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2016-17 Performance Highlights
NMI continues to administer a best practice regulatory framework as measured against the KPIs of the Regulator Performance Framework. As outlined in this report, NMI:

• applies a proportionate and risk-based approach to compliance and enforcement actions (KPI 3)
• involves stakeholders in development and improvement of regulatory frameworks (KPIs 1 & 4)
• is open and transparent in its dealings and clear in its communication with regulated entities (KPIs 2 & 5)
• takes a pro-active approach to continuously improving regulatory performance (KPIs 2, 3 & 6).

Policy Review
In 2016-17 NMI undertook public consultations regarding policy objectives for legal metrology that best serve the needs of Australian business and consumers now and in to the future. 40 written submissions were received on the discussion paper and 36 non-confidential submissions have been made available on the NMI website. In addition, 22 face-to-face and teleconference meetings were held with key industry and consumer stakeholders in Canberra, Brisbane, Melbourne, Adelaide and Sydney.

The Legal Metrology Policy Review Discussion and Response Papers can be found on the department’s Consultation Hub website. The stakeholder feedback confirmed the following policy objectives to inform the strategic direction of legal metrology:

• Supporting confidence in the measurement system
  Facilitating the smooth functioning of the economy and the legal system
• Facilitating a level playing field for business
  Supporting fair and open competition
• Consumer protection
  Enabling purchasers to make informed purchasing decisions
• Supporting industry development and technology innovation
  Influencing the development of measurement-related international documentary standards and supporting Australian businesses to compete internationally.

Legislative Review
The objectives identified in the policy review will now inform a major thematic review to cover the entire national measurement legislative framework. The review will aim to develop options for a more efficient measurement framework that is consistent with the Australian Government’s agenda of regulatory reform and business simplification. Prime Ministerial approval to proceed with this review was received in June 2017. Two important priorities for the legislative review will be:

• using principles-based legislation to minimise regulatory burden on business
• removing unwarranted regulatory barriers to trade, facilitating innovation and market entry of new technologies.

Formal consultations with stakeholders will commence in the third quarter of 2017. NMI is working towards completing the regulatory impact statement process and having any proposed legislative changes submitted to the Minister for consideration by the end of 2020.

Revised National Compliance Policy
NMI has published a revised National Compliance Policy. The revised Policy maintains adoption of a risk-based approach to minimise harm and now incorporates a consideration of previous compliance history when determining regulatory responses. For example, NMI may:

• consider appropriate levels of surveillance for particular traders that have demonstrated a commitment to compliance through adoption of robust quality assurance systems or an industry code of conduct
• prioritise responding to complaints received about potential breaches of trade measurement law based on the compliance record of industry sectors and/or particular traders.

Pattern Approval Standards for Electricity Meters
Following extensive stakeholder consultations NMI has agreed to implement a new approach to pattern approval certification of electricity meters. This new approach provides flexibility to take account of the wide ranges of applications and technologies for electricity meters in the current market and, for the first time in Australia, will allow certification based on compliance with a standard outside the International Organisation for Legal Metrology (OIML) system.

NMI will provide three pathways for the pattern approval of electricity meters, based on the metrological and technical requirements of:

• NMI M 6-1, with minor amendments and clarifications
• the Standards Australia adoption of International Electrotechnical Commission (IEC) standards AS-IEC 62052.11, 62053.21, and AS-IEC 62053.22
• adoption of OIML R 46 without major modification as NMI R 46.

It is estimated that the greater flexibility embodied in this new approach will save Australian businesses $720,000 annually.

Pattern Approval Standards for LPG Dispensers

NMI has consulted with stakeholders on a more principles-based approach to the regulation of liquid petroleum gas (LPG) density measurements that will allow industry flexibility to develop alternative and innovative methods of demonstrating compliance with outcomes-based performance requirements.

Under this principles-based approach, NMI will not mandate the use of a specific technology as a means of demonstrating compliance. It remains the responsibility of the applicant for pattern approval of LPG dispensers to demonstrate compliance with the performance requirements over the range of operational and environmental conditions to which the dispenser will be exposed. If it can be demonstrated that the design and operation of an LPG dispenser can reliably meet the requirements, it may be considered for approval.

Regulation of Legal Metrology

Consistency and certainty in measurement supports fair and open competition. It provides a level playing field for business by ensuring that all market participants, irrespective of their size or financial strength, follow the same rules and have equal opportunity to compete.

