Contribution to the Safer World – PAC's Perspective

Chinese Taipei

17 September 2018

Ms Chang Kwei Fern

PAC Chair

Outline

- Role of Accreditation
- Global Estimates and Trends in Workplace Safety and Health
- Global Estimates and Trends in Food Safety
- Assurance Domestically
- Recognition Regional and Internationally – PAC Multilateral Recognition Arrangements (MLAs)

Role of Accreditation

Check the Checkers

"One Test/Certification by a Competent Body, accepted Worldwide"

Platform for international acceptance of national accreditation systems

Global Mutual Recognition Arrangement (MRA) on Accreditation

National System to ensure compliance to international standards and practices

National Accreditation Body

Confidence in the technical **competency & integrity** of the service providers

- **Calibration & Testing laboratories**
- **Mgt Systems & Product Certification Bodies**
- **Persons Certification Bodies**
- **GHG Validation & verification bodies**
- **Inspection Bodies**

Conformity Assessment Bodies (CABs)

Assurance in Products & Services rendered & Skills

Industry (Products & Services & Skills)

Construction materials	Ready-mixed concrete	Lifts	Structural Steelwork
Welds Paint	Fire Doors	Skilled Personnel	Soil investigation
Quality Mgt Systems	Envt Mgt Systems	OSH Mgt Systems	Energy Mgt Systems

Global Estimates of Workplace Safety & Health

Fatalities
2.78 million fatalities per year as a result of occupational accidents or work related diseases
(7,500 people die every day; 1,000 from occupational accidents & 6,500 from work-related disease)

Injuries and Diseases
374 million non-fatal work related injuries and illnesses every year

Productivity
Poor occupational safety and health practices estimated to cost 3.94% global Gross Domestic Product each year

Reference: Global Estimates of Occupational Accidents and Work-related Illnesses 2017, Published by WSH Institute (Singapore) & Ministry of Social Affairs and Health (Finland)

Global Trends in Workplace Health & Safety

- Introducing global standard for occupational health and safety management systems
  - ISO 45001 has the potential to push safety and compliance management forward on a global level
- New Legislation to ensure Workplace Health & Safety Compliance
- Digital Transformation
  - Adoption of predictive analytics and big data technologies to make data-driven safety and compliance decisions
- Rising demand for well-trained and certified safety personnel

Global Trends in Food Safety

- Food supply chain becomes increasingly global
  - increased potential for food safety issues and traceability is critical

- Global harmonization of Food Safety Standards and Regulations is a significant challenge
  - use of preventive tools such as HACCP for achieving food safety across the world
- Consumer Awareness
  - foodborne illness on the rise and is a key concern
- Technological and scientific breakthroughs
  - better technology and analytical methods in detecting chemical and microbiological hazards, giving quick results with better accuracy, reproducibility and reliability

WHO: An estimated 600 million – almost 1 in 10 people in the world – fall sick from consumption of contaminated food and 420,000 people die per year, resulting in the loss of 33 million healthy life years

