



F. No. 6(1)/2011-IT  
**ELECTION COMMISSION OF PAKISTAN**  
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Secretariat,  
Constitution Avenue, G-5/2,  
19<sup>th</sup> April, 2018

## **ORDER**

The Hon'ble Election Commission of Pakistan is pleased to constitute a Task Force on Internet Voting for Overseas Pakistanis. The Task Force is mandated to assess the overall web based automated system of Internet Voting for eligible Pakistani voters living abroad having NICOP (National Identity Card for Overseas Pakistanis) and valid machine readable Pakistani Passport as per the Terms of Reference (TOR) Annexed. The composition of the Task Force is as under:

1.	Dr. Muhammad Manshad Satti, CEO, M/s IT-Butler, Dubai, U.A.E.	Convener
2.	Mr. Muhammad Arshad, Director General (Law), ECP	Member
3.	Dr. Umer Saif, Chairman, Punjab Information Technology Board (PITB), Lahore	Member
4.	Mr. Shahbaz Khan, Information Technology Board, Peshawar.	Member
5.	Dr. Syed Taha Ali, Assistant Professor, National University of Science & Technology (NUST), Islamabad	Member
6.	Representative from Lahore University of Management Sciences (LUMS), Lahore	Member
7.	Representative from Institute of Business Administration (IBA), Karachi	Member

2. The Hon'ble Election Commission of Pakistan may modify the composition of the Task Force or pass any order as to its mandate at any time.

**By the Order of the Hon'ble Election Commission of Pakistan.**

**(Dr. Akhtar Nazir)**

Additional Secretary (Administration)

**TERMS OF REFERENCE (TOR)  
FOR  
'INTERNET VOTING TASK FORCE'**

**INTRODUCTION:**

Under Section-94 of the Elections Act 2017, *"the Commission may conduct pilot projects for voting by Overseas Pakistanis in bye-elections to ascertain the technical efficacy, secrecy, security and financial feasibility of such voting and shall share the results with the Government"*. To comply this, the Election Commission of Pakistan (ECP) has signed Contract with National Database and Registration Authority (NADRA) in April, 2018 for the designing, development, testing, deployment and implementation of proposed voting mechanism using 'Internet Voting System' as a solution.

**OBJECTIVE:**

To perform 3<sup>rd</sup> party technical evaluation audit of the 'Internet Voting System' on its all components like software, hardware, network, connectivity, web, email, security, data center, etc developed by NADRA. The special 'Internet Voting Task Force' has been established to assess the overall web based automated system of Internet Voting for eligible Pakistani voters' living abroad having National Identification Card for Overseas Pakistanis (NICOP) and valid machine-readable Pakistani passport. The said Task Force will be equipped with state-of-the-art technical tools and qualified & experienced professionals having specialized skill-sets & expertise in data security, quality testing and system integration.

**ROLES AND RESPONSIBILITIES:**

- To get access from NADRA for testing the software code, hardware, network, connectivity, web services, email services, load balancing, security at all levels, database services and its optimization;



- To evaluate the endpoint security protection that detects malicious behavior and prevents malicious files from attacking on NADRA networks and systems;
- To Evaluate the Data Security during transmission, applications and web servers commonly using Transport Layer Security (TLS) for encrypted communication
- To audit the Remote Identity Proofing (RIDP) a Process of validating sufficient information that uniquely identifies voters eligibility (e.g., NICOP, personal demographic information, and other indicators).
- To evaluate the hosting facility of Overseas Voting Server for Denial of Service (DOS) or Distributed Denial of Service (DDOS) attacks on Voting Day or even earlier
- To assimilate the Man-in-Middle Attacks for ensuring the Data integrity of voting data.
- To identify various types of vulnerabilities and propose its optimum solutions;
- To perform comprehensive 'penetration testing' of systems;
- To make efforts for compromising website;
- To break or hack the I-Voting system and mark its loop-holes;
- To perform load testing activities & check the expected traffic;
- To give technical recommendations for enhancing its security;
- To submit 3<sup>rd</sup> party technical audit report to the ECP along with its recommendations for improving or upgrading all aspects of secure 'Internet Voting System' in elections;

**TIME:**

To accomplish the task within 10 working days after its formation.

**DELIVERABLES:**

Prepare detail Report on all kinds of testing and identified vulnerabilities. Also give technical recommendations to improve the existing framework of Internet Voting architecture for its further improvement.