## ELECTION COMMISSION OF INDIA

Nirvachan Sadan, Ashoka Road, New Delhi 110 001

No. 51/8/16/9/2009-EMS (Vol-IX)

Dated: 29<sup>th</sup> March, 2010

To,

Shri V.V. Rao HIG-155, Phase-V, KPHB Colony, KKP Hyderabad – 500072 Andhra Pradesh

Sub: Allegation of vulnerability/tamperability of the ECI-EVM.

Ref: 1. The Commission's letter dated 22.07.09.

- 2. The Commission's letter dated 31.07.09
- 3. Your letter dated 04.08.09
- 4. Your letter dated 08.08.09
- 5. The Commission's letter dated 12.08.09
- 6. Your letter dated 13.08.09
- 7. The Commission's letter dated 22.08.09
- 8. Your letter dated 27.08.09
- 9. The Commission's letter dated 01.09.09
- 10. Your letter dated 03.09.09
- 11. Your letter dated 10.11.09
- 12. Your letter dated 25.11.09
- 13. The Commission's letter dated 14.12.09
- 14. Your letter dated 22.12.09
- 15. The Commission's letter dated 12.01.10
- 16. Your letter dated 16.01.10
- 17. The Commission's letter dated 02.02.10
- 18. The Commission's letter dated 15.03.10
- 19. Your letter dated 18.03.10

Sir,

In inviting a reference to the above referred correspondence on the above subject, I am directed to say that the present proceedings before the Commission are being conducted in pursuance of the order dated 27<sup>th</sup> July 2009 of the Honourable Supreme Court in your Writ Petition (Civil) No. 292 of 2009, whereby the Honourable Supreme Court had disposed of your Writ Petition with the observation that you and other petitioners would be at liberty to pursue the matter with the Election Commission of India (ECI). In the very first paragraph of your abovementioned writ petition, it has been stated that "several experts and election watch groups and individuals who have been monitoring the election process have found that EVMs can be

manipulated/tampered. They have analyzed the electronics results in several constituencies which indicate that there is something drastically wrong with the EVMs". Besides, making similar allegations in many other paragraphs of your writ petition, in the concluding para 19(xiii), it has been further stated that "Because the election watch which was conducted at several places raises serious doubts on the functioning of the EVMs. The indications given in these studies point out how the machines could be tampered and used for casting votes in favour of a particular candidate". Thus you had made the allegation that the EVMs could not only be tampered with but had in fact been manipulated/tampered with in some constituencies. However, while making these sweeping allegations, you did not mention the name of any constituency or polling station where the EVMs used by the ECI were manipulated or tampered with. It was in the context of these allegations in your petition that the Commission had asked you to demonstrate the alleged tamperability of EVMs. Moreover, the above invitation to you to demonstrate the alleged tamperability of EVMs also flowed from your prayer itself (Prayer-1) in your Writ petition, which is re-produced below:-

"Direct the respondents to provide such mechanism which is free from any manipulation/tampering so that free and fair elections in the parliamentary democracy are ensured and that the votes cast by the citizens as their right of free expression under Article 19(1)(a) of the Constitution are reflected correctly in such mechanism, whether EVM or ballots or any other device."

- 2. The Commission is fully convinced that the mechanism provided by it, including the use of ECI-EVMs alongwith the prescribed administrative procedures and safeguards, for conduct of elections is free from any manipulation/tampering and ensures free and fair elections. However, in view of your continued allegations about the tamperability/manipulation of ECI-EVMs, you have been given repeated opportunities to demonstrate the alleged tamperability of ECI-EVMs.
- 3. The Commission has noted that nowhere in your Writ Petition before the Supreme Court, have you raised the issue of ethical hacking or <u>sought</u> reverse-engineering of ECI-EVMs. However, when the Commission asked you to demonstrate the tamperability, instead of demonstrating the tamperability as alleged by you, you are seeking to do reverse-engineering. The Commission has not allowed reverse-engineering of the ECI-EVMs, inter-alia, for the reasons that manufacturers of ECI-

