

#### Republic of the Philippines COMMISSION ON ELECTIONS Manila

#### **EN BANC**

GUIDELINES ON THE CONDUCT OF THE LOCAL SOURCE CODE REVIEW OF THE AUTOMATED ELECTIONS SYSTEMS FOR THE 12 MAY 2025 NATIONAL AND LOCAL ELECTIONS AND BARMM PARLIAMENTARY ELECTIONS

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Promulgated: September 11, 2024 ·

## **RESOLUTION No. 11053**

**WHEREAS**, Section 12 of Republic Act No. 9369 provides that "once an AES technology is selected for implementation, the Commission shall promptly make the source code of that technology available and open to any interested party or group which may conduct their own review thereof";

WHEREAS, the conduct of the Local Source Code Review (LSCR) by any interested party as provided under Section 12 of Republic Act No. 9369 will enhance public acceptance in the Automated Elections System (AES);

**NOW, THEREFORE**, pursuant to the powers vested in it by the Constitution, the Omnibus Election Code, Republic Act No. 9369, and other election laws, and after taking into consideration the recommendation of the local source code reviewers in the last 2022 National and Local Elections, the Commission has RESOLVED, as it hereby RESOLVES, to approve and adopt the following guidelines on the conduct of the LSCR of the AES for the 12 May 2025 National and Local Elections and BARMM Parliamentary Elections:

## Article I LOCAL SOURCE SODE REVIEW

**SECTION 1. Objectives.** The LSCR seeks to provide interested parties, groups and associations with opportunity to inspect and examine the source

codes of the AES. It seeks to build public trust, promote transparency and confidence on the AES.

**SECTION 2. Coverage.** The review shall cover the source codes of the following systems programmed, developed and/or configured by the respective system providers of the:

- i. Full Automation System with Transparency Audit/Count (FASTrAC) which includes but not limited to:
  i.i. Election Management System (EMS)
  i.ii. Automated Counting Machine (ACM)
  i.iii. Consolidated Canvassing Systems (CCS);
- ii. Secure Electronic Transmission Services (SETS);
- iii. Online Voting and Counting System (OVCS).

**SECTION 3. Review Parts.** The source code review shall involve three (3) parts: (a) guided review, (b) unguided or independent review, and (c) public source code modules.

**SECTION 4. Guided Review**. The subject matter experts (SMEs) of each provider will present a walkthrough of the design and functionalities of the systems for review.

**SECTION 5. Unguided or Independent Review.** The accredited reviewers will have access to the source codes for their independent inspection.

**SECTION 6.** Public Source Code Modules. Each system provider shall make available non-critical parts/modules of their respective source codes, as may be approved by the LSCR Committee, which will be posted in the COMELEC website.

**SECTION 7. Source Code Security.** In order to ensure the security of the entire AES source codes, any module that contains, pertains, or relates to processes of the transmission of data, encryption mechanism including, but not limited to, configuration files shall not be part of the Public Source Code Modules.

**SECTION 8. Public Source Code Integrity.** All the files of each Public Source Code Modules shall be uploaded along with its SHA256 Hash file which shall allow users to review the integrity of the files displayed in the COMELEC's official website, and shall serve as a verification tool to validate and confirm that these Modules were not altered in case of direct or indirect public dispute.

# Article II DURATION AND VENUE

**SECTION 9. Duration.** The period of the LSCR will commence on October 2024 or after all systems have completed its customization/configuration, and will run until December 2024, subject to extension as may be approved by the LSCR Committee.

**SECTION 10. Venue.** The review shall be conducted in a secure location or facility. Access to this area shall be regulated by the LSCR Committee. To strengthen the transparency and integrity of the review, closed-circuit televisions (CCTV) shall be strategically installed in the facility by the system providers.

**SECTION 11. Virtual extension of the review room.** The CCTV live feed shall be open to the media, political parties, electoral reform organizations, other interested parties, and the general public in order for them to view the conduct of the LSCR.

