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)
<table>
<thead>
<tr>
<th>When</th>
<th>Project Stage</th>
<th>Responsibility</th>
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<tbody>
<tr>
<td>Mid 2019</td>
<td>Develop pilot project overview, circulate to participating laboratories, RLMO chairs, CEEMS advisory Committee chair and BIML (Completed)</td>
<td>NMIA</td>
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<td>(completed)</td>
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<tr>
<td>Mid-Late 2019</td>
<td>Develop pilot project plan, circulate to participating laboratories, RLMO chairs, CEEMS advisory Committee chair and BIML</td>
<td>NMIA</td>
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<td>(Completed)</td>
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<td>Late 2019</td>
<td>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</td>
<td>NMIA</td>
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<td>Early 2020</td>
<td>Stage 1 Pilot Project - Commencement</td>
<td>All project partners</td>
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<td>• Finalise sourcing of instruments from the region</td>
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<tr>
<td>Mid 2020</td>
<td>Stage 1 Pilot Project – Pre-market Surveillance type testing</td>
<td>All project partners</td>
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<tr>
<td>Late 2020</td>
<td>Stage 1 Pilot Project – Testing Completed</td>
<td>All project partners</td>
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<td>• Share Test Results and Summary</td>
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<td>2021</td>
<td>Stage 1 Pilot Project – Reporting</td>
<td>NMIA</td>
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<td>• Compile the results and report on outcomes of Stage 1</td>
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<td>2021</td>
<td>Develop possible Stage 2 – ongoing pre-market surveillance program</td>
<td>TBC</td>
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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