EVMs, BEL & ECIL, have a patent on the machines and have objected to any attempt at reverse-engineering. Your insistence on reverse-engineering of the ECI-EVMsin your letters, to be able to demonstrate the alleged tamperability, makes one thing absolutely clear - that as of now you are not aware of any process or mechanism by which the ECI-EVMs can actually be tampered with. It would appear that by reverse-engineering all you intend to do is to experiment and test your theoretical hypothesis of tamperability of the ECI-EVMs based on purely theoretical premises and assumption. The Commission has also noted that some of your team members including Mr. Hari Prasad of NET India have been showing fake look-alike EVMs on TV Channels and elsewhere to make a false propaganda against the ECI-EVMs and create confusion in the mind of the public by unethical means. The Commission is concerned that commercial interests could use the route of reverse engineering which may compromise the security and sanctity of the entire election system. It is, therefore, not possible for the Commission to permit reverse-engineering of ECI-EVMs.

- 4. In your letter dated 27<sup>th</sup> August 2009, you had sought information on some points many of which do not arise out of your Writ petition before the Supreme Court. Nevertheless, some of these points were explained to you during discussions. **Information on your questionnaire is enclosed with this letter.**
- 5. In your letter dated 18<sup>th</sup> March 2010, you have made wild allegations about threat from 'insiders'. However, you have not mentioned anywhere in your Writ petition or in any communication to the Commission, as to who are the 'insiders' who pose a threat to the ECI-EVMs and how they can tamper with them. There are more than 4 million personnel involved in the process of conduct of elections. The Commission has issued detailed instructions on ensuring security, accountability and transparency of the entire process of conduct of elections. The confidence of the Election Commission that there can be no threat from 'insiders' stems from these instructions and prescribed procedures. There is no possibility of insertion of Trojan by the manufacturer of the chip. The Commission, based on 3 decades of dealing with them, is fully satisfied with the internal procedures and safeguards of BEL and ECIL. These are Central Public Sector Undertakings (CPSU) of impeccable credential also dealing with sensitive and critical defense and atomic sector equipments. The Commission does not find any substance in your insinuation of threat from 'insiders'.

- 6. You have also raised concerns on the Expert Committee. Prayer 2 of your Writ petition reads as follows:
  - "Direct appointment of an Independent Expert Committee to study in details all the aspects/objections concerning the present EVMs and submission of the said report before this Hon'ble court for passing appropriate orders."
- 7. You have requested the Commission to appoint experts who have no direct involvement in evaluating EVMs earlier. In your letter 18.03.10, you have suggested the names of Prof. David L. Dill and Prof. Alex Halderman. It needs to be mentioned that design of EVM does not only depend on technological knowledge of the expert, but also requires, knowledge of the Indian voting system and relevant statutes. Foreign computer professionals mentioned in your letter do not have knowledge of administrative safeguards in place in the Indian election system and Indian Prof. David L. Dill had sent a video statement to the Commission in conditions. which, while talking about an optical scan system he admits - "I do not know enough about elections in India to know whether that would work out or not". Commission does not find any need for appointing any other experts, including foreign experts. Further more, worldwide, India is held in high esteem in the field of Information Technology. The Indian experts who have evaluated ECI-EVMs earlier are highly respected professors of internationally reputed Indian Institute of Technology (IIT). It may also be recalled that the original Expert Committee itself and indeed the Chairman of the present experts committee was identified and nominated as a member of the original expert committee in 1990 by the All Party Committee on Electoral Reforms headed by Shri Dinesh Goswami.
- 8. Judgments from various High Courts since 2001, like, High Courts of Madras, Bombay, Delhi, Karnataka and Kerala, have upheld the use of ECI-EVMs and technical experts have endorsed the machines from time to time. In fact, the Karnataka High Court in Election Petition No. 29/1999 [Michael Fernandes vs. C.K. Jafer Sharif] decided on 5<sup>th</sup> February 2004, has hailed the ECI-EVMs as "undoubtedly a great achievement in electronic and computer technology and a National Pride". The Madras High Court has also observed in W.P. Nos. 3346, 3633, 4417, 4454, 4466, 4945, 5077, 6038 and 6039 of 2001 filed by AIADMK, PMK, AIFB (TN), INL, CPI (TN State Council) & Mr. Haneefa against the Election Commission of India, order dated 10-04-2001 that "The mere statement that the petitioner could demonstrate some

EVMs to show the possibility of misuse, is not helpful as those machines are not going to be used in the polls. In view of the earlier discussion, this court finds no ground to witness the demonstration". In a subsequent Writ Petition filed by Mr. Haneefa before the Madras High Court in August, 2009, the Hon'ble High Court while dismissing that petition, even imposed a fine of Rs.5,000/- on him, as the Court was convinced that the Writ Petition appeared to be filed in personal interest and not in public interest.