Accreditation - supports assurance across various industries

Food

Building & Construction

Healthcare

Biomedical

Chemicals

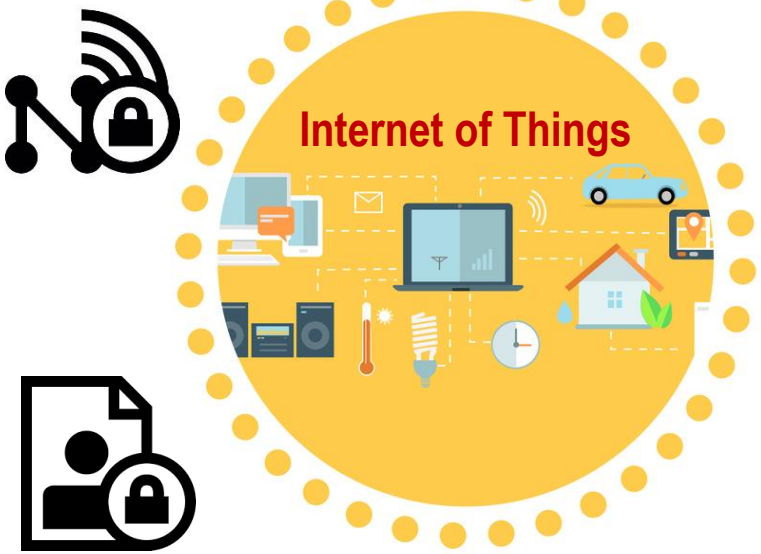
Electrical & Electronics

Environmental

Info Technology

Accreditation supporting Emerging Areas

- Network Security



- Encryption

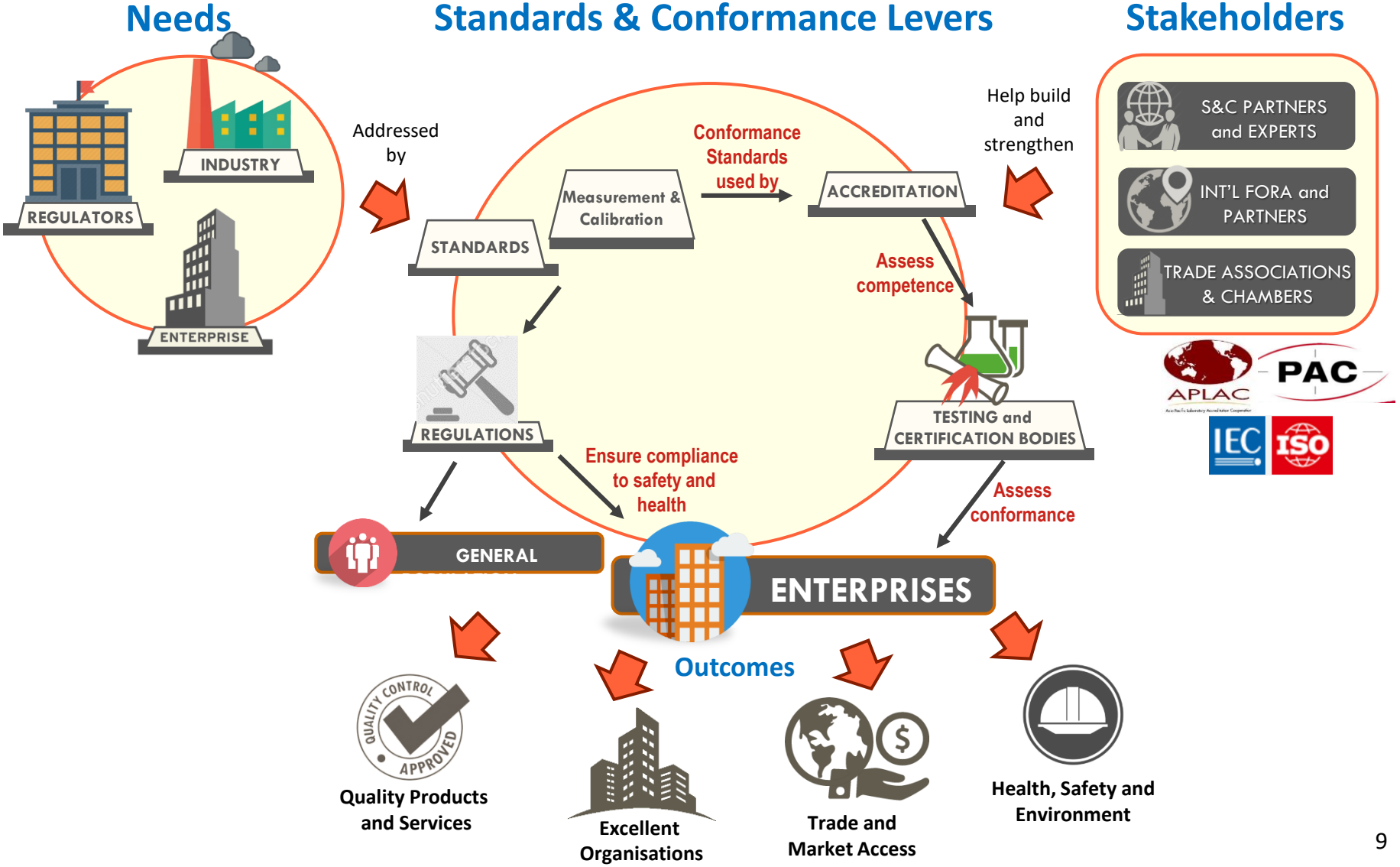
- Information Privacy

- Data Protection

Assurance Domestically

PAC
Pacific Accreditation Cooperation

Quality Ecosystem



Accreditation as a Tool to support Regulators

Ministry of Manpower (MOM) regulates the workplace safety and health in Singapore to safeguard the welfare of persons at work in a workplace.

- Requires accredited testing of safety helmets, shoes, relief values & accredited inspection of pressure vessels
- Requires training providers for safety courses to attain accredited certification
- Requires companies to obtain accredited OSHMS certification

Building and Construction Authority (BCA) ensures high safety standards and promotes quality excellence in the built environment.

- Requires all construction materials to be tested by accredited laboratories & ready-mixed concrete to be certified by SAC accredited certification bodies
- Requires inspection of structural steelwork and soil investigation to be done by accredited inspection bodies

Accreditation as a Tool to support Regulators

Agri-Food & Veterinary Authority of Singapore (AVA) operates a regulatory food analytical laboratory under Veterinary Public Health Laboratory (VPHL) which is accredited by SAC.

- **Conformance** to International Standards
- Demonstrated **capacity** and **capabilities** to produce accurate testing results
- **Provides assurance** to regulatory counterparts locally and internationally for import and export testing

National Environment Agency (NEA) is responsible for regulations of water safety in areas such as swimming pools, cooling towers and water fountains. Leverages accredited water testing laboratories to support regulatory compliance.

- **Regulatory requirement** of Heterotrophic Plate Count (HPC) or Standard Plate Count (SPC) testing on all swimming pools, cooling towers and water fountains
- **Accredited water testing** laboratories supports regulatory compliance with competent testing capabilities and facilities

Pacific Accreditation Cooperation (PAC)

Association of accreditation bodies and other interested parties whose objective is to facilitate trade and commerce among economies in the Asia Pacific region

