

Asia Pacific Metrology Programme

APMP's Developing Economies'
Committee (DEC) – Growing Together

Quo Vadis?

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*DEC Workshop: 9th June 2016
Bangkok, Thailand*

The APMP DEC

Our journey: 2000-2016



Achievements of APMP's DEC* over the last 16 years include:

- ❖ **Strategic Planning Workshops (needs assessment)**
- ❖ **TCxx-DEC capacity building workshops, Train-the-Trainer courses, etc, in:**
 - ❖ **Supporting CIPM MRA Participation**
 - ❖ **Technical training in specialist metrology areas**
 - ❖ **Metrology in Chemistry development**
 - ❖ **Comparisons & PTs, including preparatory and concluding workshops**
- ❖ **Development of Guidance documents (DEC members working with PTB)**
- ❖ **Mid-year meetings in developing NMI → engagement by international metrology leaders with government decision-makers & technical experts with developing NMI staff**
- ❖ **Partnerships/support at regional and national levels with international stakeholders (APEC, BIPM, other RMOs, other SRBs)**
- ❖ **Capacity building interventions under PTB's MEDEA project (2014-2017)**

**These activities have benefited greatly from the DEC's partnerships with PTB, Germany, and the support of individual developed NMIs (eg, KRISS, NMJJ, NMIA)*



10 Priority Issues identified in 2005

- 1. Awareness raising**
 - 2. NMI Strategic Planning**
 - 3. Fund raising**
 - 4. Linkages with legal metrology**
 - 5. Needs Assessment of DEC NMIs**
 - 6. Information Sharing**
 - 7. Training**
 - 8. Infrastructure development & improvement**
 - 9. CIPM MRA Participation**
 - 10. Comparisons**
- **Metrology in Chemistry**



APMP Workshop Nov 2015:

1. Where do we want to be in 3-5 years

- Continue to participate and strengthen participation in CIPM MRA
- Be a recognised service/solution provider domestically
 - Be able to meet calibration needs (basic services)
- Close collaboration with QI institutions with clear designation of roles
- Providing training for other NMIs
- Capacity and capability as an NMI, including in metrology in chemistry



2. How are we going to get there

- **Regular DE needs assessments**
- **Regional training**
- **Bilateral consultancies**
- **Prioritise services areas for CMCs based on real needs**
- **Use DEC as a forum to learn lessons from other NMIs**
- **Industry needs surveys – identify key sectors**
- **Share case studies highlighting metrology's relevance to sectors**
- **Improve strategy for communication and better stakeholder engagement**



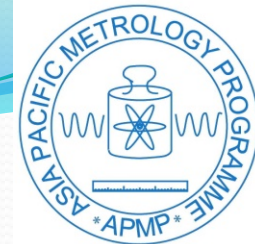
3. APMP's inputs

- **Consultancies and capability building in setting up laboratories**
- **Knowledge transfer from developed NMIs**
 - **Benchmarking**
- **Case studies on NQI systems**
- **Guidance documents**
- **Lessons learned re: strategic communication**
- **Being a gateway to other forums, advocate in international forums**



4. *APMP Action Plan*

- **Provide guidance for stakeholder engagement**
- **Provide experts for lobbying and awareness raising in Asia Pacific**
- **Support interactions with, eg. APEC, to gain support from top-down (political leadership)**
- **Funding support**



10 Priority Issues identified in 2005

- Still relevant in 2016...*And in 2026?*

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Strengths

- **APMP's culture of support and goals of developing regional capabilities and international recognition**
- **APMP's close ties with regional S&C/QI infrastructure (MoUs with APLMF, APLAC), engagement with APEC SCSC and other RMOs & BIPM**
- **Access to global and regional expertise and experience**
- **Sub-fora with individual resources: ASEAN, SAARC**
- **Support from national DA programs, including PTB, KRISS, NMIJ, NMIA**



Weaknesses

- **Time and financial constraints of DEC members and APMP experts**
- **No regional fund (c.f European Commission)**
- **Diversity of cultures, language skills**
- **Geographical distances**
- **Spectrum of technical capabilities, infrastructure, soft skills**
- **Mentoring, succession planning**
- **Mis-alignments of international/regional activities with national responsibilities**
- **Lack of continuity in DEC champions**



