

PTB project “Metrology for Digital Transformation – International Cooperation”
CABUREK Global Program

Working Group: WG3-Digital Project Management (DPM)
National project title: Digitalization of Verification Services for Measuring Instruments Used in Trade
National Metrology Institute: Measurement Units, Standards and Services Department (MUSSD)

Coach: NPLI India

MUSSD SL Towards Digital Economy, Metrology & Digital trust,

Benefits of Digital Transformation (DT) to MUSSD				
Standards Maintenance, Traceability & Industry:	Legal Metrology:	Safeguarding Vital Sectors:		
Automated Traceability and faster, error-free services for industry.	Real-Time Surveillance to monitor market compliance continuously.	Public Safety: Ensures reliable data from critical infrastructure and safety equipment.	Medical: Guarantees traceable accuracy of diagnostic and life-support devices.	Consumer Protection: Boosts transparency and trust in all trade transactions.

National Digitalization Project

Accurate measurements are the cornerstones of the Digital Economy

Digitalization of Verification Services for Measuring Instruments Used in Trade (under the Measurement Standards Management Information System (MSMIS) project, Sri Lanka)

The Digitalization of Verification Services for Measuring Instruments Used in Trade under the Measurement Standards Management Information System (MSMIS) project, implemented by the Measurement Units, Standards and Services Department (MUSSD), focuses on the digital transformation of metrological services under the Measurement Units, Standards and Services Act No. 35 of 1995. It strengthens the efficiency, transparency, and accessibility of services through a secure web-based platform aligned with the national digital infrastructure. Project digitalized the manual verification process for the accuracy of measuring instruments used for trade purposes (Weighing, Fuel dispensing, Volume measurements, Length measurements, etc.)

TRADITIONAL MANUAL PROCESS (BEFORE DT)

Step 1: On-Site Inspection & Testing

Step 2: Physical Sealing & Adjustment

Paperwork & Signatures

Archiving (Paper Records)

Step 4: Consumer Trust (Visual Check)

DIGITAL AUTOMATED PROCESS (AFTER DT)

Step 1: Remote Monitoring & On-Site Audit

Digital Verification & Mark (DVM)

DVC: Digital Verification Certificate (DVC)

Cloud Archiving (Real-time Database)

Step 5: Consumer Trust (Scan QR for Info)

Key Achievements:

- Completed and implemented at User Acceptance Testing (UAT) and pilot stage.
- Development of online service portals for Initial and Subsequent Verification Services
- Digital registration, workflow automation, and real-time dashboards for performance monitoring.
- Integration readiness with Government payment systems and other national systems (Register of Persons, Companies, Sri Lanka Customs).
- Hosting in Lanka Government Cloud (LGC) using license-free, expandable components.
- System ownership and maintenance retained by MUSSD, ensuring sustainability.

Results and Impacts:

- Streamlined verification and certification processes.
- Reduced processing time and manual documentation.
- Enhanced traceability, data reliability, and consumer protection.
- Strengthened digital capacity and coordination between the head office and regional offices.
- Contributed to building a trusted, connected, transparent measurement ecosystem in Sri Lanka.

Numbers of Users of the system

	Initial verification	Subsequent verification
customers	~500/Year	~300000/Year
MUSSD staff	45	150