- 9. ECI has given you many opportunities to demonstrate tamperability of ECI-EVMs under all the conditions in which ECI-EVMs are used/found in the field. These stages were finally communicated to you in writing vide ECI letters No. 51/8/16/9/2009-EMS (Vol.-IX), dated 12<sup>th</sup> January 2010 and 2<sup>nd</sup> February 2010. It may be noted that once the EVMs leave the factory premises, they are found only in these three conditions/stages and therefore no additional conditions have been put on your demonstration of alleged tamperability of ECI-EVMs.
- 10. In this connection, please recall that ECI had written on 22<sup>nd</sup> July 2009 to Shri V. Lakshmana Reddy, State President, Janchaitenaya Vedika who was one of the copetitioners in the above-mentioned Writ Petition inviting him for demonstration of so-called manipulation of EVM used by ECI. On 28<sup>th</sup> July 2009, the Commission received a letter from your Counsel Shri Sanjay Parekh requesting the ECI to consider points raised in the Writ Petition and such other questions which the petitioners wish to submit. The Commission wrote to Shri Sanjay Parekh on 31<sup>st</sup> July 2009 informing him that one of the petitioners Shri V. Lakshmana Reddy was already invited by the Commission. Shri Sanjay Parekh was further informed in this letter that petitioners may give a demonstration of the alleged tamperability of the ECI-EVMs in the Office of Election Commission of India without delay preferably in the week between 3<sup>rd</sup> to 7<sup>th</sup> August 2009. Instead of coming for demonstration, you wrote another letter to the Commission on 4<sup>th</sup> August 2009. This letter was mostly the repetition of all the points in your Writ Petition. On 12th August 2009, the Commission wrote to you reminding you that the Commission had already invited you with your team vide its letter dated 31<sup>st</sup> July 2009 addressed to your Counsel Shri Sanjay Parekh and further said that you were again invited at 4.00 pm on 17<sup>th</sup> August 2009. On 17<sup>th</sup> August 2009, you came to the Commission along with Shri Hari Prasad of Net India Pvt. Ltd., Dr. Roxna Swamy, Advocate, Shri P.R. Krishnan, Senior Advocate, Shri Suresh Tripathi, Advocate, Shri Ashish Anand, Shri Kailash

Mishra, Samajwadi Party, and Dr. Avinana Hota, Member Policy Board, All India Congress Committee. The full Commission met you along with the Expert Committee and representatives of manufacturers of EVM. A detailed discussion took place. The answers to the questions related to EVMs were explained to you in detail, as also the administrative procedures and safeguards laid down by the Commission whereby any apprehension of tamperability of ECI-EVMs is completely ruled out. Then the Commission gave you another opportunity for a demonstration of the alleged tamperability of ECI-EVMs at 3.30 pm on 3<sup>rd</sup> September 2009.