**SECTION 12. Participation of Academic Institutions.** Subject to the approval of the LSCR Committee, members of the Academe and Educational Institutions of Information Technology courses may serve as volunteer proctors to facilitate the administration of the activity. The volunteer proctors may include the following:

- 1. Administrators duly endorsed by the University President;
- 2. Teaching and non-teaching faculty duly endorsed by the University President or Vice-President for Academic Affairs (VPAA); and
- 3. Students duly endorsed by the VPAA.

Interested individuals shall email their letter of intent to participate as proctors along with their endorsement to <u>2025nle.lscr@comelec.gov.ph</u> not later than September 30, 2024.

#### Article III

## INTERESTED PARTIES, GROUPS AND ASSOCIATIONS

**SECTION 13. Participants.** Parties, groups or associations interested in conducting the LSCR must belong to any of the following:

- i. Members of the COMELEC Advisory Council (CAC), the Joint Congressional Oversight Committee (JCOC), and the TEC;
- Political parties or coalition of parties duly registered by the Commission which include parties and organizations registered under the Omnibus Election Code and the Party List System of Representation;
- iii. Accredited citizen's arm of the Commission;
- iv. Reputable Information Technology (IT) Groups known and recognized as existing in the IT community and duly endorsed for accreditation by any of the following:
  - a. any member of the CAC;
  - b. the Secretary or duly authorized representative of the Department of Information and Communications Technology (DICT) or the Department of Science and Technology (DOST); or
  - c. the Commissioner of the National Telecommunications Commission;
- v. Civil Society Organizations/Associations known for their involvement in election reform activities as may be determined by the Commission

## Article IV LOCAL SOURCE CODE REVIEWER

**SECTION 14. Qualifications.** The source code reviewer must be duly authorized by the interested party or group he/she represents, and must have credentials in computer programming languages preferably on the following systems: C/C++; HTML, Web Application using Spring Framework and ReactJS; Android Application with Java/Kotlin; Java application development; Bash; Android Operating System; Object Oriented Programming Language; Unix-like Systems; Linux Operating System, or similar IT disciplines including but not limited to cybersecurity and

cryptography; and in all instances, must be knowledgeable in election processes.

The prescribed qualification is to ensure that the code reviewer can understand and appreciate the source codes of the AES to be reviewed. The interested parties, groups, and associations are expected to choose their reviewers based on the foregoing consideration.

**SECTION 15. Number of Reviewers; Limitations.** Each interested party, group or association may appoint for each system – FASTrAC, SETS and OVCS – two (2) reviewers who shall serve alternately.

In the event that interested parties, groups and associations could not be accommodated at the designated venue all at the same time, preference shall be given to the:

- 1. Members of the CAC, JCOC, and TEC;
- 2. Major political parties; and
- 3. Accredited citizen's arm.

The remaining slots, if any, shall be filled on the basis of the date of submission of the written request of other parties or groups. Parties or groups which still cannot be accommodated shall, with prior authority by the LSCR Committee, be entitled to collectively appoint one (1) reviewer for each system who shall collectively represent the concerned parties/groups.

# Article V ACCREDITATION AS REVIEWER

**SECTION 16. Procedure and Requirements.** The interested party, group or association shall accomplish the online accreditation form which can be accessed from the official COMELEC website (www.comelec.gov.ph).

The duly accomplished Accreditation Form must be submitted together with the complete requirements as follows:

PARTICIPANTS	REQUIREMENTS
Members of the CAC, JCOC, and	<ul> <li>Intent to participate</li> </ul>
TEC	• 2 x 2 picture
	• Resume
	<ul> <li>Appointment/Endorsement</li> </ul>
Political Party or Coalition of Parties	<ul> <li>Intent to participate issued by</li> </ul>
2	the authorized representative