Studies in Australia, the USA and Canada have estimated that the total value of trade transactions involving measurement (including packaged goods and utility metering) accounts for at least 50% of Gross National Income (GNI). Of this amount, around a quarter is accounted for by retail transactions. The remaining three quarters are business to business transactions.

Based on these estimates, more than $750 billion worth of goods and utilities are traded each year in Australia on the basis of their measurement. Reliable representations of measurements help consumers and businesses make informed purchasing decisions. More broadly, they support the efficient operation of the market.

Confidence in accurate measurement also delivers:

- reduced disputation and lower transactions costs in commercial dealings
- a sound evidential basis for legal and regulatory measurements.

What is legal metrology?

Australia’s legal metrology system provides a reliable framework to support confidence in accurate measurement. The system includes elements that ensure:

- measuring instruments are fit for purpose
- measurements are made correctly
- representations about measurements are accurate.

The system is also underpinned by the necessary scientific and technical infrastructure to support correct measurements (traceability).

The National Measurement Institute (NMI) is responsible for the regulation of Australia’s legal metrology system through administration of the National Measurement Act 1960 (the Act).

The Act establishes a national system of units and standards of measurement and provides for their uniform use throughout Australia to ensure traceability of measurement. The Act also regulates transactions involving measurement, including sales of measured quantities and packaged goods, and sets out specific requirements for measuring instruments used for trade.

In planning and undertaking its regulatory responsibilities, NMI recognises that reducing the burden on industry of inefficient regulation can lower costs to businesses and facilitate innovation. We also note the importance of ensuring that the regulatory environment strikes the right balance between efficient markets and community expectations.

NMI participates in formal processes that develop international documentary standards for measuring instruments, including through the International Organisation of Legal Metrology (OIML), and adopts relevant international standards to ensure Australia’s regulatory environment is harmonised with international best practise. This supports market efficiency by reducing technical barriers to trade.

In order to maintain delivery of best practice regulation, NMI recognises that as an organisation it must adapt, be proactive and innovative as we work with stakeholders to find new approaches in a changing environment.

How is legal metrology regulated?

A measuring instrument is being used for trade if it is used in determining the consideration in respect of a transaction or in determining the amount of a tax. In Australia, all measuring instruments used for trade must be pattern-approved and verified.

Pattern approval confirms that a measuring instrument’s design meets relevant documentary standards and performs as intended over a range of environmental and operating conditions. NMI examines trade and other legal measuring instruments against relevant standards and issues certificates for pattern approval that are internationally recognised. NMI may also appoint Approving Authorities to examine measuring instruments and produce test reports for pattern approval.

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4 A documentary standard provides requirements, specifications, guidelines or characteristics that can be used consistently to ensure that materials, products, processes and services are fit for their purpose. (www.iso.org).
When reviewing applications for pattern approval of trade measuring instruments where certification has already been issued in another country, NMI recognises test reports issued in accordance with the International Organisation for Legal Metrology’s framework for mutual acceptance arrangements and can also accept certain other test results based on a risk analysis.

Verification is the testing of measuring instruments to ensure that they operate in accordance with pattern approval requirements and are accurate. Verification of trade measuring instruments is usually carried out by NMI appointed organisations, known as Servicing Licensees or Utility Meter Verifiers. These organisations verify instruments against standards that are aligned with international practice, including National Instrument Test Procedures (NITPs) determined by NMI.

Traceability is being able to demonstrate that a measurement result is related to a primary measurement standard through a documented, unbroken chain of calibrations. To ensure traceability of reference standards used for verification of trade measuring instruments, NMI appoints Verifying Authorities in areas such as length, mass, area, volume, density, and temperature.

NMI also appoints Certifying Authorities to ensure that certain legal measuring instruments are of an approved pattern and accurate. Certifying Authorities may also be appointed to produce reference materials used in the verification of trade measuring instruments and certification of legal measuring instruments.

NMI has a national network of trade measurement inspectors who audit traders and licensees to assess their compliance with their obligations under the law. Inspectors can enter a place of business to:
- review trading practices
- ensure that measuring instruments used for trade are verified and used correctly
- check pre-packed articles for correct packer identification, measurement markings and accurate measure
- ensure that servicing and public weighbridge licensees are operating in accordance with the conditions of their licence
- take appropriate enforcement action where there have been breaches of the law.

Coordination with other regulators

Under a Memorandum of Understanding with the Department of Health, NMI provides inspection and education services in relation to business compliance with Tobacco Plain Packaging legislation. Where appropriate, these activities are undertaken in conjunction with inspections to monitor compliance with trade measurement law.