Merger with Asia Pacific Accreditation Cooperation (APLAC), by 2019

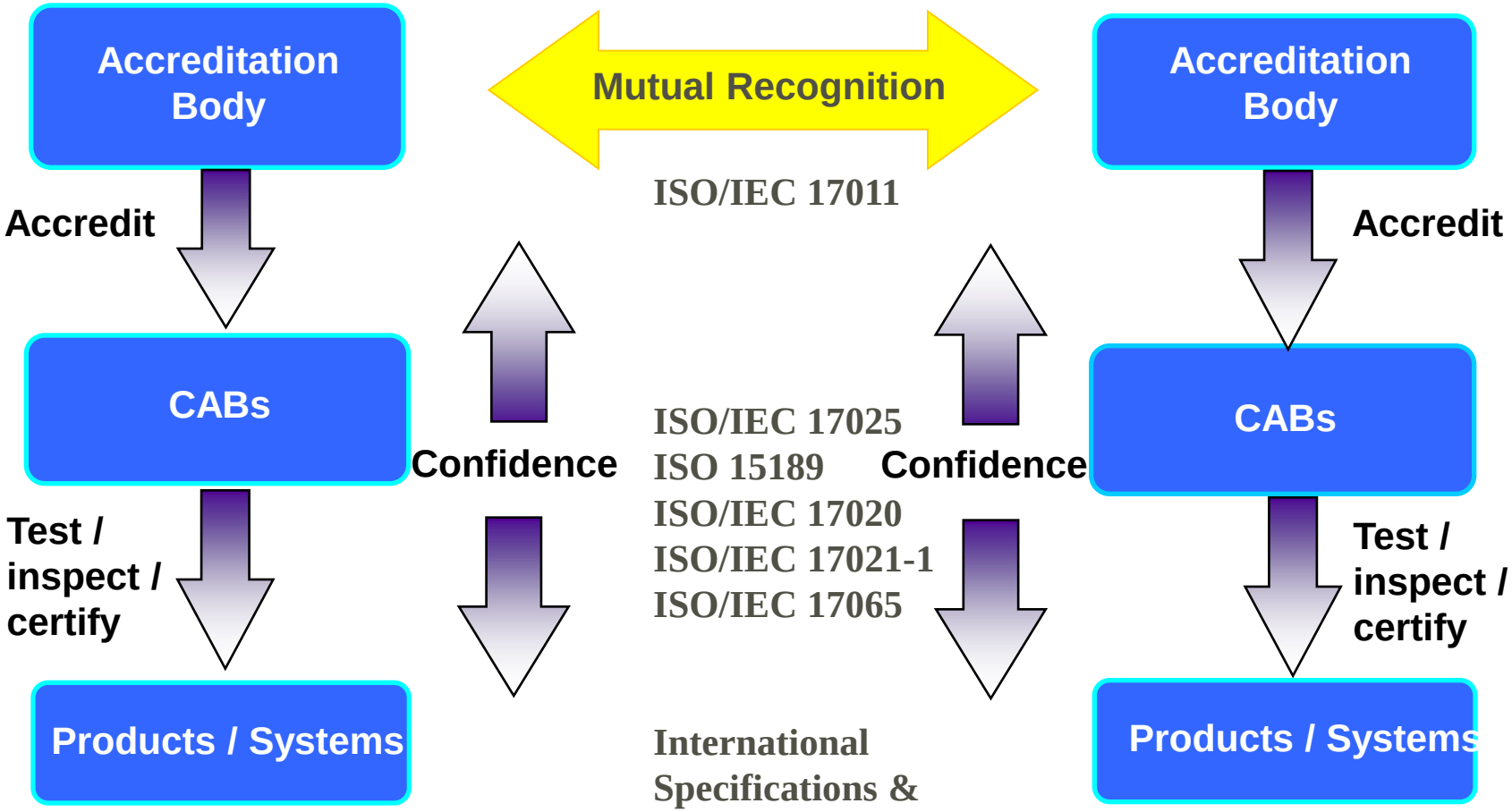
PAC MLAs for Mgt Systems, Product, GHG, Persons

Periodic peer evaluation ensures confidence on equivalence of accreditation results

