



Australian Government
National Measurement Institute

Experience, Opportunities and Challenges as one of the world's youngest NMIs

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This talk

- Integrating measurement with government
 - What we have learned
 - What we have done well
 - What we have learned to do better



NMIA History



- NMIA was formed in 2004 by combining 3 predecessor organisations into a Division within the Department of Industry, Tourism and Resources
- Australian Government Analytical Laboratory (AGAL)
 - Chemical/Biological measurement services – part of a government department
- National Standards Commission
 - Australia’s legal metrology body – a Statutory Authority
- National Measurement Laboratory
 - Physical standards laboratory – part of CSIRO
- In 2010 the National Trade Measurement function was added to NMIA
- NMIA presently has ~500 staff, spends about \$80M p.a., and earns about \$30M p.a.

Challenges and Opportunities

Challenges

- Principles of Government funding
 - Eg: no funding program for technical outcomes
- Little understanding or appreciation of science in the policy environment
- NMIA staff day to day responsibilities very different from most civil servants
- Dealing directly with Ministers

Opportunities

- Dealing directly with Ministers
- Able to influence Government policy thinking to take more account of measurement
- Access to all levels of Government

What has gone well

Engagement with government on major national issues

- National system for Trade Measurement established in 2010, with NMIA as the regulator
 - \$24 M AUD p.a.
- NMIA establishing biometrology and nanometrology capabilities in support of government innovation agenda
 - \$16M AUD over 4 years
- National forensic and sports drugs facilities within NMIA

Engagement with industry stakeholders

- Consistently excellent responses to surveys



What we could have done better

Engagement on smaller issues with other government departments

- Many opportunities, eg:
 - Defence
 - Wide range of calibrations & consultancy
 - Climate Change and Energy Efficiency
 - Device efficiency regulation – advice and monitoring
 - Emissions monitoring and analysis
 - Carbon trading calculations
 - Health
 - Pharmaceutical composition
 - Device performance
 - Development aid programs
 - Capacity building for specific issue areas but not at broader sector level (eg., food security, health)



Why?

- Talking about NMIA's capabilities gains limited traction
 - Need to focus on the policy agendas of the target audience



Drivers for new approach

- Government is our primary stakeholder
- NMIA serves Government by serving Australian stakeholders
 - Government primarily interested in impact and outcomes of metrology, not the science or technical aspects
 - Metrology “invisible”, taken for granted and misunderstood
 - Ongoing investment in evolution of NMI’s activities needed
- NMIA needs to better articulate the relationship between the investment made by the Government in NMIA and the outcomes for Australia
- Visible support for measurement from industry and other stakeholders is essential



Talking to Government

“Never use the word metrology when talking to government”

Dr Willie May, NIST

“Measurement is the only way to be sure that policies are working and resources are being put to the best possible use”

from *Powering Ideas*

Australian Government Innovation Policy 2009



A Sectoral Approach

- Science & Innovation
- Manufacturing
- Environment
- Trade
- Security
- Mining & Resources
- Health
- Energy
- Food & Agriculture



Objectives and Outcomes

External goals: To be more transparent and accessible to external stakeholders

- Government & Ministers
- Regulators
- Industry
- Science and Technology community
- The general public

Internal goal:

- To prioritise NMI's activities and increase Australia's return-on investment through improved internal communication and harmonisation of related areas of work;

Technical Infrastructure Alliance



Joint Accreditation System of Australia and New Zealand (JAS-ANZ) - Government-appointed accreditation body for certification and inspection bodies.



National Association of Testing Authorities (NATA) - Australia's national authority for assessing and recognising the competence and capability of organisations that deliver technical data used in decision making processes.



National Measurement Institute (NMI)



Standards Australia - Leads and promotes a respected and unbiased documentary standards development process.

“Committed to a high degree of collaboration for the benefit of government, industry and the broader community within Australia and overseas”

Working with Government

- Government likes to see best return on investment

- Issues
 - Demand for new measurement capabilities is increasing
 - Demand on NMIs is increasing
 - Many governments are seeking savings
 - NMIs already cooperate and collaborate

- Issues for APMP / BIPM
 - The strategic value of cooperation between NMIs needs to be more visible to government

 - Governments need to see a business case for additional investment in metrology



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Thanks for your attention

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