Stakeholder Reference Group

The stakeholder consultation mechanism approved by the Minister for Industry, Innovation and Science under the Regulatory Performance Framework is the Consumer and Industry Liaison Committee (CILC). NMI established CILC in 2010 comprised of representatives from industry associations and consumer groups. CILC meets twice yearly to:
- exchange views about trade and regulatory matters as they relate to trade measurement:
  - scope of metrological control of measuring instruments used for trade purposes
  - pattern approval framework and service levels
  - trade measurement service levels and perception of compliance in the market place
- formulate advice to NMI aimed at improving the efficiency and effectiveness of the regulatory framework and service levels.

CILC’s membership includes:
- Accord Australasia Ltd
- Aerosol Association of Australia Inc
- Australasian Convenience and Petroleum Marketers Association
- Australian Food and Grocery Council
- Australian Hotels Association
- Baking Association of Australia
- CHOICE
- Consumers Association of South Australia Inc
- Consumers Federation of Australia
- Food & Beverage Importers Association
- Master Grocers Australia
- National Farmers Federation
- National Retail Association
- Seafood Importers Association of Australasia
- Queensland Consumers Association
- Weighing Industry Association of Australia

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5 Australia’s primary measurement standards are maintained by NMI and directly relate to the base units of the International System of Units (SI): the metre, the kilogram, the second, the ampere, the kelvin, the mole, and the candela.
The Regulator Performance Framework

The Commonwealth Government has developed the Regulator Performance Framework6 to give business, the community and individuals confidence that regulators effectively and flexibly manage risk. Efficiently administered regulatory frameworks can improve the operation of businesses, markets and the economy, bring major benefits for individuals and lead to fewer resource requirements for regulators.

To achieve the Government’s objectives, the Framework includes six outcomes-based key performance indicators (KPIs) to articulate the Government’s overarching expectations of regulator performance, namely:

1. regulators do not unnecessarily impede the efficient operation of regulated entities
2. communication with regulated entities is clear, targeted and effective
3. actions undertaken by regulators are proportionate to the risk being managed
4. compliance and monitoring approaches are streamlined and coordinated
5. regulators are open and transparent in their dealings with regulated entities
6. regulators actively contribute to the continuous improvement of regulatory frameworks.

The Framework also includes a requirement for regulators to undertake an annual self-assessment against the KPIs of the Framework and publish a report on the outcomes of that self-assessment and any external reviews of their performance.

Implementing the Framework

This report has been prepared to assess achievements in 2016-17 against the Framework’s KPIs. The evidence metrics used to measure performance against the KPIs were reviewed and endorsed by NMI’s stakeholder reference group, the Consumer and Industry Liaison Committee (CILC) and subsequently endorsed by the Minister for Industry, Innovation & Science.

Because there is some duplication and repetition amongst the “measures of good regulatory performance” and “examples of output/activity-based evidence” published against each of the Framework’s KPIs, each ‘evidence metric’ usually covers more than one KPI.

Performance against each of the evidence metrics has been rated using the following categories:

- **Met** - Strong performance against all aspects of the metric
- **Substantially met** - Strong performance against most aspects of the metric
- **Not met** - Poor performance against all aspects of the metric.

### Evidence metrics

<table>
<thead>
<tr>
<th>Evidence Metric</th>
<th>Applicable KPI</th>
</tr>
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<tbody>
<tr>
<td>Percentage of trade measurement inspections that address areas identified as high-risk with regard to policy goals</td>
<td>KPI 1, KPI 3, KPI 4</td>
</tr>
<tr>
<td>Percentage of applications assessed and processed within agreed or published timeframes</td>
<td>KPI 1, KPI 2</td>
</tr>
<tr>
<td>Percentage of stakeholder feedback that is favourable (customer satisfaction)</td>
<td>KPI 2, KPI 5, KPI 6</td>
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<tr>
<td>Number of information sharing meetings with key stakeholders (effective communication)</td>
<td>KPI 2, KPI 5, KPI 6</td>
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<tr>
<td>Examples of improvements to how NMI conducts its regulatory role (continuous improvement)</td>
<td>KPI 6</td>
</tr>
<tr>
<td>Percentage of assessments or inspections that take account of risk profile (risk informed regulation)</td>
<td>KPI 3, KPI 4, KPI 5, KPI 6, KPI 6</td>
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<tr>
<td>Number of enforcements actions that do not involve a fine</td>
<td>KPI 3, KPI 4</td>
</tr>
<tr>
<td>Number of enforcements actions that involve at least a fine</td>
<td>KPI 3, KPI 4</td>
</tr>
<tr>
<td>Percentage of instances in which stakeholders are consulted on the development of regulations (transparent development of standards)</td>
<td>KPI 2, KPI 5, KPI 6</td>
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Performance Scorecard

