Process Followed For Trustees Election On 29th May 2022

- 1. The Election Commission is setting out details as regards the electoral process followed and electronic voting system used in respect of the elections held on 29th May 2022. The Election Commission in the interest of transparency is setting out (i) the electoral process along with the checks and balances built into the same; (ii) the electronic voting system along with the checks and balances built into the same; (ii) the electron of the same as also the testing, checking and audit process to which the same was subjected to ensure that the voting process was robust and tamper proof. The same was made known to all candidates in the Candidates meeting held on 24th May 2022. We believe that it is also important to set out the same in the public domain.
- 2. The Election Commission circulated expressions of interest as per Clause 9.12 of the Scheme to various service providers. Based on the quotations received the following service providers were selected:
 - a. **Deloitte Touche Tohmatsu India LLP**. ("Deloitte") was appointed as the Validating Agency to monitor and validate the election process;
 - b. **M/s. Salbro Engineers** ("Salbro") was appointed as the electronic voting machines vendor and servicing agency who also provided the requisite software for the election;
 - c. **GCS Automation Private Limited** was appointed to provide CCTV coverage at the election centres as also at the secure room for the audited equipment as detailed later herein. The above was done though not required by Clause 9.12 of the Scheme.
- 3. The election process was to be carried on through electronic voting machines ("EVMs") with voter verifiable paper audit trail ("VVPAT"). In that regard, the following equipment was to be used: (i) EVM or ballot unit; (ii) controller unit; (iii) VVPAT; (iv) master laptop; (v) registration laptops.
- 4. The election process was structured to work as under:
 - a. A voter would approach an announcer's table and present his certificate evidencing his / her name either on the General or Donor Register maintained by the Bombay Parsi Punchayet ("BPP"). The voter's name and certificate number along with whether the voter was on the General or Donor Register of the BPP would be announced.
 - b. The voter would proceed to the registration table. There, operators (comprising one BPP staff and one person provided by Salbro manning one laptop) would access the BPP's General and Donor Register database which was uploaded by Salbro onto a server which could be accessed from each

election centre. Each election centre was provided with 10 such laptops which were manned as set out above.

- c. Upon the voter presenting his certificate (with a Government issued photo id if the certificate did not carry the voter's photograph) the entry corresponding to the voter's name and certificate number would be pulled up from the above online database. The operators would register the voter at the relevant election centre then lock the relevant entry. This was done so that if the voter sought to register his vote from a different election centre after he had already cast his vote his entry would show as being locked and unavailable for registration to vote.
- d. The date and approximate time at which the voter had presented his certificate would be endorsed by the BPP staff on such voter's certificate. The voter would sign the above endorsement. The certificate would then be stamped by the BPP staff with a stamp made specifically for the present elections. This was done to ensure that a voter could not once again present his certificate for voting from a different centre.
- e. The voter's name and certificate number would be manually entered in a register maintained by BPP staff. The voter would put his signature next to the same. This was done to create a further paper trail which could be verified in case a voter attempted to vote for a second time from a different venue.
- f. Only upon completion of the above formalities would a voter be given a numbered token. Upon receipt of a numbered token and before entering the voting area a voter would have to have his left index fingernail inked. The process of inking the left index fingernail operated as one more check to prevent a voter attempting to vote for a second time at a different venue.
- g. A voter verified and inked as above would approach an EVM only if he had his numbered token. The operator would initiate a voting session on the EVM only if the verified voter gave him the numbered token evidencing his verification / registration above.
- h. Each EVM or Ballot Unit was connected to a controller unit and a VVPAT. The EVM or Ballot Unit and the VVPAT were set up inside a covered booth to ensure that a voter could exercise his right of secret ballot. On the outside of the booth the connected controller unit was operated by an operator provided by Salbro. All that the operator had to do was press a switch on the Controller unit to commence a voting session and press the same switch to end the voting session.
- i. As the elections were for a vacancy of seven trustees and there were fifteen candidates, a voter was entitled to cast upto a maximum of seven votes. In

other words, a voter could validly cast a maximum of seven votes or less than seven votes if he so chose. However, a voter could not give more than one vote to any candidate.

