

TELANGANA STATE ELECTION COMMISSION
1st Floor, DTCP Building, Opp: PTI Building, A.C. Guards, Hyderabad – 500 004.

CIRCULAR

Cir.No. 111/TSEC-ULBs/2020,

Dated:18.01.2020

Sub:- TSEC – Face Recognition Application - Method of Voter Verification at Polling Stations using Real-time authentication capabilities through a Mobile Phone using latest technologies from Artificial Intelligence, Big data, Machine Learning and Deep learning on Pilot Basis – Circular Instructions - Reg.

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The Telangana State Election Commission has issued election notification on 07.01.2020 for conduct of ordinary elections to Urban Local Bodies, 2020 in the State of Telangana.

On the day of poll, the first polling officer who is incharge of Marked copy of electoral roll, also be responsible for identification of electors. The identity of voters is verified manually with specified identity documents without any trail for any future scrutiny. Impersonation is still noticed during the polls, in spite of the use of photo-electoral rolls, insistence of photo ID card for each voter and, above all, having the polling agents of different candidates present in the polling station.

An analysis of the cases of tendered votes recorded during the previous elections to local bodies in the state revealed that in each of those cases there was a violation of voting procedure leading to conduct of re-polls in all those cases. It is likely that there may be more number of impersonation cases but have not come to the notice of election authorities since the real voters may not have come to polling station or may not have demanded for a tendered vote. The gravity of the situation can be better appreciated if one considers the ASD voters, which lists are known to local persons and there are ample opportunities to resort to impersonation in those cases.

Further it is noticed that the 1st Polling Officer who is incharge of voter identification is required to perform many transactions, because of which there is little

opportunity for that officer to even look up at the face of the voter and compare the same with the ID card / photo in the Electoral rolls.

In this background, the proposal of TSTS which is using the facial recognition technology to validate the life/identity of the pensioners is considered an appropriate tool for adoption at the polling stations to bring objectivity to voter identification work. However, this technology is proposed as an additional tool to validate the identity of the voter in addition to the existing procedures prescribed i.e. employing the 1st Polling Officer as identification officer, use of photo electoral rolls, insistence on a photo ID proof in addition to the personal scrutiny by the polling agents appointed by the contesting candidates.

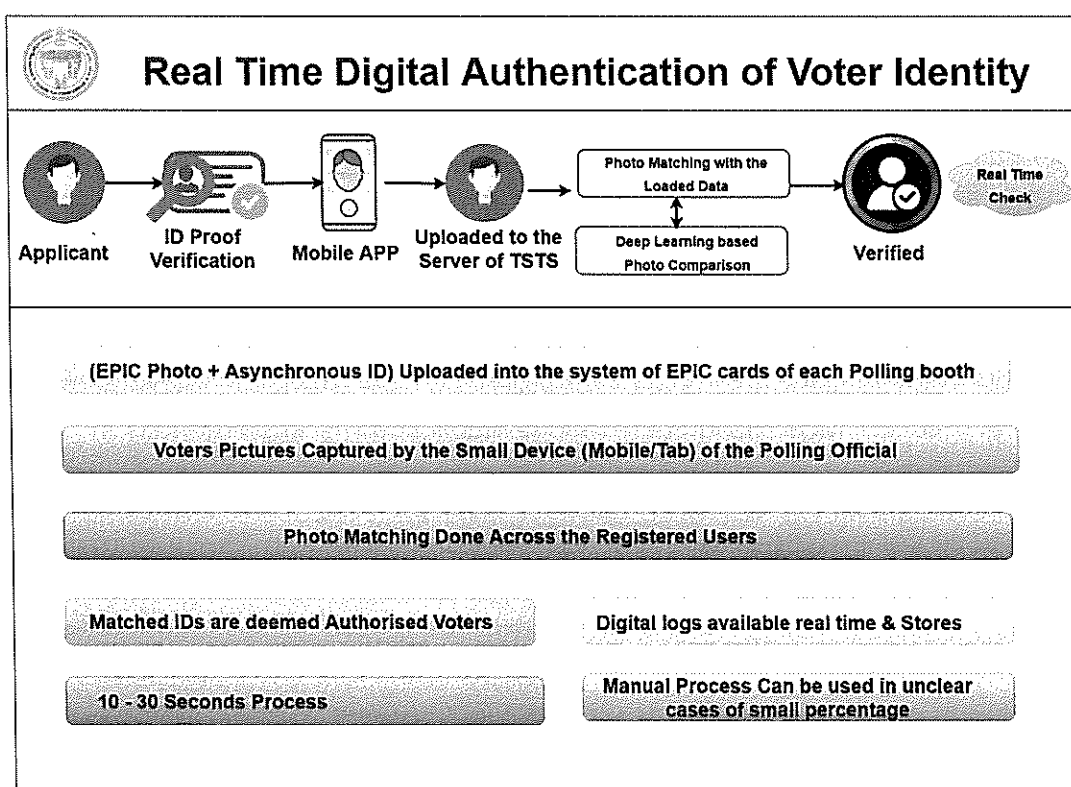
This technology is proposed to be used in selected 10 polling stations of Kompally Municipality of Medchal Malkajgiri district. Further it is ensured that the photographs taken are not stored or used for any other purpose. They will be erased from the memories of the mobile phone used in the Polling Station and also the server of TSTS. Further TSTS has to give an undertaking to this effect before implementation of the pilot project.