KPI 1: Regulators do not unnecessarily impede the efficient operation of regulated entities

<table>
<thead>
<tr>
<th>Measure</th>
<th>Performance</th>
<th>Commentary</th>
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</thead>
<tbody>
<tr>
<td>Percentage of applications assessed and processed within agreed timeframes</td>
<td>Of 146 applications for establishing or renewing Servicing Licence, 141 (97%) were assessed and processed within 28 days.</td>
<td>Substantially met</td>
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<td>Of the 5 Servicing Licences issued after 28 days:</td>
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<td></td>
<td>• 2 were issued in 29 days – (due to Easter long weekend)</td>
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<td>• 3 were delayed because incomplete financial information was provided by client with electronic funds transfer, so that payments were not promptly identified</td>
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<td></td>
<td>Of 83 applications for establishing or renewing Public Weighbridge Licence, 77 (93%) were assessed and processed within 28 days.</td>
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<td>Of the 6 Public Weighbridge Licences issued after 28 days:</td>
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<td></td>
<td>• 1 was issued in 29 days – (due to Easter long weekend)</td>
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<tr>
<td></td>
<td>• 3 were delayed because incomplete financial information was provided by client with electronic funds transfer, so that payments were not promptly identified</td>
<td></td>
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<td></td>
<td>• 2 were delayed while applicant worked to satisfy legislative requirements for issue of Licence.</td>
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<td>All 16 (100%) applications for establishing or renewing appointment as Legal Metrology Authority were assessed and processed within 90 days, including:</td>
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<td>• 7 Certifying Authority appointments</td>
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<td></td>
<td>• 7 Verifying Authority appointments</td>
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<td></td>
<td>• 2 Utility Meter Verifier appointments</td>
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<td></td>
<td>Of 64 applications for Pattern Approval Certificate, 40 (63%) were assessed and processed within 90 days.</td>
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<td></td>
<td>• Unforeseen staff absences, retirements and difficulty in engaging suitable replacements has impacted performance against this target. NMI is looking to re-staff as quickly as possible and is exploring other options for facilitating timely progress of Pattern Approval applications.</td>
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</tbody>
</table>
**KPI 2: Communication with regulated entities is clear, targeted and effective**

### Instances in which stakeholders are consulted on the development of regulations

NMI publishes a number of standards and test procedures which set out requirements and expectation of manufacturers and licensees. These standards are generally adoptions of international standards. Consultation with manufacturers and licensees improves transparency in regulation and supports continuous improvement. **Met**

- All proposed changes to policy/standards are preceded by comprehensive engagement with stakeholders, including: one-to-one, focus groups, and formal public consultation. Some examples from 2016-17 are listed below:
  - in August 2016 NMI sought comment on the first draft of the revision of the international recommendation OIML R 81 Dynamic measuring devices and systems for cryogenic liquids
  - in September 2016 NMI sought comment on the revision of the international recommendation OIML R 61 Automatic gravimetric filling instruments
  - in November 2016 NMI undertook a review of the requirements for LPG dispensers relating to the measurement of LPG density. The public consultation process has concluded and a response paper has been released
  - in April 2017 targeted consultation with industry stakeholders was held regarding the implementation of NITP 6.8 National Instrument Test Procedures for Wheeled Loaders
  - ongoing consultations were held with the sugar refining industry on developing a framework, verification methodology and national standard for the use of Near Infra-Red (NIR) instruments for the measurement of sugar quality
  - a number of one on one meetings were held with manufacturers and importers of various measuring instruments related to standards applicable to their instruments and industry.

### Percentage of customer feedback that is positive

NMI seeks feedback through surveys. Negative feedback is an opportunity to improve systems and reassess regulatory burden. Responses which are neutral or better are taken to be favourable. **Met**

- NMI invites all pattern approval laboratory clients to complete a survey on satisfaction with service delivery. Of the 26 survey respondents in 2016-17, favourable responses were provided to the following statements:
  - it was easy to contact the right person to assist me – 24 (92%)
  - I received an acknowledgement of the application in a timely manner – 26 (100%)
  - the application process was clearly explained – 26 (100%)
  - the person I was dealing with clearly explained what information was required – 26 (100%)
  - the results of the assessment or decision were clearly explained – 26 (100%)
  - the person I was dealing with was knowledgeable and professional – 26 (100%)
  - the Pattern Approval Section was easy to deal with – 26 (100%)
  - the Pattern Approval Section responded to my questions in a timely manner – 25 (96%)

Additional commentary provided through the survey included:

- “Quick, easy and very helpful in helping me gain my patent.”
- “The persons I dealt with at the NMI are very professional and extremely helpful and it is clear that they have excellent knowledge of the process and requirements. I honestly cannot complain about anything. Outstanding department.”
- “All dealings with NMI personnel they were very friendly and able to provide detailed response. Pleasure to deal with.”