- j. Each EVM or Ballot Unit contained a photograph and name of each of the fifteen candidates in English and in Gujarati. Next to the name was a red LED light. Next to the light was a red button. When the red button corresponding to a candidate name was pressed, the red light corresponding to such candidate would light up and the EVM would emit a short beep. Once a voter registered seven votes the EVM would emit a long beep. This is how a voter would know that the EVM had registered the votes for the candidates chosen by the voter.
- k. Each EVM was designed to record a maximum of seven votes or less than seven votes per voter per voting session. Each EVM was designed and tested to ensure that it would not register more than one vote for a candidate per voter per voting session. This was done to ensure that a voter could vote for seven candidates or less but could not vote for any candidate more than once.
- I. Once the EVM emitted a long beep on seven votes being cast by a voter; or in a case where seven votes had not been cast, a voter signalled that he had completed voting; or the voter walked away, the operator would close the voting session on the EVM through the controller unit. The operator had no way of knowing who the voter had voted for.
- m. When a voter voted for a candidate by pressing the red button on the EVM corresponding to a candidate's number and name, the button so pressed:
 (i) resulted in registering and storing the vote for such candidate against his number on the connected controller unit; and (ii) resulted in the VVPAT (located inside the voting booth and next to the EVM) printing the number and name of such candidate.
- n. It is very pertinent that each of the components of the above system viz. (i) EVM or Ballot Unit; (ii) Controller Unit; and (iii) VVPAT were connected to an electrical outlet and to each other. None of the components had any means to connect to or access the internet.
- o. Further, none of the above components had any software user interface through which the same could be accessed or tampered with. Every Controller Unit contained a data chip which was embedded into it. The chip in the Controller Unit would maintain a record of the number of voters and votes registered against each candidate number.

- p. Each election centre was provided with nine such EVMs. These EVMs were used for registering the votes cast by voters on the General Register of the BPP.
- q. Voters on the Donor Register of the BPP are entitled to two votes. As regards the voters on the Donor Register of the BPP, a dedicated EVM was provided at each election centre. The Donor controller unit was programmed to register two votes in favour of a candidate if the button corresponding to such candidate's name was pressed once. Each Donor Controller Unit was designed to record a maximum of seven button presses or less per voter per voting session initiated by the operator. Each donor EVM was tested to ensure that it would not register more than one button press for a candidate per voter per voting session initiated by the operator. This was done to ensure that a voter on the Donor Register could vote for seven candidates or less but could not vote for any candidate more than once.
- r. Each election centre was provided with one donor EVM. This EVM was used for registering the votes cast by voters on the Donor Register of the BPP.
- s. Each election centre, therefore, was provided with ten EVMs (nine to be used for voters on the General Register and one EVM to be used for voters on the Donor Register). The ten EVM Ballot Units were to be accompanied by ten controller units and ten VVPATs.
- t. In addition to the above, each election centre was provided with standby EVM Ballot Units, Controller Units and VVPATs. These were kept available in the event any of the above ten EVMs, ten controller units or ten VVPATs did not function as anticipated.
- u. Upon conclusion of the voting at each election centre, the Election Commissioner for such election centre noted down the votes per candidate per EVM or ballot unit as appearing on the connected controller unit. This was done in the presence of the authorised representatives of the candidates at such centre.
- v. Once the above was done, only then the controller unit was connected to a master laptop (each voting centre was provided with one which had been audited and sanitised as set out subsequently). The master laptop was then connected to a printer and a printout of the consolidated results of the voting at that centre was taken. The centre wise vote count was taken to the election centre at Dadar where all centres vote count was consolidated and final results were announced by Chief Election Commissioner.
- 5. All candidates were invited to the office of the BPP on 24th May 2022 for a Candidates meeting. The purpose of the above invitation was to explain the entire

voting process along with all the checks and balances set out above to the candidates.

- 6. For the benefit of the candidates, a demonstration of a mini version of the above electronic voting system was also set up in the board room of the BPP. The same comprised of (i) a laptop manned by the staff members of the BPP as also Salbro to access the server which contained the BPP's General and Donor Register database; and (ii) two EVMs or ballot units [one for voting as per the BPP's Donor Register and the other for voting as per the BPP's General Register] connected to two controller units and VVPATs.
- 7. A dry run of how the system would work from the point of time a voter presented his certificate at the announcer's table to the time the voter cast his vote and exited the polling booth was demonstrated. The candidates present were requested to participate and use the system set up as if they would on election day.
- 8. The candidates present were satisfied with the electoral process as outlined above as also the demonstration of the mini electronic voting system as had been set up. On the day of demonstration some candidates suggested adding the Candidate number also with the Candidate name, that was appearing on the VVPAT. Auditing and sealing was postponed by a day to 26th May 2022, to accommodate suggestions given by candidates in the Candidates Meeting held on 24 May 2022.
- 9. All candidates were invited by the Election Commission, by its email dated 19th and 24th May 2022 to witness the checking, testing and sealing of the EVM equipment at Salbro's premises at C Wing-002, Twin Arcade, Military Road, Marol, Andheri (E), Mumbai 400059 as also to witness the secure room of such equipment at J. B. Vachha School for Parsi Girls at Dadar. The above took place on 26th May 2022.
- 10. Based on Deloitte's recommendations the (i) EVMs or Ballot Units; (ii) Controller units; and (iii) Master laptops were checked, tested and securely sealed as provided below on 26th May 2022:
 - a. EVMs or Ballot Units:
 - i. Each EVM to be used in the election process was checked to ensure that the details of all candidates appearing thereon were correct and matched the notice issued by the BPP as per the Scheme;
 - ii. Each EVM to be used in the election process was checked to ensure that all candidate names appear in the same order and bear the same serial number;
 - iii. Each EVM to be used in the election process was checked to ensure that it did not record more than seven votes;