The process of identification and authentication of the Voter by applying the latest technologies of Artificial intelligence, deep learning etc., completely driven by the system with full Digital trail can help to reduce impersonation cases significantly.

The Mobile APP helps in identifying / confirming the voter based on the photograph taken by the additional polling officer kept incharge of mobile phone. This additional polling officer first verifies the identity proof of the voters and then takes photograph and uploads to the server using Face Recognition APP installed in Mobile Phone provided to him so as to compare the same with the photographs of all the voters of the concerned polling station. The APP displays the result of verification based on the match established with any one of the voters with an appropriate message. This system is not in lieu of the

existing identification system comprising of identification (First) polling officer, photo electoral rolls, insistence of EPIC/alternate ID document, subjective satisfaction of the polling agents, but an additional aid, that too employed in only 10 selected polling stations on a pilot basis. A negative return from this pilot exercise shall not be a sufficient ground to deny voting rights to any voter and it needs to be corroborated by the existing identification systems if that has to be imposed.

The flow chart of the voter verification system is shown in the below figure.



Entire transmission process is properly encrypted and the IDs are anonymized i.e. it is a type of information sanitization whose intent is privacy protection. It is the process of either encrypting or removing personally identifiable information from data sets, so that the people whom the data describe remain anonymous. The input files (encrypted live photo data) are deleted immediately after the purpose is fulfilled.

The above process is an additional measure to be implemented in Kompally Municipality in Medchal Malkajgiri district for the polling stations nos. 13,15,16,21, 22,23,24, 27, 31 & 32 on pilot basis. The normal duties of polling personnel will be intact and there is no deviation because of implementation of face recognition application in the polling station.

All the stake holders including the political parties representatives, contesting candidates, polling staff of the selected polling stations shall be briefed by the district administration about the implementation of face recognition Mobile APP and the procedure to be followed in the polling stations prior to the day of polling.

The District Election Authority, Medchal-Malkajgiri is directed to arrange to provide 10 new 4G android smart mobile phones (with dual SIM facility) with minimum specification of 2GB RAM, 4MP camera and also to appoint one additional polling official of APO cadre from the reserved list for each of the polling stations mentioned above and also ensure that the face recognition mobile Application is implemented in the above polling stations of Kompally Municipality without fail. The selection of additional polling officers shall be done in the presence of the General Observer.

(THIS HAS THE APPROVAL OF STATE ELECTION COMMISSIONER)

**Sd/- M Ashok Kumar
SECRETARY**

To
The Election Authority & Director of Municipal Administration, Hyderabad.
The Collector and District Election Authority, Medchal Malkajgiri District
The Managing Director, Telangana State Technology Services, Hyderabad
The Municipal Commissioner and Assistant District Election Authority, Kompally Municipality for necessary action.
The Returning officers concerned.

// Attested //

Assistant Secretary