OFFICE OF THE MINISTER
MINISTRY OF ADMINISTRATIVE SERVICES AND MINISTRY ASSISTING THE PRIME MINISTER ON CONSTITUTIONAL MATTERS

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Transforming Elections through Biometric & Technology Workshop
13-16 October 2025, Hilton Hotel, Port Moresby

Speech by Hon. Richard Masere

THEME: "TRANSFORMING ELECTIONS THROUGH BIOMETRIC AND ELECTRONIC VOTING TECHNOLOGY IN PAPUA NEW GUINEA'S ELECTORAL SYSTEMS – 2027 & BEYOND."

Acknowledgements

The Prime Minister of Papua New Guinea, Honourable James Marape,
State Ministers,
Regional Members and Members of Parliament,
Diplomatic Corp,
Development Partners,
Heads of Government Departments and Agencies,
Representative of the Civil Society,
PNG Electoral Commission,
PNG Civil & Identity Registry,
International Guests and Speakers,
Distinguished guests,
Members of the media,
Ladies and gentlemen,

Good morning and welcome to the workshop on "*Transforming Elections through Biometric and Electronic Voting Technology in Papua New Guinea's Electoral Systems from 2027 & Beyond.*"

Opening Remarks

The journey to reform our electoral process started soon after I was appointed as the Minister for Administrative Services and Minister Assisting the Prime Minister on Constitutional Matters on the 18th of January 2024. The directive from our Prime Minister to me was explicit, establish a single source of population data which the electoral roll must be aligned with and commence the work on the electoral reforms and work towards implementing some of these reforms by 2027 and beyond.

In order for the Ministry to progress smoothly, the Prime Minister reorganised key government agencies such as the National Statistical Office, PNG Civil & Identity Registry, NID, PNG Electoral Commission, and others to be under my Ministry's responsibility. This strategic approach was to ensure the work would progress uninterrupted. As a result;

Priority "A" was to ensure we progressed the delayed national population census count. We needed to establish our real population number after 13 years from the last population census. The fact that there were conflicting and projected population numbers in the public domain, the National Statistical Office was funded in the 2024 national budget to conduct the national population count to establish a reliable population figure for Papua New Guinea.

Priority "B" was to establish a reliable voting population figure from 18 years old and above by Ward, by LLG, by District, by Province, and the Country and all citizens issued with NID cards. To ensure there was no conflicting data between PNG Civil & Identity Registry and NID, these two agencies were amalgamated early this year, and work has commenced to ramp up the registration of our citizens in the Country. To date, PNG Civil & Identity Registry has registered over 3.8 million Papua New Guineans.

Priority "C" is to establish a credible electronic electoral roll before the 2027 General Election, data from the national census and NID had to be used. Based on the national census population count, our population at 18 years old and above is at 5.9 million, minus 2.8 million NID cards issued to date, resulting in a shortfall of 3.1 million citizens. This means these citizens must be registered and issued with NID cards at the earliest. This will ensure that PNGEC has a credible electronic electoral roll before the 2027 General Election.

Priority "D" was the quest to migrate from the traditional paper method of voting to maybe a biometric voting method, or maybe an electronic voting method or maybe both, biometric and electronic voting method to ensure credibility is restored in our electoral process. This important migration will be headed by the PNG Electoral Commission with support from PNG Civil & Identity Registry and other relevant Government agencies including Department of ICT and NICTA.

For our traditional paper voting method to work in Papua New Guinea in 2027 and beyond, it must be driven by respect, honesty and trust. Unfortunately, these foundational pillars of democracy are slowly eroding in our electoral process and required an immediate review of the last election. I would like to thank our Prime Minister, Hon. James Marape for establishing the Special Parliamentary Committee on the 2022 General Elections.

The Special Parliamentary Committee on the 2022 General Elections provided 70 recommendations and these recommendations provided key references to specific areas that required the immediate attention of the National Government. My Ministry initiated a temporary working group of all agency heads under my responsibility and with their support, assisted the Ministry to initiate and progress priorities A, B, C and D. We met every Monday to discuss workable solutions on the 2024 National Population Census, NID registrations, and the electoral reforms.

Data collection using electronic platforms were critical to maintaining data credibility and data quality. This meant using technology to collect census data, maintain NID registration and develop an electronic electoral roll on these platforms to maintain integrity of the information. Example, in 1980, 1990 and 2000, the national census data collected manually showed a steady population growth of around 30% over each decade, however in 2011, the national census showed irregular spike in population counts in certain areas, some up to 85% growth, raising concerns why these areas had significantly jumped in numbers in 2011. There were many reasons offered however the one that made more sense was the fact the General Election in 2012 could have influenced the population numbers. In the 2024 National Census, we did not want to see a similar trend hence the electronic data collection was crucial. With the recent concerns raised in the mainstream media about inflated electoral rolls, it is important that data credibility and data quality must be achieved at the earliest.