	<ul> <li>of the political party or coalition of political parties</li> <li>2 x 2 picture of the reviewers</li> <li>Resume of the reviewers</li> <li>Appointment/Endorsement issued by the authorized representative of the political party of coalition or political parties</li> </ul>
Accredited Citizen's Arm	<ul> <li>Intent to participate issued by the authorized representative of the accredited citizen's arm</li> <li>2 x 2 picture of the reviewers</li> <li>Resume of the reviewers</li> <li>Appointment/Endorsement issued by the authorized representative of the accredited citizen's arm</li> <li>Brief Background of Electoral Reform Supported (in pdf)</li> </ul>
Reputable IT Groups	<ul> <li>Intent to participate issued by the authorized representative of the IT group</li> <li>2 x 2 picture of the reviewers</li> <li>Resume of the reviewers</li> <li>Appointment/Endorsement issued by any member of the CAC, Secretary of the DICT or DOST, or the Commissioner of the NTC</li> <li>Brief Background of Electoral Reform Supported (in pdf)</li> </ul>
Civil Society Organizations	<ul> <li>Intent to participate issued by the authorized representative of the civil society organization</li> <li>2 x 2 picture of the reviewers</li> <li>Resume of the reviewers</li> <li>Appointment/Endorsement issued by the authorized representative of the civil society organization</li> <li>Brief Background of Electoral Reform Supported (in pdf)</li> </ul>

**SECTION 17. Date of Submission.** The submission of request for accreditation with complete requirements shall start from **September 15**, **2024 until December 15**, **2024.** 

The date of receipt shall be determined by the system-generated date and time receipt.

**SECTION 18. Approval.** All request for accreditation submitted within the specified period shall be subject to review and approval of the LSCR Committee. Approval or denial thereof shall be based on the following:

- i. Completeness of the request and required attachments;
- ii. Presence of Qualifications;
- iii. Availability of slots/space in the source code review venue; and
- iv. Such other ground as may be determined by the LSCR Committee.

The approval or denial of the request for accreditation shall be sent to the email address of the interested party or group used in the application. The decision of the LSCR Committee shall be final and unappealable.

The list of the approved requests for accreditation shall also be posted in the official website of the COMELEC and official social media channels.

# Article VI PRE-REVIEW CONFERENCE

**SECTION 19. Pre-review Conference.** Before the start of the review proper, approved parties, groups, associations and their reviewers shall attend a conference where an overview of the LSCR process and the design of the AES shall be discussed. Orientation shall also be provided on the following:

i. Security and Protocol;
ii. Working Hours;
iii. Scope of the Review;
iv. Duration of the Review;
v. Review Process;
vi. Proper Report and Documentation;
vii. House Rules; and
viii. Other matters.

External stakeholders, the media, and the general public may also be invited to observe and witness the pre-review conference.

**SECTION 20. Non-Disclosure Agreement.** The parties, groups, associations and their reviewer shall sign a non-disclosure agreement before participating in the LSCR.

**SECTION 21. Reviewer Orientation.** The parties, groups, associations and their reviewers shall attend an orientation of the systems to be reviewed, particularly on the following:

i. Organization of the source code per system to be reviewed;

ii. The manuals to be distributed, if any; and

iii. Other matters which may aid the reviewer in the conduct of the review.

# Article VII REVIEW PROPER

**SECTION 22. Workstations and Review Tool Application.** Workstations and review tool application shall be provided by the respective system providers.

**SECTION 23. Source Code.** The LSCR Committee shall provide and install a read-only copy of the source code on the workstations. To ensure the identity of the source code under review, hash codes may be generated and used.

**SECTION 24. Availability of subject matter experts.** The respective SMEs of the system providers shall be present at all times for the entire duration of the LSCR.

**SECTION 25. Compilation and demonstration of the AES systems reviewed.** The LSCR Committee, through the system providers, may schedule compilation and demonstration of the systems reviewed for testing purposes only.

**SECTION 26.** Notices of scheduled activities. The schedule of LSCR activities shall be posted on the COMELEC official website and official social media accounts.