Opportunities

- **APMP's Focus Group strategy to increase awareness by government and other national stakeholders of importance and impact of measurement in priority economic sectors**
- **Support from national DA programs, including PTB (Germany), KRISS (Korea), NMIJ (Japan), NMIA (Australia)**
- **Economic growth of Asia and, in particular, China, India, ASEAN**



Threats

- **Resource constraints**
- **Cross-border challenges: food safety, climate change, security, energy, clean water, health**
- **Breadth of needs in chemistry & biology**
- **Limited consultation with/ dissemination to stakeholders**
- **Increasing competitiveness due to, e.g. advances in technologies, industry innovation**
- **Limited resources to drive and deliver on strengths and opportunities**
- **Turnover in government influencers, decision-makers**

SWOT Analysis: How are we travelling



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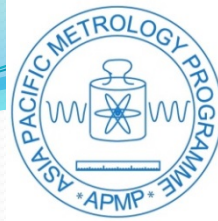
Quo Vadis ?

- Envision the national and global context in the next 3-5 years in which APMP's NMIs will need to deliver measurement outcomes for their economies,
- and*
- Envision a DEC that will support delivery of, those outcomes into the future



Global/external challenges, government priorities & APMP “actors”

Global/external influences/ drivers	Government policy priorities, reforms	APMP “actors”
TBTs, global supply chains	Economic diplomacy, FTAs, business & industry competitiveness, regulatory reform → adoption of trusted international standards	CIPM MRA, OIML MAA, APEC SCSC, ISO/IEC TCs, APLMF, EMRP/EMPIR-STAIR
Health: infectious diseases, ageing populations, personalised & precision medicine, biotech	Regulatory frameworks, policies in support of medical sector, research & industry	IFCC, JCTLM, CCQM, TCQM, Medical FG, APEC Health WG
Food security, safety, Clean Water	Regulatory frameworks, policies in support of food producers, agribusiness – exports/imports, domestic consumption	CCQM, TCQM, Food Safety FG, APEC FSCF
Energy efficiency, alternative, renewable	Regulatory frameworks, policies in support of resources sector (oil, gas, solar, biogas etc) – exports/imports, domestic consumption	CCs/APMP TCs, Energy Efficiency FG, OIML TCs, APEC Energy WG



Global/external influences, government priorities & APMP “actors”

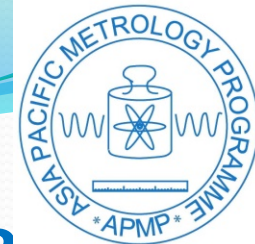
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Environment/Climate Change (disasters, pollution, security)	Regulatory frameworks, policies in support of agreed global climate change targets,	CCQM, BIPM, TCQM, Climate FG, APEC Climate WG
Industry 4.0, enabling and disruptive technologies, advanced materials, 3D- printing	Regulatory frameworks, policies in support of business innovation / competitiveness, research commercialisation, PPPs	CIPM MRA, OIML MAA, APEC SCSC



Key Questions..

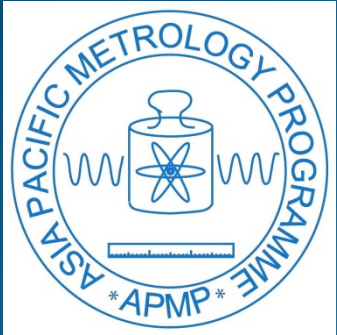
- **What are the driving forces of change? External influences? Government priorities/reforms?**
- **What concrete outputs/outcomes can the DEC achieve in the short-to-medium term to address these?**

→ Work Program/Action Plan: 2016-2019



What is the DEC's "Strategic Intent"?

- **OUTWARD LOOKING:** To DELIVER responses to external influences, government priorities - dynamically, proactively, and with creativity, agility and flexibility
- **SUSTAINABLE:** To support APMP's developing NMIs deliver significant and clear return-on-investment for their economies?
- **ADVOCACY:** To be the APMP forum that champions the issues of developing NMIs?
- **GROW CAPABILITY AND RECOGNITION:** To grow the credibility of APMP's developing NMIs with government, industry, business & academia?



Asia Pacific Metrology Programme

Thank you