



TRADE RELATED TECHNICAL ASSISTANCE PROJECT 3

A project supported by the European Union

Challenges of the NQI Institutions

NQI Forum & Workshop
28 Oct. 2014 – AIM, Makati
Jon Echanove



NATIONAL
COMPETITIVENESS
COUNCIL | PHILIPPINES

2011

TRTA

PTB

Government Regulatory Practices and NQI Study

GRP

Standardization

Accreditation

Metrology

Institutional meetings on NQI (60+)

PhilMSTQ

Executive Summary
Launching Event (100+)

Workshops on NQI, GRP and STD (150+)

NCC NQI WG

National Metrology Laboratory
Corporate Image and Strategy

Comparative Analysis

Standardization

Accreditation

Metrology

Publication of Strategy & revision of MET Act

2014

Strategic Recommendations

Standardization

Accreditation

Metrology

EU-Philippines

Trade Related Technical Assistance Project 3



Global Competitiveness Report 2014-2015

Country	Rank	Score	GCI 2013–2014
Singapore	2	5.65	2
Malaysia	20	5.16	24
Thailand	31	4.66	37
Indonesia	34	4.57	38
Philippines	52	4.40	59
Vietnam	68	4.23	70

How the NQI institutions of the most competitive economies looks like?



On Standardization

- Benchmark with ASEAN countries

Country	NSB	Policy Orientation	Balanced Governance	Management & Financial Autonomy	Functions
Indonesia	National Standardization Agency of Indonesia (Badan Standardisasi Nasional -BSN)	Competitiveness and Trade Facilitation	<i>STD Council</i>	Agency reporting to President Office	STD & ACC
Malaysia	Department of Standards Malaysia (DSM) & SIRIM Berhad	Competitiveness and Trade Facilitation	Private/Public STD Council	Attached Agency	STD & ACC
Philippines	Bureau of Philippines Standards (BPS)	Consumer Protection	No council	Gov. Bureau	STD, CERT, INS, TEST & REG
Singapore	Standards, Productivity and Innovation Board (Spring SG)	Productivity and Innovation	Board of Directors and Standardization Council	Attached Agency	STD, ACC & SMEs
Thailand	Thai Industrial Standards Institute (TISI)	Competitiveness and Trade Facilitation	Public/Private STD Council	Institute	STD & ACC
Viet Nam	Directorate for Standards, Metrology & Quality (STAMEQ)	Consumer Protection	No Council	Gov. Department	STD, CERT, ACC, MET, QUALITY, INS, TEST, SMEs

On Standardization

- Benchmark with ASEAN countries

Country	NSB	STD. Activities	National Stakeholders	Int. Presence
Indonesia	National Standardization Agency of Indonesia (Badan Standardisasi Nasional -BSN)	1 NSB. 2 SDOs. <i>No evidence for formal delegation process</i>	Good	Active in governance and technical bodies
Malaysia	Department of Standards Malaysia (DSM) & SIRIM Berhad	1 NSB. 2 SDOs. Formal delegation process	Strong	Active in governance and technical bodies
Philippines	Bureau of Philippine Standards (BPS)	5 Depart./agencies mandated No formal coordination	Weak	Inactive in technical bodies Inactive in ISO gov. Active in IEC gov.
Singapore	Standards, Productivity and Innovation Board (Spring SG)	1 NSB. 2 SDOs formally reporting to STD Council	Strong	Active in governance and technical bodies
Thailand	Thai Industrial Standards Institute (TISI)	1 NSB	Good	Active in governance and technical bodies
Viet Nam	Directorate for Standards, Metrology & Quality (STAMEQ)	<i>1 NSB? 22 SDOs. No evidence of formal delegation process</i>	Weak	<i>Active in governance?</i>