- iv. Each EVM to be used in the election process was checked to ensure that it would record less than seven votes;
- Each EVM to be used in the election process was checked to ensure that it would not register more than one vote per candidate per voting session;
- vi. Each EVM to be used in the election process was checked to ensure that the buttons corresponding to each candidate's name were working;
- vii. Each EVM to be used in the election process was checked to ensure that the button with no candidate name was disabled and did not cast any vote;
- viii. Each EVM to be used in the election process was checked to ensure that the light corresponding to the button next to a candidate's name flashed when the button corresponding to such candidate's name was pressed;
 - ix. Each EVM to be used in the election process was checked to ensure that it emitted a short beep each time the button corresponding to a candidate's name was pressed;
 - Each EVM to be used in the election process was checked to ensure that it emitted a long beep once seven votes had been recorded in one voting session;
 - xi. Each EVM to be used in the election process was checked to ensure that it did not record any votes till the INIT button on the connected controller unit was pressed;
- xii. Each EVM to be used in the election process was checked to ensure that it recorded votes only after INIT button on the connected controller unit was pressed;
- xiii. Each EVM to be used in the election process was checked to ensure that it did not record any vote once the INIT button on the connected controller unit was pressed to end the voting session;
- xiv. Each EVM to be used in the election process was checked to ensure that if two buttons are pressed simultaneously only one vote would be registered;
- xv. Each EVM to be used in the election process (for voters on the BPP's General Register) was checked to ensure that it was registering one vote per button press;

- xvi. Each EVM to be used in the election process (for voters on the BPP's Donor Register) was checked to ensure that it was registering two votes per button press.
- b. Controller units:
 - i. Each controller unit to be used in the election process was set at zero and checked to ensure that it showed zero votes;
 - Each controller unit to be used in the election process was checked to ensure that when connected to an EVM or Ballot Unit to be used for voters on the BPP's General Register, recorded one vote per button press on the EVM;
 - Each controller unit to be used in the election process was checked to ensure that when connected to an EVM or Ballot Unit to be used for voters on the BPP's Donor Register, recorded two votes per button press on the EVM;
 - iv. Each controller unit to be used in the election process was checked to ensure that the same did not lose data even when the controller power button was turned off;
 - v. Each controller unit to be used in the election process after being checked as above was once again set to zero votes.
 - vi. Each VVPAT was checked to ensure that the votes cast for a candidate were correctly reflected thereon;
 - vii. Each VVPAT was checked to ensure that even when the paper roll in the same was changed half way through the voting process, there was no loss of data.
- c. Master laptop to be used to import data from the EVM Controllers:
 - i. Each master laptop was scanned for viruses, malicious malware;
 - ii. Each master laptop had a firewall and app and browser control enabled;
 - iii. Each master laptop had its bluetooth disabled;
 - iv. Each master laptop was password protected by Deloitte.
- d. In the course of the above checking and testing and auditing process, certain equipment did not function. The same was reconfigured and re-checked, tested and audited or replaced with other equipment which was put through a similar testing, checking and auditing process.