## Article VIII REPORT AND DOCUMENTATION

## SECTION 27. Contents. The Report must contain the following details:

- i. Name of the Reviewer
- ii. Party or Group Represented;
- iii. System being reviewed: FASTrAC (EMS, ACM, CCS, etc.), SETS, and OVCS)
- iv. Methodology
- v. Description of the findings;
- vi. Location of the findings;
- vii. Description of risks/comments; and
- viii. Recommendations

**SECTION 28. Daily Report.** Each reviewer must submit a daily report of his or her findings to the LSCR Committee.

**SECTION 29. Final Report.** After the end of the review, each reviewer shall submit within five (5) days a final report consolidating all of his or her findings for the entire duration of the review to the LSCR Committee. The five (5) day period shall be counted from the last day of each of the review phase. The Final Report may be in the form of a collation of the reports submitted, which must be signed by the code reviewer.

For purposes of transparency and accountability, the Final Report will be posted on the COMELEC official website and will also be endorsed and submitted to the Project Management Office for the 2025 National and Local Elections.

**SECTION 30. Certification.** In the absence of a major critical findings observed in the source codes of the AES reviewed, the code reviewer shall issue a certification attesting to the fact of such absence.

# Article IX MISCELLANEOUS PROVISIONS

SECTION 31. Documents Limitations. No copy of the source code, documentation, any material supplied by the Commission or any part thereof may be taken out from the secured location/facility, whether

physically or electronically, unless expressly authorized in writing by the LSCR Committee.

**SECTION 32. Electronic Device; Limitations.** Electronic device of any kind, including but not limited to laptops, mobile phones, cameras, USB drives and other storage devices shall not be allowed inside the secured location/facility, unless expressly authorized in writing by the LSCR Committee.

**SECTION 33. Conduct of a Post-Review Assessment and Publication of a Transparency Report.** The LSCR Committee may conduct a Post-Review Assessment discussing, among others, the entire source code review process, findings, recommendations, and corrective actions taken.

A comprehensive Transparency Report shall be published as a result of the Post-Review Assessment.

**SECTION 34. Composition and Authority of the Local Source Code Review Committee.** The LSCR Committee for the 12 May 2025 National and Local Elections and BARMM Parliamentary Elections is composed of the following:

Commissioner Nelson J. Celis	Commissioner-In-Charge
Dir. John Rex C. Laudiangco	Head
Education and Information Department	
Dir. Abigail Claire C. Llacuna	Over-all Vice Head
Education and Information Department	
Mr. Leo Lim	Vice Head for Operations
Education and Information Department	
Division Chief from the Information	Vice Head for Technical
Technology Department	Concerns
Ms. Anna Marie Quilala	Vice Head for Administration
Education and Information Department	
Atty. Joie Alphonse Geronimo	Secretariat Head
Education and Information Department	
Ms. Mariel B. Dolatre	
Ms. Raquel R. Rola	Secretariat
Ms. Mariel Ann Joy C. Mendoza	
Education and Information Department	
Three (3) representatives from the	
Office of Comm. Celis	
Three (3) representatives from the	
ITD	

The LSCR Committee may issue necessary rules and regulations for the proper implementation of this Guidelines.

Let the Education and Information Department cause the immediate publication of this Resolution in two (2) daily newspapers of general circulation in the Philippines.

#### SO ORDERED.

## GEORGE ERWIN M. GARCIA Chairman

SOCORRO B. INTING Commissioner MARLON S. CASQUEJO Commissioner

AIMEE P. FEROLINO Commissioner **REY E. BULAY** Commissioner

ERNESTO FERDINAND P. MACEDA, JR. Commissioner NELSON J. CELIS Commissioner

#### CERTIFICATION

APPROVED for publication, September 11, 2024.

CONSUELO B. DIOI

Director IV Office of the Commission Secretary

This Resolution can be verified at this number (02)85272987; email address comsec@comelec.gov.ph.

cc: Chairman All Commissioners Executive Director Deputy Executive Director for Operations Project Management Office