		13	917	917
138	445	54		20	519						519
139	134	8		3	145	196	28	1	2	227	372
140						581	53	1	12	647	647
141	293	32		17	342						342
142						530	48		15	593	593
143	287	42		11	340						340
146						580	56		13	649	649
147	360	51		7	418						418
148						534	38		9	581	581
149	311	37		17	365						365
150						722	92		12	826	826
151	387	101		20	508						508

POLLING STATION	VERIFIED	BYPASSED	NOT VERIFIED	NO FP DATA	Female Total	VERIFIED	BYPASSED	NOT VERIFIED	NO FP DATA	Male Total	Grand Total
161						896	61		15	972	972
163	447	74		12	533						533
166						775	34		14	823	823
167	406	49		28	483						483
187						753	119	3	15	890	890
188	425	87	2	25	539						539
213						809	85		14	908	908
214	478	48		30	556						556
Grand Total	6,398	880	5	267	7,553	13,122	1,284	10	211	14,628	22,181

Device Wise Summary

Device wise summary is given below. The colour coding shows the progress of each operator/device. Devices colored in green indicate very high performance (over 400 voters processed), those in yellow show good performance (over 300) and red shows poor performance (less than 50).

Overall the average for each device was 221, which is considered very good.

Device Number	VERIFIED	BYPASSED	NOT VERIFIED	NO FP DATA	Grand Total
STC-0110774	282				282
STC-0110775	322	53		7	382
STC-0110776	198	10		6	214
STC-0110777	165	6		7	178
STC-0110778	184	5		5	194
STC-0110779	191	3		6	200
STC-0110780		23			23
STC-0110781	374	37		4	415
STC-0110782	241	27		3	271
STC-0110783	240	60	3	7	310
STC-0110784	272	32		5	309
STC-0110785	95	30		5	130
STC-0110786		7			7

Device Number	VERIFIED	BYPASSED	NOT VERIFIED	NO FP DATA	Grand Total
STC-0110787	330	50	2	20	402
STC-0110788	222	10		2	234
STC-0110789	224	13		5	242
STC-0110790	205	5		1	211
STC-0110791	137	8		1	146
STC-0110792	133	13		10	156
STC-0110793	271	20	1	6	298
STC-0110794	133	12		6	151
STC-0110795	206	31	1	3	241
STC-0110796	117	21	1	3	142
STC-0110797	197	15			212
STC-0110798	310	22		1	333
STC-0110799	89	9		1	99
STC-0110800	266	26		8	300
STC-0110801		7	1		8
STC-0110802	341	20	1	6	368
STC-0110803		30			30
STC-0110804	92	12		6	110
STC-0110805	99	16		3	118
STC-0110806	262	16		3	281
STC-0110807	285	19		4	308
STC-0110808	193	19		2	214
STC-0110809	160	29	2	6	197
STC-0110810	159	31		5	195
STC-0110811	280	24		4	308
STC-0110812	210	18	1	2	231
STC-0110813	166	6		1	173
STC-0110814	149	11		3	163
STC-0110815	272	22		6	300
STC-0110816	236	61		3	300
STC-0110817	152	30		4	186
STC-0110818	162	28		3	193
STC-0110819	242	17		6	265
STC-0110820	248	16		1	265
STC-0110821	123	27		1	151
STC-0110822	99	12		3	114
STC-0110823	154	10			164
STC-0110824	82	19		4	105