34 Full Members, 25 Signatories to the PAC MLA in 22 economies

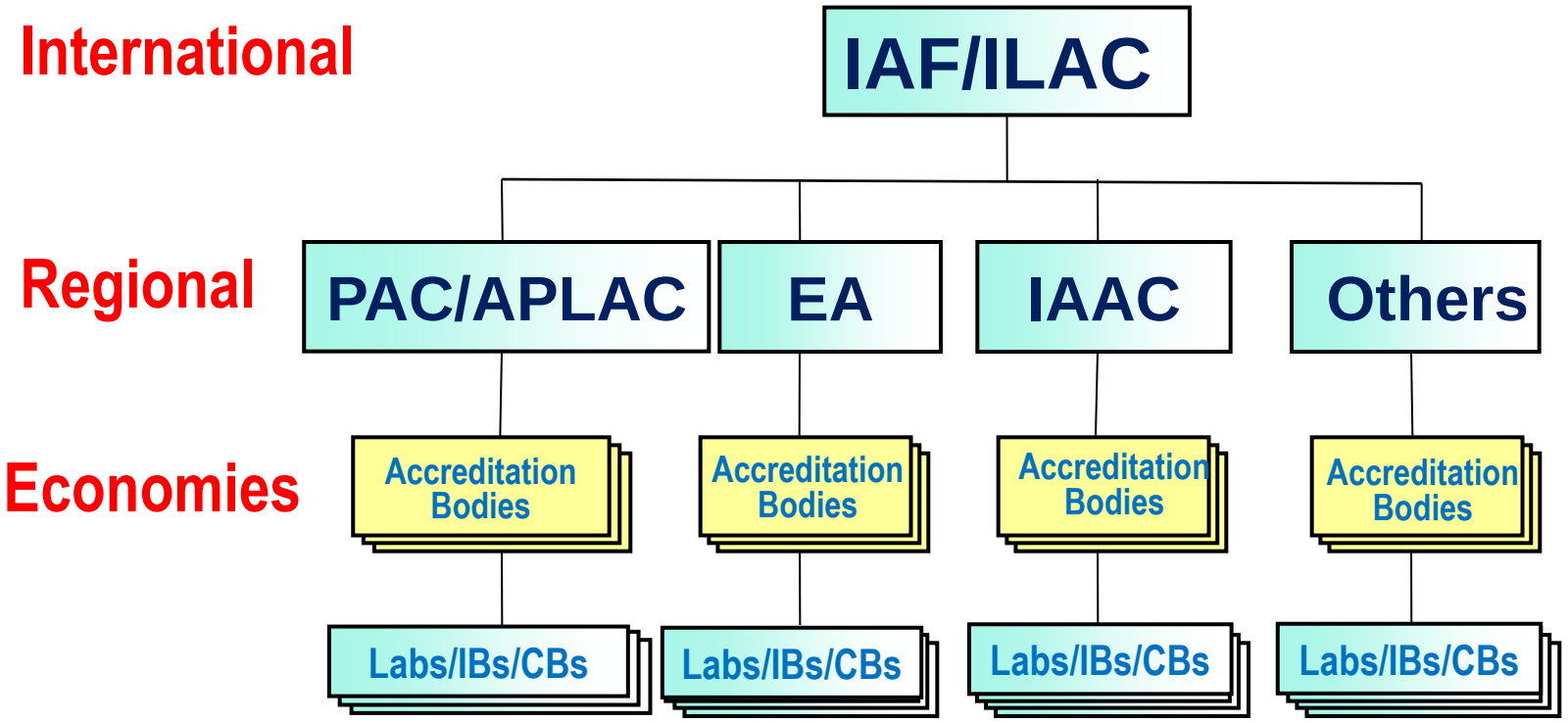
PAC undertakes the peer evaluations of its member bodies and promotes the international acceptance of accreditations based on the equivalence of their accreditation programmes

Mutual Recognition Arrangement (MRA)



World Accreditation Structure

Global mutual recognition through arrangements of international and regional co-operations



PAC Multilateral Mutual Recognition Arrangements

	Structure of the PAC MLA								
	Level 1	ISO/IEC 17011							
Main Scope	Level 2	Management Systems Certification					Product	GHG Validation Verification	Persons
	Level 3	ISO/IEC 17021-1					ISO/IEC 17065	ISO 14065	ISO/IEC 17024
Subscopes	Level 4	ISO/IEC 17021-3	ISO/IEC 17021-2	ISO TS 22003	ISO/IEC 27006	ISO 50003	GLOBAL G.A.P. IFA General Regulations	N/A	N/A
	Level 5	ISO 9001 QMS	ISO 14001 EMS	ISO 22000 FSMS	ISO/IEC 27001 ISMS	ISO 50001 EnMS	GLOBAL G.A.P. IFA CPCCs	N/A	N/A

MRA in the pipeline: OHS Mgt System (ISO 45001), Medical Devices Quality Mgt System (ISO 13485), FAMI-QS and Persons IPS as subscopes to its MLA

Thank you!