- 11. In the meantime, your letter dated 27<sup>th</sup> August 2009 was received in the Commission on 31<sup>st</sup> August 2009. In this letter you had enclosed your version of the proceedings held on 17<sup>th</sup> August, 2009. You had also enclosed a suggested procedure for demonstration of alleged tamperability and a detailed questionnaire on EVMs. In addition you had mentioned that ECIL had given you a legal notice. In the Element 4 of the procedure for demonstration on alleged tamperability suggested by you, you had clearly written that you intend to reverse-engineer the EVMs and wanted permission for reverse-engineering. The Commission advised ECIL on 1<sup>st</sup> September 2009 to consider the withdrawal of the legal notice in view of the pendency of the proceedings before the Commission. On 1<sup>st</sup> September 2009 itself the Commission wrote to you informing you of the advice given by the Commission to ECIL and allaying any misgivings in your mind on account of the notice given by ECIL to you. In this letter the Commission also informed you that the Annexure-1 in your letter dated 27<sup>th</sup> August 2009 which you had referred to as proceedings of ECI meeting of 17<sup>th</sup> August 2009 had several inaccuracies including wrong attributions and therefore could not be accepted as Minutes of the proceedings of the meeting. The Commission also informed you that questionnaire given by you has been referred to the Expert Group and replies will be given to you after receiving necessary information from them. The questionnaire was also referred to BEL and ECIL for their reply. On 1st September 2009 itself, the Commission received communications from ECIL and BEL that reverse engineering of EVMs cannot be accepted as it violates their IP.
- 12. On 3<sup>rd</sup> September 2009 you came to the Commission alongwith your team. All questions raised by you on the EVMs were answered in detail. You were then allowed to open the EVM at your request for a visual understanding of the 'insides'

of the ECI-EVM. However, when it became clear that you were taking measurements and making notes with a view to reverse-engineer the ECI-EVMs, you were informed that the Commission had only permitted demonstration of tamperability of EVMs and not its reverse-engineering. It may also be noted that on assurance from you that you will not misuse knowledge gained by you, you were allowed to take with you papers on which you had made notings about inner details of ECI-EVM.

13. On 10<sup>th</sup> November, 2009 you requested the Commission to fix a date for beginning the process of demonstration of tamperability of EVMs. Commission was extremely busy around this time with General Elections to Legislative Assemblies of Maharashtra, Haryana, Arunachal Pradesh and Jharkhand. In spite of this, the Commission wrote to you on 14<sup>th</sup> December 2009 informing you once again to demonstrate the alleged tamperability of EVMs on date of your convenience between 29<sup>th</sup> and 31<sup>st</sup> December 2009. In this letter, the Commission communicated to you the procedure on tamperability demonstration and made it clear that any attempt at reverse-engineering was not acceptable as it violates IP held by manufacturers of ECI-EVMs. On 22<sup>nd</sup> December 2009, you wrote another letter to the Commission confirming your participation in the discussion on 29<sup>th</sup> December 2009. In this letter, you again raised several questions, which had already been answered in previous discussions. However, you did not come to the Office of the Commission on 29<sup>th</sup> December 2009. On 12<sup>th</sup> January 2010, the Commission again wrote to you inviting you for demonstration of alleged tamperability of ECI-EVM from 2.00 pm to 6.00 pm on 19<sup>th</sup> January 2010. You wrote to the Commission on 16<sup>th</sup> January 2010 requesting to fix another date as your team members were away due to Sankranti and Pongal festival. On 2<sup>nd</sup> February 2010 you were again invited for demonstration of alleged tamperability of EVMs at 4.00 pm on 10<sup>th</sup> February 2010. You informed the Commission over telephone that you were not available on 10<sup>th</sup> February 2010 and requested the Commission to defer the meeting. The Commission gave you yet another opportunity for a meeting to demonstrate the alleged tamperability of ECI-EVM on any of the dates convenient to you out of 19<sup>th</sup>, 20<sup>th</sup> or 22<sup>nd</sup> March 2010. Instead of coming for a demonstration, you have again written to the Commission a letter repeating the points earlier made by you.

14. It is clear from the above that in spite of many opportunities given to you by the Election Commission of India you have not been able to demonstrate and prove your allegation of tamperability in ECI-EVMs. The Commission would like to reiterate that the ECI is fully aware of its constitutional obligations and is always concerned about the conduct of free and fair elections. Towards this end the ECI has an open mind for concrete and positive suggestions for any improvements. The Commission is, therefore, willing to invite you to another meeting and give you yet another opportunity to demonstrate alleged tamperability of ECI-EVMs in accordance with the letters of Commission No.51/8/16/9/2009-EMS (Vol-IX) dated 12<sup>th</sup> January 2010 and 2<sup>nd</sup> February 2010, during the third or fourth week of April 2010 for which, you may suggest a specific date of your choice. It is once again made clear that any demonstration of alleged tamperability cannot include reverse-engineering as it compromises security and sanctity of the entire election system.

Yours faithfully,

(K.N. BHAR) UNDER SECRETARY