Pre-market Surveillance

Pilot - Project Plan

Coordination - National Measurement Institute Australia (NMIA)

Project Overview

Objectives

To investigate the:

- risks of non-conformance with approved type (pre-market entry)
- logistics of conducting testing and sharing results
- potential benefits of an on-going regional program

Proposal Pilot in APLMF Region

- APLMF members will be invited to participate
- Supply newly-manufactured instruments to the participating laboratories for testing.

Participating OIML-CS Test Labs (Regulatory Authorities)

- National Measurement Institute Australia (NMIA)
- National Institute of Metrology, China, (NIM/SAMR) (TBC)
- National Metrology Institute of Japan, (NMIJ) (TBC)

Project Timeline

When	Project Stage	Responsibility
Mid 2019 (completed)	Develop pilot project overview, circulate to participating laboratories, RLMO chairs, CEEMS advisory Committee chair and BIML (*Completed*)	NMIA
Mid-Late 2019 (Completed)	Develop pilot project plan, circulate to participating laboratories, RLMO chairs, CEEMS advisory Committee chair and BIML	NMIA
Late 2019	Project tabled at the Asia-Pacific Legal Metrology Forum in November in Vietnam. APLMF members asked to participate in pilot by providing instruments. Confirmation of Test Lab participation	NMIA
Early 2020	Stage 1 Pilot Project - Commencement • Finalise sourcing of instruments from the region	All project partners
Mid 2020	Stage 1 Pilot Project – Pre-market Surveillance type testing	All project partners
Late 2020	Stage 1 Pilot Project – Testing Completed • Share Test Results and Summary	All project partners
2021	Stage 1 Pilot Project – Reporting • Compile the results and report on outcomes of Stage 1	NMIA
2021	Develop possible Stage 2 – ongoing pre-market surveillance program	TBC

Instrument Selection / Testing

Selection

- Sourced from different economies
- Newly manufactured instruments (have not been in use)
- Instruments should not be supplied directly by manufacturer
- Must have national, regional or OIML type approval
- Proposed instrument types: R 60, R 76, R 117

Testing

- Each laboratory shall test three different instruments
- Testing shall be against the OIML recommendation used for the original approval
- Each laboratory shall use a risk-based approach (not full testing) – use their knowledge and experience to focus on high risk tests

Reporting

- Full test results shared between all project test laboratories.
  - Necessary to support communication and collaboration
- APLMF members who supply an instrument for testing shall be provided with the test results for that instrument.
- NMIA will prepare a summary of the results
  - Will be shared with all APLMF members
  - Manufacturers and models will be de-identified
- NMIA will prepare a report on the outcomes of the Stage 1 Pilot 2021
  - Summary of the results and remarks on the pilot and its outcomes
  - The report will be circulated to participating laboratories, APLMF, OIML CEEMS Advisory Committee, the RLMOs and BIML

NMIA - Example Test Plan

Testing – Load Cells (R 60)

- Load cell errors
- Temperature effect on minimum dead load output
- Repeatability
- Creep
- Minimum dead load output return

Testing – Fuel Dispensers Hydraulics (R 117)

- Accuracy
- Air elimination

Testing – Fuel Dispensers Calculator/Indicator (R 117)

- Electro-magnetic compatibility
- Electrostatic discharge
- Line-borne bursts