Device Number	VERIFIED	BYPASSED	NOT VERIFIED	NO FP DATA	Grand Total
STC-0110825	298	45		7	350
STC-0110826	188	42		1	231
STC-0110827	293	38		5	336
STC-0110828	84	14		4	102
STC-0110829	168	24		12	204
STC-0110830	193	16		4	213
STC-0110831	196	28	1	2	227
STC-0110832	134	8		3	145
STC-0110833	305	22		7	334
STC-0110834	229	16		2	247
STC-0110835	209	25		13	247
STC-0110836	102	12		4	118
STC-0110837	290	19		9	318
STC-0110838	291	34	1	3	329
STC-0110839	130	14		5	149
STC-0110840	163	18		12	193
STC-0110841	263	24		8	295
STC-0110842	267	24		7	298
STC-0110843	130	19		6	155
STC-0110844	157	23		5	185
STC-0110845	382	40		7	429
STC-0110846	156	15		2	173
STC-0110847	184	37		3	224
STC-0110848	179	39		8	226
STC-0110849	77	24		2	103
STC-0110850	131	38		10	179
STC-0110851	283	25		4	312
STC-0110852	297	31		9	337
STC-0110853	184	28		5	217
STC-0110854	176	23		2	201
STC-0110855	184	21		3	208
STC-0110856	238	18		4	260
STC-0110857	263	4		2	269
STC-0110858	211	18		6	235
STC-0110859	223	21		9	253
STC-0110860	109	20		2	131
STC-0110861	115	33		1	149
STC-0110862	224	14		6	244

Device Number	VERIFIED	BYPASSED	NOT VERIFIED	NO FP DATA	Grand Total
STC-0110863	278	9		5	292
STC-0110864	273	11		3	287
stc-0110865	160	21		9	190
STC-0110866	103	12		5	120
STC-0110867	143	16		14	173
STC-0110868	106	8		2	116
STC-0110869	379	42		3	424
STC-0110870	324	35		9	368
STC-0110871	70	3		4	77
STC-0110872	209	26		19	254
STC-0110873	199	19		7	225
Grand Total	**19,520**	**2,164**	**15**	**478**	**22,181**

The reason for poor performance of these 4 devices was investigated immediately and we found that these devices were not "binded" properly (i.e. voters data was not loaded on these machines) which resulted in voters not being verified and had to be bypassed or not verified.

As soon as the problem was identified, voters were required to get their authentication done on an adjacently placed device in the same polling booth. These numbers represent those voters bypassed till the issue was identified. Perhaps these voters would have been verified if this issue had not arisen.

DEVICE NUMBER	VERIFIED	BYPASSED	NOT VERIFIED	NO FP DATA	Grand Total
STC-0110780		23			23
STC-0110786		7			7
STC-0110801		7	1		8
STC-0110803		30			30
Grand Total	**0**	**67**	**1**	**0**	**68**

We consider this to be an operational/QC failure at the time of data loading/binding and do not consider that these devices were faulty during the course of the voting process.

CONCLUSION AND RECOMMENDATIONS

- The overall performance of the biometric machines was satisfactory and the verification in terms of percentage was **88%** considering the fact that scale of pilot testing was too small like only 100 machines were used.

- The enthusiasm of voters to use BVM was commendable, especially as these BV machines were placed after the completion of voting process, no there was no hindrance or problem reported inside polling stations.

- Average time taken by a voter was approximately between 15 to 20 seconds.

- The failure or miss rate was **12%** in just 100 BV machines, which was quite big number in terms of very small scale. Hypothetically speaking, if we scale up the project up to nationwide like 300,000 BV machines per booth then the number of failure will rise from 12% to 20% because as we increase the magnitude, the quality of output and performance of individual operator will certainly decrease as per world experience.

- NA-120 Lahore III was urban constituency comprising large number of literate voters who casted their votes and used these BVMs whereas if we test these BVMs in rural areas then the rate of failure of biometric authentication will rise say over 12%.

- As lucrative cost will be involved to keep the 'quality of output' intact in terms of imparting trainings and testing.

- The Section 103 of Election Act 2017 also recommended that ECP may conduct multiple pilots and move progressively by gradually scaling up the numbers from 100 to 1000 for covering the whole constituency and assess the performances of BV machines, input of the voters, and quality of biometrics data copied in the BV machines, 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.

- By adopting technology in haste to national rollover and without conducting multiple pilots will be problematic in all aspects in terms of wasting time, money and effort.

- 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.

- 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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