On Standardization

- Benchmark with ASEAN countries

Country	NSB	National STD Strategy	STD & Associated Services <i>PH has...</i>	Corporate Image
Indonesia	National Standardization Agency of Indonesia (Badan Standardisasi Nasional -BSN)	NSS published	137% stds No industry support services	Logo and independent webpage Corporate Image somehow developed
Malaysia	Department of Standards Malaysia (DSM) & SIRIM Berhad	NSS published and implemented thru Business Objectives	65% stds Industry support services	Well developed corporate image
Philippines	Bureau of Philippines Standards (BPS)	No NSS	500 Stds No industry support services	No agency logo STD&CA Portal?
Singapore	Standards, Productivity and Innovation Board (Spring SG)	NSS published and implemented thru Strategic Outcomes	641% stds Industry support services	Well developed corporate image
Thailand	Thai Industrial Standards Institute (TISI)	NSS Published	323% stds No industry services	Logo and independent webpage
Viet Nam	Directorate for Standards, Metrology & Quality (STAMEQ)	No NSS	74% stds No industry services	<i>No agency logo</i> <i>No independent webpage</i>

On Accreditation

- Benchmark with ASEAN countries

Country	NAB	Policy Orientation	Balanced Governance	Management & Financial Autonomy	Functions
Indonesia	National Accreditation Committee (KAN)	Competitiveness and Trade Facilitation	ACC Council Private/Public	Agency reporting to President Office	STD & ACC
Malaysia	Department of Standards Malaysia (DSM) & SIRIM Berhad	Competitiveness and Trade Facilitation	Private/Public STD Council	Attached Agency	STD & ACC
Philippines	Philippine Accreditation Bureau (PAB)	Consumer Protection	Advisory Council	Gov. Bureau	ACC
Singapore	Standards, Productivity and Innovation Board (Spring SG)	Productivity and Innovation	Board of Directors and Standardization Council	Attached Agency	STD, ACC & SMEs
Thailand	Thai Industrial Standards Institute (TISI)	Competitiveness and Trade Facilitation	Public/Private STD Council	Institute	STD & ACC
Viet Nam	Directorate for Standards, Metrology & Quality (STAMEQ)	Consumer Protection	No Council	Gov. Department	STD, CERT, ACC, MET, QUALITY, INS, TEST, SMEs

On Accreditation

- Benchmark with ASEAN countries

Country	NAB	ACC. Activities	National Stakeholders	Int. Presence
Indonesia	National Standardization Agency of Indonesia (Badan Standardisasi Nasional -BSN)	1 NAB	Good	Active in governance
Malaysia	Department of Standards Malaysia (DSM) & SIRIM Berhad	1 NAB	Strong	Active in governance and technical bodies
Philippines	Philippine Accreditation Bureau (PAB)	4 Depart./agencies mandated No formal coordination	Weak	Inactive in technical bodies Active in Regional governance bodies Inactive in Int. bodies
Singapore	Standards, Productivity and Innovation Board (Spring SG)	1 NAB	Strong	Active in governance and technical bodies
Thailand	Thai Industrial Standards Institute (TISI)	4 NAB reporting to the National Accreditation Council	Good	Active in governance
Viet Nam	Directorate for Standards, Metrology & Quality (STAMEQ)	1 NAB	Weak	<i>Active in governance?</i>

On Accreditation

- Benchmark with ASEAN countries

Country	NAB	National ACC Strategy	ACC & Associated Services <i>PH has...</i>	Corporate Image
Indonesia	National Standardization Agency of Indonesia (Badan Standardisasi Nasional -BSN)	NAS published	TL: 33%, CL:18%, QMS:25%, P:0% (28)	Logo and independent webpage
Malaysia	Department of Standards Malaysia (DSM) & SIRIM Berhad	NAS published and implemented thru Business Objectives	TL: 51%, CL:38%, QMS:43%, P:0% (5)	Well developed corporate image
Philippines	Philippine Accreditation Bureau (PAB)	No NAS	500 Stds No industry support services	Agency Logo Not independent webpage
Singapore	Standards, Productivity and Innovation Board (Spring SG)	NAS published and implemented thru Strategic Outcomes	TL: 74%, CL:38%, QMS:55%, P: 0%(11).	Well developed corporate image
Thailand	Thai Industrial Standards Institute (TISI)	NAS Published	TL: 48%, CL:13%, QMS:67%, P:0% (2)	Logo and independent webpage
Viet Nam	Directorate for Standards, Metrology & Quality (STAMEQ)	No evidence of NAS	TL: 37%, CL:45%, QMS:86%, P:0% (8)	<i>No agency logo</i> <i>No independent webpage</i>

