

Case Study: Enhancing Forensic Capabilities in Timor-Leste with NEC Livescan Technology



Background

Timor-Leste, one of Australia's closest neighbours, continues to invest in strengthening its policing and justice systems. The Timor-Leste Police Development Program (TLPDP), led by the Australian Federal Police (AFP) with support from the Department of Foreign Affairs and Trade (DFAT), works alongside the Polícia Nacional de Timor-Leste (PNTL) and the Policia Cientifica e de Investigação Criminal (Scientific Police of Criminal Investigation - PCIC) to enhance operational capacity, community safety, and border security.

A key focus has been building forensic capability, giving local police and scientific police the tools and skills to investigate serious crime, support prosecutions, and collaborate effectively with international partners.

The Challenge

Until recently, fingerprint capture in Timor-Leste was a largely manual process. This meant:

**Inconsistent results:**

Fingerprint quality varied, making reliable comparison difficult.

**Limited sharing:**

Manual records could not be easily integrated into international systems like Interpol.

**Slow workflows:**

Paper-based processes delayed casework and investigations.

**Skills gap:**

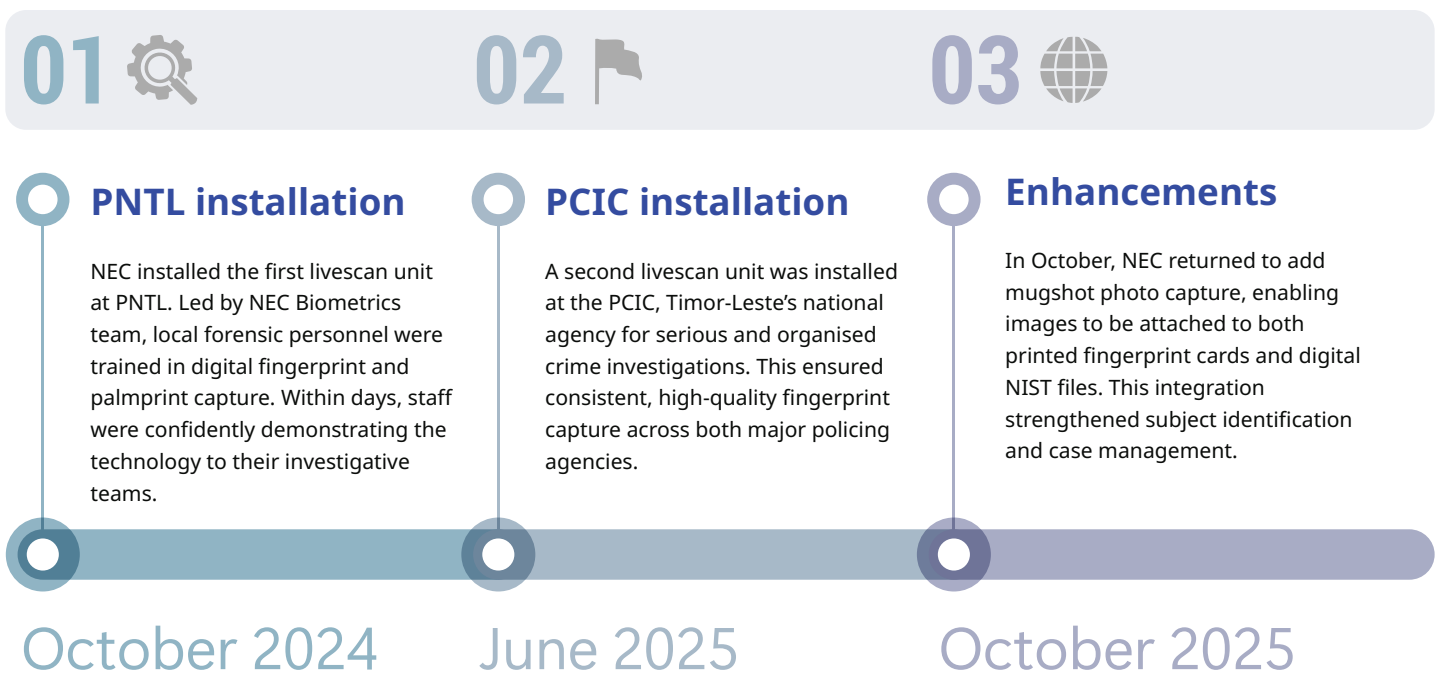
Forensic staff needed training to adopt and maintain modern biometric standards.

For a country facing cross-border crime, organised crime, and complex investigations, upgrading to digital, internationally recognised systems was essential.

The Solution

In collaboration with the AFP, NEC Australia's Biometrics team delivered cutting-edge forensic technology to Timor-Leste, installing two complete livescan fingerprint systems in key Timor-Leste facilities, each equipped with a workstation, optical imaging scanner, monitor, and printer, to modernise identification and investigative processes.

Deployment Timeline



Technology Impact



- International standards:** Livescan devices generate NIST-compliant digital files containing fingerprint, palmprint, and biometric data. These can be uploaded to Interpol, enabling secure global cooperation.
- Quality & efficiency:** High-resolution capture eliminates common errors in manual processes, accelerating investigations.
- Future-proofing:** The two units are designed to be networked, creating a shared database across agencies for seamless collaboration.

Results & Benefits

Higher-quality forensic evidence

Fingerprints now meet global forensic benchmarks.



Faster investigations

Digital capture reduces delays in criminal casework.



Capacity building

Local forensic staff quickly gained confidence using the new systems, thanks to practical training.



Inter-agency collaboration

PNTL and PCIC can now share consistent biometric data, supporting joint investigations.



International cooperation

Timor-Leste is better positioned to exchange data with regional and global partners, strengthening security across borders.



Conclusion

This project demonstrates the power of technology. NEC Australia's livescan solution has transformed fingerprinting in Timor-Leste, moving from manual processes to internationally integrated systems. More importantly, it has built confidence and capability within local policing, laying the groundwork for safer communities and stronger regional security.

Through strong partnerships and on-the-ground expertise, NEC continues to deliver solutions that matter, advancing forensic science, international cooperation, and public safety in our region.

Contact us to book a live demo