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**Note:** The content is extracted from the Regulator Performance Framework — Self-Assessment Report. The KPI 2 section specifically focuses on communication with stakeholders, detailing instances of consultation and feedback mechanisms implemented by NMI to ensure clear, targeted, and effective communication.
**KPI 3: Actions undertaken by regulators are proportionate to the regulatory risk being managed**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Performance</th>
<th>Commentary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of enforcement actions that do not involve a fine</strong></td>
<td>Met</td>
<td>Of 4118 enforcement actions in 2016-17, 4040 (98%) did not involve a fine, including:</td>
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<td>• 3708 non-compliance notices</td>
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<td>• 26 education letters</td>
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<td>• 306 warning letters</td>
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<tr>
<td><strong>Number of enforcement actions that involve at least a fine</strong></td>
<td>Met</td>
<td>Of 4118 enforcement actions in 2016-17, 78 (2%) involved at least a fine, including:</td>
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<td></td>
<td>• 75 infringement notices</td>
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<td>• 3 prosecutions.</td>
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</table>
KPI 4: Compliance and monitoring approaches are streamlined and coordinated

<table>
<thead>
<tr>
<th>Measure</th>
<th>Performance</th>
<th>Commentary</th>
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</thead>
<tbody>
<tr>
<td>Proportion of trade measurement inspections that address areas identified as high-risk</td>
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<td>Of 10,239 trader audits undertaken in 2016-17, 6772 audits (66%) were conducted as part of national targeted programs based on risk profiles. Targeted programs in 2016-17 included:</td>
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<td>• industry-based programs: ‘Harvest to Home’ (fruit and vegetables) and Confectionery</td>
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<td></td>
<td>• ‘Community Savings’ to capture data on likely financial loss suffered by customers in trade measurement transactions across a broad range of industry types.</td>
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<td>• Servicing Licensee and verifier audits</td>
</tr>
<tr>
<td>Assessments or inspections that take account of risk profile</td>
<td></td>
<td>The 2016-17 and 2017-18 National Compliance Plans7 were published on the NMI website and confirmed our approach to program-driven compliance activities based on risk profile.</td>
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<td>The 2017-18 Plan allocates all performance targets to program-based activities, including:</td>
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<td>• targeted industry programs: Meat, Fish and Poultry Retailing, Supermarket and Grocery Stores, and Waste Management</td>
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<td></td>
<td></td>
<td>• data collection and monitoring programs: ‘Community Savings’ and ‘Compliance Confidence’</td>
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<td></td>
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<td>• ongoing programs such as: ‘Outer Regional and Remote’ and Weighbridge Audits.</td>
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</table>

### KPI 5: Regulators are open and transparent in their dealings with regulated entities

<table>
<thead>
<tr>
<th>Measure</th>
<th>Performance</th>
<th>Commentary</th>
</tr>
</thead>
</table>
| Number of information sharing meetings with key stakeholders | | As outlined above, NMI held a range of stakeholder meetings in 2016-17 to:  
- discuss proposed changes to regulations/standards  
- seek input for the Legal Metrology Policy Review.  
Two scheduled CILC meetings were held, in November 2016 and June 2017. NMI’s trade measurement staff also held around 40 additional meetings in 2016-17 with industry associations, companies and organisations to receive feedback and discuss developments in technology and business models and associated regulatory compliance issues.  
Met |

### KPI 6: Regulators actively contribute to the continuous improvement of regulatory frameworks

<table>
<thead>
<tr>
<th>Measure</th>
<th>Performance</th>
<th>Commentary</th>
</tr>
</thead>
</table>
| Examples of improvements to how NMI conducts its regulatory role | | Various examples of NMI’s actions in 2016-17 to improve the regulatory framework are outlined in this paper, including:  
- Prime Ministerial approval received to proceed with Legislative Review  
- agreement to introduce greater flexibility in approach to pattern approval of electricity meters  
Met |