COMELEC ADVISORY COUNCIL

Resolution No. 2017-002

Technology Recommendations on the 2019 National and Local Elections

WHEREAS, Section 5 of Republic Act No. 8436, as amended by Republic Act No. 9369, authorizes the Commission on Elections (COMELEC) to "use an automated election system or systems in the same election in different provinces, whether paper-based or a direct recording electronic election system as it may deem appropriate and practical for the process of voting, counting of votes and canvassing/consolidation and transmittal of results of electoral exercises";

WHEREAS, Section 8 of RA 9369, provides for the creation of an Advisory Council to the COMELEC that shall "recommend the most appropriate, secure, applicable and cost-effective technology to be applied in the AES, in whole or in part, at that specific form in time";

WHEREAS, on 15-16 June 2017, the COMELEC and the Advisory Council organized an AES Workshop in order to determine the needed and most appropriate AES technology to be used for the 2019 National and Local Elections (NLE). The workshop was attended by the officials of COMELEC, members of the Advisory Council, and members of the Technical Evaluation Committee (TEC);

WHEREAS, during the AES Workshop, COMELEC presented the following matrices:

Requirements for the AES 2019	Figures
Number of registered voters	59,442,591
Number of voters per clustered precinct	600
Number of clustered precinct	123,350
Required number of voting machines with 5% contingency	129,518
Number of PCOS machines that may be upgraded	73,686
Number of VCMs available for OTP	97,517

WHEREAS, the Workshop resulted to the identification of the following parameters and criteria necessary in an automated election system (AES) technology:

- a. Must be compliant with RA 8436 as amended;
- b. Must be interoperable;
- c. Must be sustainable as well as flexible;
- d. Machines may be reproduced timely or within the timeline needed by COMELEC;

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- e. Has high security and tight privacy features;
- f. Cost-effective;
- g. Must be accepted by the public and must be user-friendly; and
- h. Must be the most appropriate, responsive, applicable, and most efficient and effective for electoral use in the 2019 elections, and, if possible, in subsequent elections.

WHEREAS, on 26 July 2017, the AES Technology Fair was conducted as a kick-off activity in preparation for the 2019 National and Local Elections (NLE). The Technology Fair was conducted to provide vital inputs to the Advisory Council in making the most appropriate recommendations to the COMELEC;

WHEREAS, the AES Technology Fair showcased the available locally developed automated election system technologies which includeOptical Mark Reader (OMR) election systems, Direct Recording Electronic (DRE) election systems, and Internet Voting. Presented also during the Technology Fair were a voter verification system and a cybersecurity system;

WHEREAS, the Advisory Council envisions the creation of an ecosystem of interoperable, multiple, and mixed technologies where providers can reasonably participate as election technology providers for our country's elections. The last three (3) automated NLEs (2010, 2013, and 2016) have been using technologies from the same foreign election systems provider. The Advisory Council encourages more diversity, variety for election service providers, local and international, and less dependency, if not total freedom, from only one source or provider;

NOW, THEREFORE, the Advisory Council, properly convened in a series of meetings, discussions and deliberations, resolves, as it hereby resolved, to recommend to the COMELEC the following:

1. To consider seriously the use of multiple or mixed technologies, there must be interoperability to encourage these potential innovative solutions and systems. Interoperability refers to the ability of all interconnected components of the automated election system (election management system, voting machines or vote counting machines, consolidation and canvassing system, transparency serve, servers of the dominant majority and minority party, the accredited citizen's arm, the Kapisanan ng Broadcaster ng Pilipinas, and other groups accredited by COMELEC, COMELEC's central server and, web server, all other servers, and other components) to efficiently and effectively accept, receive, record, store, process, produce, generate, retrieve, or transmit election data and election results between and among the AES components using a common election data structure;

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- 2. To re-use the OMR technology as the voting system. The re-use of the existing technology shall be on the following premises:
 - a. The 2019 NLE is the fourth time that the COMELEC will re-use the technology on a national scale;
 - Acceptability of the OMR technology with paper-based ballots by the electorate and the BEIs as they have been exposed to this technology, thus minimal voters' education is required; and
 - c. The costs of keeping, warehousing, refurbishing, and other related costs on the re-use of existing OMR will not offset the benefits and utility of re-using these OMR.
- 3. For the COMELEC to provide opportunities for local election system developers and providers, utilizing the latter's useful and qualified automated election system, in electoral exercises such as, but not limited to, 2019 NLE, future referenda, Barangay and Sangguniang Kabataan (SK) elections.
 - To provide opportunities for local election system developers and providers aforesaid, the COMELEC is urged to provide solutions by addressing Section 12 of RA 8436, as amended;
- 4. If COMELEC exercises the Option to Purchase (OTP) the leased Vote Counting Machines (VCMs) used in 2016 NLE, the following measures shall be considered seriously:
 - a. The costs of keeping, warehousing, refurbishing, and other possible related or incidental costs when re-using these machines with the end view of maximizing its use and benefits in the forthcoming 2019 and 2022 electoral exercises do not outweigh the costs and benefits of exercising the OTP;
 - b. The mechanism by which this refurbishment and incidental costs are to be procured in the light of the Government Procurement Reform Act, Republic Act No. 9184, and its Implementing Rules and Regulations. The goal is to avoid future problems, as well as the problems encountered or observed during the procurement of refurbishment services for the procured PCOS machines in 2013 for the 2016 NLE;
 - c. The problems or deficiencies identified or observed in the 2016 elections such as but not limited to Voter Verified Paper Audit Trail (VVPAT) implementation, should be addressed before exercising OTP;

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- d. Disposal of the machines when no longer serviceable or when their purchase and re-use will be more costly and disadvantageous to the government;
- e. The mechanism to dispose the machines as contemplated in item c above to avoid unnecessary warehousing, maintenance and related costs.
- 5. If COMELEC shall decide to adopt or use the OMR technology in the 2019 NLE, either the use of VCM or PCOS machines will still be inadequate to support the requirement of 600 voters per precinct. Thus, to augment support of this requirement, other AES technology should be acquired;
- If necessary by reason of cost and time elements and if found to be more advantageous to the government considering other factors, the existing PCOS technology shall be refurbished and upgraded for utilization in the forthcoming elections.

Provided further that these existing machines are subjected to rigorous quality and utility assurances and testing processes, and that the required security features and minimum system capabilities under RA 8436, as amended, including the VVPAT be fully observed and implemented;

7. For the COMELEC to appoint a Commissioner-Chief Information Officer (CIO) who shall be in-charge of the automated election system technology for the forthcoming NLE and subsequent elections and other functions as mandated by law.

Adopted this 4th day of August 2017.

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