The Learning Journey Since 2024 – Building Knowledge and Readiness

Since 2024, the Government, through the PNG Electoral Commission, the PNG Civil and Identity Registry, Department of Prime Minister & NEC, Department of National Planning, Ministry of Administrative Services, and Ministry Assisting the Prime Minister on Constitution Matters had embarked on a learning and transition journey to understand global best practices in electronic and biometric voting.

We have explored and engaged with experiences from India and the Philippines, two of the world's leading developing democracies that have successfully implemented large-scale electronic voting systems.

In India, the world's largest democracy, electronic voting machines have been deployed nationwide for more than three decades, ensuring efficient, transparent, and tamper-resistant elections. The Indian experience demonstrates how strong legislation, voter education, and system integrity can make technology-based elections both credible and inclusive, even across diverse and remote regions.

In the Philippines, the adoption of automated election systems has drastically reduced counting times, minimized human error, and increased confidence in electoral outcomes. Their model shows that with clear processes, training, and independent auditing, technology can transform public trust in democratic institutions.

At the same time, Papua New Guinea continues to learn from its neighbouring democracies - Australia and New Zealand, whose electoral systems are globally recognized for their transparency, security, and public accountability. Both countries demonstrate the value of independent electoral management, strong institutional frameworks, and continuous public engagement - lessons that are vital as we modernize our own systems.

We have also begun exploring various electronic voting machines and systems used internationally - including hybrid models that combine digital verification with manual voting, and paper audit trails, as seen in parts of Europe and the Asia Pacific region. These comparative learnings are helping us assess what technologies are most practical, affordable, and adaptable to Papua New Guinea's unique geographical and cultural context.

Through this learning process, we have developed a clearer understanding of the requirements for successful transition including robust legislation, capacity building, secure data infrastructure, and sustained voter education. These elements will be crucial as we design a roadmap for the adoption of biometric and electronic voting ahead of the 2027 National General Elections & beyond.

This learning journey is not only about technology; it is about institutional readiness, public trust, and national ownership. By applying lessons from around the world and tailoring them to our local realities, Papua New Guinea is positioning itself to implement an electoral system that is secure, inclusive, and trusted by all.

What does this workshop provide for us today?

Elections are the cornerstone of any democracy. They give voice to the people and legitimacy to leadership. In Papua New Guinea, as in many developing democracies, our electoral system has faced numerous challenges; voter impersonation, duplicate registrations, missing names on the electoral roll, and delayed counting processes.

We have also experienced logistical and security pressures; moving ballot boxes across rugged terrains, safeguarding them through the night, and manually counting millions of votes under immense pressure.

These challenges have, at times, undermined public confidence in the credibility of our elections. But today, we stand at a turning point; an opportunity to modernize our electoral systems, to strengthen trust, and to build a process that is secure, transparent, and worthy of our nation's democratic aspirations.

The adoption of biometric and electronic voting technologies offers a clear pathway to achieving this transformation. These innovations are not just about modernization, they are about ensuring that every eligible Papua New Guinean has an equal, secure, and verified voice in shaping the future of our nation.

1. BIOMETRIC VOTING SYSTEMS – ENHANCING VOTER VERIFICATION AND INTEGRITY

Biometric technology represents one of the most powerful tools available to modern democracies seeking to protect electoral integrity. Through fingerprints, facial recognition, or iris scans, biometrics create a unique digital identity for every eligible voter ensuring that no individual can vote more than once.

In a country like Papua New Guinea, where geography and infrastructure present significant challenges, biometric voting introduces precision and accountability. It ensures that every voter's identity is verified accurately, eliminating impersonation, multiple voting, and fraudulent use of another's name or voter ID.

By capturing biometric data, we can also cleanse and strengthen the electoral roll; removing ghost names, duplicate entries, and records of deceased persons. The result is a credible, verified roll of living citizens, a foundation of trust for every election that follows.

At the polling stations, biometric verification makes the process faster and more efficient. Instead of manually searching through printed lists, voters can be verified in seconds, reducing queues and wait times.

For our rural citizens, many of whom may be unable to read, write, or sign their names, biometric systems provide inclusivity. Their fingerprint or iris becomes their signature. Their identity becomes their access to democracy.

Above all, this technology fosters confidence. When voters see that every individual in the polling booth has been properly verified, they are assured that the process is fair and their vote truly matters.

Biometric voting, therefore, is not just a technological innovation, it is a moral and democratic safeguard, ensuring that one person equals one vote, and that every ballot represents a genuine voice of the people.

2. SECURITY BENEFITS OF BIOMETRIC SYSTEMS

The introduction of biometric verification also transforms the security architecture of elections.

It offers a level of voter authentication that is far stronger than traditional identification methods such as voter cards or signatures, both of which can be forged or manipulated. By using unique physical traits, biometric systems ensure that only genuine eligible citizens can vote.

This technology also reduces human interference. The automated verification limits opportunities for collusion or bias among polling staff. Every verification is data-driven, transparent, and traceable, minimizing manipulation and maximizing accountability.

Furthermore, biometric systems protect data integrity. Once a voter is verified, their record is flagged immediately, preventing double voting or tampering. All activities can also be recorded in an auditable digital trail providing an unbroken chain of transparency from registration to results.