On Metrology

- Benchmark with ASEAN countries

Country	NMIs	Metre Convention	APMP	APLMF	OIML
Indonesia	Research Center for Calibration, Instrumentation and Metrology – Indonesian Institute of Sciences (Puslit KIM-LIPI)	Member State 1960	Full Member 1980	Full Member 1999	Member State 1962
Malaysia	National Metrology Lab – SIRIM Berhad	Member State 2001	Full Member 1977	Full Member 1999	Member State 1999
Philippines	National Metrology Laboratory of the Industrial Technology Development Institute	Associate State 2002	Full Member 1980	Full Member 1999	No Membership (Corresponding Member from 1995 – 1998)
Singapore	National Metrology Centre (NMC) of the Agency for Science, Technology and Research (A*STAR)	Member State 1994	Full Member 1977	Full Member 2000	Corresponding Member 2000
Thailand	National Institute of Metrology (Thailand)	Member State 1912	Full Member 1979	Full Member 1999	Corresponding Member 1994
Viet Nam	Vietnam Metrology Institute, Directorate for Standards and Quality	Associate State 2003	Full Member 1992	Full Member 1999	Member State 2003

On Metrology

- Benchmark with ASEAN countries

Country	National Metrology Institute	Annual Budget (in US\$, 2014)	Technical Staff	Support Staff	Total Number of Staff
Indonesia	Research Center for Calibration, Instrumentation and Metrology – Indonesian Institute of Sciences (Puslit KIM-LIPI)	2.4 million	135	50	185
Malaysia	National Metrology Lab – SIRIM Berhad	7 million	76	29	105
Philippines	National Metrology Laboratory of the Industrial Technology Development Institute	< 0.5 million	24	2	26
Singapore	National Metrology Centre (NMC) of the Agency for Science, Technology and Research (A*STAR)	Undisclosed	66	9	75
Thailand	National Institute of Metrology (Thailand)	7.83 million	127	68	195
Viet Nam	Vietnam Metrology Institute, Directorate for Standards and Quality	3.8 million	90	46	136

On Metrology

- Benchmark with ASEAN countries

Country	National Metrology Institute	Number of Calibration Measurement Capabilities (CMCs)	Number of Metrology Areas Covered by the CMCs	Key Comparisons	Supplementary Comparisons	Number of Accredited Calibration Laboratories
ID	Research Center for Calibration, Instrumentation and Metrology – Indonesian Institute of Sciences (Puslit KIM-LIPI)	107	5	53	18	155
MY	National Metrology Lab – SIRIM Berhad	155	8	57	21	90
PH	National Metrology Laboratory of the Industrial Technology Development Institute	21	1	11	5	27
SG	National Metrology Centre (NMC) of the Agency for Science, Technology and Research (A*STAR)	355	7	101	33	318
TH	National Institute of Metrology (Thailand)	473	8	86	37	131
VT	Vietnam Metrology Institute, Directorate for Standards and Quality	31	4	14	2	75

On Metrology

10 key strategic elements

1. A national metrology policy
2. Relationship with Designated Institutes
3. The NML's regional and international relations
4. Institution building of the NML
5. Technical competence of the NML and DIs
6. Relations between NML and accredited calibration laboratories
7. Relations between NML and the regulators
8. Relations between the NML and industry
9. Relations between the NML and the other components of the NQI
10. A metrology culture



STANDARIZATION
SESSION

ACCREDITATION
SESSION

METROLOGY
SESSION

PLENARY ROOM NORTH

BREAK OUT ROOM

PLENARY ROOM SOUTH

10 Key Challenges
FLIPCHART

10 Key Challenges
FLIPCHART

10 Key Strategic
Elements
FLIPCHART

Introduction on each
key challenge:
-Description
-ASEAN Benchmark
-Strategic
Recommendation

**10
times**

Introduction on each
key challenge:
-Description
-ASEAN Benchmark
-Strategic
Recommendation

Introduction on each
key challenge:
-Description
-Outcome
-Milestones

Clarifications & inputs
from participants
FLIPCHART

Clarifications & inputs
from participants
FLIPCHART

Clarifications & inputs
from participants
FLIPCHART

Summary by Facilitator

Summary by Facilitator

Summary by Facilitator

Facilitators present discussions and outputs in plenary session

Thanks a lot for listening!!!

Jon Echanove

TRTA3 KE3 Expert

jon@positivedevelopment.be