- e. Each of the EVM Ballot units and Controller units were sealed with masking tape covering all their ports or in the case of laptops by being put in sealed plastic bags in the presence of the representatives of Deloitte, Salbro and the Election Commission.
- f. System and security review:
 - i. Deloitte also performed a system and security review:
 - a) of the web portal to which the data from the EVM Controllers was uploaded; and
 - b) of the web portal used to register the voters and mark that they have voted.
 - ii. For the above two Applications security review was performed based on Open Web Application Security Project (OAWSP) standards and the Deloitte approach for Application security review.
- g. Upon completion of the testing and sealing of the EVM equipments as set out above, the same was brought to a secure room in J. B. Vachha School for Parsi Girls at Dadar and stored therein centre-wise. The room contained windows which were barred. The main door was locked with two locks. The locks were also sealed by Deloitte. The key to one lock remaining with a member of the Election Commission and the key to the other lock remaining with the representative of Deloitte.
- h. Though not required by the Scheme, the Election Commission called on GCS Automation Private Limited to provide CCTV cameras within and outside the secure room. In addition, a security guard was also posted outside the secure room. A muster was provided to the security guard to record details of those who took external rounds of the secure room.
- 11. On 29th May 2022, election day, the secure room at J. B. Vachha School for Parsi Girls at Dadar was opened at 6 a.m. in the presence of the members of the Election Commission as also representatives of Deloitte and such authorised representatives of candidates who attended.
- 12. Each Election Commissioner carried the EVM equipment earmarked for his / her election centre to such election centre. The same was put in the relevant places earmarked for the same by the representatives of Salbro under the supervision of the representatives of Deloitte and the Election Commission. At around 8 a.m., the seal was opened in the presence of Election Commissioner, representatives of Deloitte and Salbro after the sealed equipments were shown to the Candidates /their authorised representatives.

- 13. Thereafter, the EVMs or Ballot Units, Controller units and VVPATs were connected to each other as also to electrical outlets. This was done by the representatives of Salbro in the presence of the representatives of Deloitte and the Election Commissioner.
- 14. The Election Commissioners for each election centre, then demonstrated that the controller units were all set to zero votes. This was done in the presence of the representatives of Deloitte and such candidates / authorised representatives as had attended. It is only after all of the above, that the electoral process (outlined above) commenced at 10.00 a.m. or shortly thereafter.
- 15. The election process was impeded, at times, briefly. This was essentially on account of being unable to connect to the online database of the BPP's General and Donor Registers. This resulted in delay in commencing the voting process at most of the centres. During these times no unregistered person was allowed to vote. Persons were allowed to vote once connectivity was restored and the online databases accessed for such voters. As a result of the same, the voting times were extended in certain centres upto 6.45 p.m. instead of 6.00 p.m ensuring 8 hours of voting at each centre. Due to lag in connecting to the server containing the database of BPP General and Donor Voter list, the process of registration of voters was initially impeded. Apart from the above, the connectivity issue had no other impact on the election process.
- 16. The protocol followed at all election centres in the event certain equipment in a polling booth malfunctioned was that such equipment was immediately isolated, and no voting was permitted therefrom. If the technical issue was resolved or equipment substituted (with standby sealed equipment) by Salbro staff in the presence of the representatives of Deloitte and the Election Commissioner, the polling booth was restarted.
- 17. In some centres, on a couple of occasions, the VVPAT machine did not function due to electrical and mechanical reasons. This did not impact the vote count registered in the EVM Controller Unit as the VVPAT was only a method of re-verification of vote count.
- 18. In certain instances, under the instructions of the Election Commission and in consultation with the representative of Deloitte, exceptions have been noted at each Centre demanding an adjustment in the vote count at that respective centre in respect of certain Candidate. The impact on the vote count of a Candidate and the adjustment with reasons is set out subsequently.
- 19. At the extended time of voting at each voting centre, a barrier was put in place to stop any further persons from joining the line of voters. The voters already in line were permitted to complete voting. Thereafter, the votes cast per candidate per EVM as recorded on the connected controller unit were called out by the Election Commissioner at each voting centre. This was done in the presence of the

candidates / their authorised representatives, who were also permitted to see the same on the controller units and note the same.

- 20. Thereafter, the master laptop was connected to each controller unit and its data imported to the master laptop. The master laptop was then connected to a printer and the consolidated results for each candidate across the ten EVMs was printed. This printout was signed by the Election Commissioner, the representative of Deloitte as also the representative of Salbro.
- 21. The above centre-wise results were conveyed to the Chief Election Commissioner at Dadar.
- 22. The results of the election process were communicated by the Chief Election Commissioner at Dadar to the candidates / their authorised representatives assembled there on 29th May 2022.
- 23. As set out above, the impact on the vote count of a Candidate and the adjustment with reasons is set out in the table below:

TOTAL NUMBER OF VOTES PER CANDIDATE EACH LOCATION														
SR.NO	CANDEDATE NAME /NO EVH Controller	J B VACCHA- DADAR (se per EVH)	J B VACCHA- DADAR (as published)	CUSROW BAUG- COLABA (me per EVH)	CUSROW BAUG- COLABA (no published)	BARUCHA BAUG- ANDHERI (ma per EVH)	BARUCHA BAUG- ANDHERI (as published)	KHAREGHAT- GRANT ROAD (as per EVH)	KNAREGHAT- GRANT ROAD (as published)	RUSTON BAUG- BYCULLA (as per EVN)	RUSTON BAUG- BYCULLA (as published)	GRAND TOTAL (MI PHY EVH)	GRAND TOTAL (published)	Exception
1	DR. ADIL MALIA	790	790	632	632	660	665	000	000	625	625	2611	3611	
2	MRS. ANAHITA DESAL	1141	1140	791	791	1111	1111	1500	1500	1004	1004	\$247	5546	1
3	MRS. ARMAITY TIRANDAZ	030	838	412	411	690	690	1024	1024	414	414	3378	3377	1
4	MR. DAARA PATEL	887	887	522	522	554	554	717	717	560	560	3240	3240	
5	MR.FARHAD HOZDAR	646	646	500	500	431	431	845	845	401	401	2903	2903	
6	MS.FARHANAZ IRANI	87	87	57	57	83	63	167	167	89	89	403	463	
7	MR.HOSHANG JAL	011	811	950	949	648	645	047	047	738	730	3994	3993	1
8	NR KADOUSHROO IRANI	106	106	56	56	66	66	119	119	71	71	410	410	
9	MR.KERSI RANDERIA	703	703	435	435	517	517	722	722	492	491	2069	2060	1
10	NRS.MANARUKH NOBLE	823	823	537	536	765	765	1196	1196	401	400	3802	3800	2
11	MR.RUMY ZARIR	626	626	370	370	710	710	1106	1106	403	403	3295	3295	
12	NR.TEHNTAN DUMASIA	219	219	203	203	375	375	467	467	150	150	1422	1422	
13	MR-VIRAF MIDITA	740	740	493	492	056	064	1279	1279	490	490	3076	3073	3
14	ERVAD CA XERXES DASTUR	663	603	469	460	709	709	1085	1005	510	510	3456	3455	1
15	PROF.DR ZULEIKA HOMAVAZIR	202	302	279	279	365	364	528	526	277	276	1032	1827	5
Total votes overall		9499	9497	6706	6701	8558	8555	12490	12466	6873	6670	44126	441111	15

- 24. Exceptions have been provided for only in the following instances :
 - a. In certain instances where a voter walked into the polling booth, he pointed out to the Election Commissioner that the lights corresponding to certain Candidate names were already lit in the EVM ballot Unit though he did not cast any vote. It is pertinent that the above happened even though the operator had terminated the earlier voting session or in other words kept the EVM ready to register the votes of the above voter. It was soon identified that the lights corresponding to few of the buttons pressed by the previous voter had not been reset upon the operator terminating the earlier session. Hence under the instructions of the Election Commissioner and in the presence of the representatives of Deloitte and Salbro an attempt was made to reset the buttons by terminating the new voting session. In every instance where the lights against the candidate names had remained lit even after termination of the voting session, such candidate names were noted by Deloitte representative. When the new voting session was also terminated as set out above, it resulted in such candidates getting an extra vote and registered an extra voter count in the EVM. Upon consolidating the

data in respect of the above, across the voting centres the votes were reduced from the vote count registered against the name of the respective candidates at those centres.

- b. In Cusrow Baug Centre, a General voter inadvertently commenced voting on a Donor EVM. This was noticed by the EVM operator and was immediately brought to the attention of the Election Commissioner and Deloitte representative. In this instance only under the instruction of the Election Commissioner, the votes cast by the voter were noted by Deloitte representative and consequent deductions were made to the vote count registered against the name of those candidates at that Centre.
- 25. As can be seen from the above, adjustments have been in the nature of reduction of votes. It is very pertinent that each candidate's vote count prior to or after adjustment makes no difference to the declared results in any manner or form. The candidates who succeeded in the election continue to be successful by a large margin of votes despite the reduction in the vote count as per the above table.

Location	Number of Voters*
J.B Vaccha School, Dadar	1570
Bharucha Baug, Andheri	1502
Khareghat Colony, Grant Road	2010
Cusrow Baug, Colaba	1125
Rustom Baug, Byculla	1157
Total	7364

26. Total number of voters registered at each location :

*These numbers are arrived at after reconciling the manual voter count with the EVM voter count by applying adjustments based on instances reported at each centre. The adjustments make no difference to the declared results in any manner or form.

Commodore Aspi Marker, Chief Election Commissioner.