In short, biometric systems protect who votes, ensuring that every ballot originates from a real, verified citizen and in doing so, they strengthen public trust in the entire electoral process.

3. ELECTRONIC VOTING SYSTEMS – SPEED, ACCURACY, AND TRANSPARENCY

While biometrics secure who votes, electronic voting systems transfigures how votes are cast, recorded, and counted. Electronic voting simplifies the process for both voters and officials. With user-friendly interfaces, clear on-screen instructions, and even local language options, voters are guided step by step ensuring accuracy and understanding for everyone, including those in rural areas and with limited literacy.

These systems automatically detect and reject invalid or incomplete ballots eliminating human errors and ensuring that every valid vote is counted correctly.

Accessibility is another key strength. Features like audio prompts, touch screens, and adjustable displays empower elderly voters, persons with disabilities, and others who may otherwise find traditional voting difficult. Portable e-voting machines can also reach remote areas, reducing the barriers to participation.

By integrating biometric verification, electronic voting ensures that only authenticated voters access the machine. Together, these technologies virtually eliminate impersonation, ghost voting, and ballot tampering.

Moreover, the option to use security featured ballot papers or electronic pad voting reduces physical risks; the theft of ballot boxes, destruction, and ballot stuffing. Votes are electronically encrypted and securely stored, ensuring privacy while maintaining quality integrity. Perhaps most importantly, electronic voting accelerates results. Automated tallying delivers accurate outcomes within hours, and not weeks. This not only improves efficiency but also minimizes post-election tension, uncertainty, and misinformation.

Electronic voting kits can also be geo-fenced to stop hijacking of ballot boxes. Using satellite GPS coding, you can secure the ballot box to work within the defined GPS location and automatically shuts down when moved outside the geo-fenced area.

4. COUNTING BENEFITS – FAST, ACCURATE, AND CREDIBLE RESULTS

Counting is the defining moment of every election where the people's voice is declared. Traditionally, manual counting has been slow, error-prone, and sometimes contentious.

With electronic systems, results can be tallied automatically, delivering outcomes in record time. Accuracy is assured, every vote is recorded and counted exactly as cast, free from the human errors that often occur in manual counting.

Electronic audit trails, verifiable logs, and printed receipt after voting adds another layer of transparency. Election officials and observers can review these records at any point, confirming the accuracy of results and reinforcing public confidence in the process.

Votes are also protected through advanced encryption, making tampering virtually impossible. And with real-time monitoring, the Electoral Commission can track incoming data across the nation using satellite technology, identifying any irregularities immediately. By combining speed, security, and transparency, electronic counting builds fairness, credibility, and accountability which is the very foundation of democracy.

Transparency centres can also be set up to observe data being transmitted from polling sites, and this provides another layer of scrutiny for the independent election observers.

5. SECURITY FEATURES OF ELECTRONIC VOTING SYSTEMS

Security remains the cornerstone of this transformation. Electronic voting systems provide tamper-resistant counting, encrypted vote storage, and access control mechanisms to prevent manipulation or fraud. Every vote is digitally protected, accessible only to verified and authorized users.

These systems maintain comprehensive audit trails, offering verifiable proof of every vote cast and counted. This enables independent verification by election observers and ensures that results cannot be altered unnoticed.

Real-time system monitoring further strengthens oversight. Any irregular access or suspicious activity is detected instantly, allowing swift response.

By removing physical risks such as ballot box theft or destruction, electronic voting makes elections safer not just for ballots, but for voters, officials, and observers. For Papua New Guinea, this means an electoral system that is not only efficient and transparent but also secure, resilient, and trustworthy, one capable of protecting democracy from both traditional and modern threats.

When combined, biometric and electronic voting technologies form a complete and tamper-resistant electoral ecosystem. Biometrics secure the front end, verifying who votes. While Electronic systems secure the back end, managing how votes are cast, counted, and reported. Together, they create a future where elections are faster, fairer, and trusted by all.

As we look toward the 2027 General Elections, we must commit to this transformation with vision and determination. Yes, the journey will require investment, coordination, training, and public education but the rewards will be immense. We will deliver elections that are credible, efficient, and trusted. We will reduce conflict, strengthen participation, and restore faith in our democratic institutions.

Finally, over the next three (3) days, we will have both international and local speakers and panellists, all experts in their fields, provide firsthand experiences, views and observations of the elections, legal requirements and infrastructure capabilities. We have also invited specialized vendors to speak and present their technology and products on Wednesday. This workshop is important for the country so I want to encourage everyone to attend.

Ladies and gentlemen, technology is not the future, it is the present. Around the world, nations are embracing innovation to enhance democracy. Papua New Guinea must not be left behind. With biometric and electronic voting technology, we can ensure that every vote is protected, every citizen is empowered, and every election upholds the principles of democracy.

Thank you and may God bless Papua New Guinea.

Hon. Richard Masere MP
Minister of Administrative Services
Minister Assisting the Prime Minister On Constitutional Matters