Asia-Pacific
Economic Cooperation

2018/SCSC/WKSP1/011
Session: Panel 2

Building Standards and Conformance Competencies

Submitted by: Singapore

APEC 2018
PAPUA NEW
GUINEA

APEC-IEC-ISO Joint Workshop on Developing Competence Requirements and Career Path for Standards Professionals
Singapore
23-24 January 2018

SPRING singapore
Enabling Enterprise

Building Standards and Conformance Competencies

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Outline

1. Introduction
2. Developing a Workforce Competent in S&C
3. Examples of Initiatives
4. Issues and Opportunities

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SPRING Singapore's Vision and Mission

VISION

Global Singapore Enterprises

MISSION

To help Singapore enterprises grow and to build trust in Singapore products & services

STRATEGIC OUTCOMES

- **Productive, innovative and resilient industries & enterprises**
- **Good jobs**
- **Trusted products and services**

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Singapore Standards Council

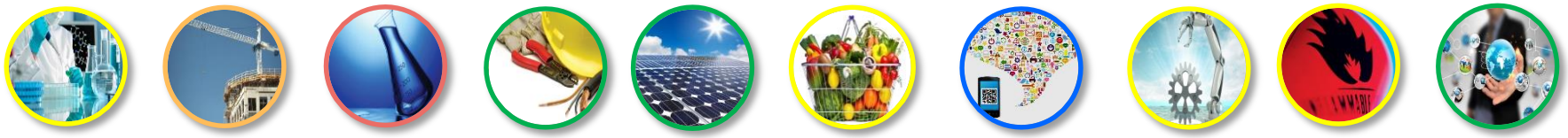
SINGAPORE STANDARDS COUNCIL

- Coordinating Committee for Smart Nation (CCSN)
- Coordinating Committee for Silver Industry (CCSI)
- Standards Promotion Committee

Secretariats:

SPRING | IDA | IES | SCIC | SMF

STANDARDS COMMITTEES



Biomedical & Health | Building & Construction | Chemical | Electrical & Electronic | Environment & Resources | Food | Information Technology | Manufacturing | Quality & Safety | Services

60 TECHNICAL COMMITTEES

90 WORKING GROUPS

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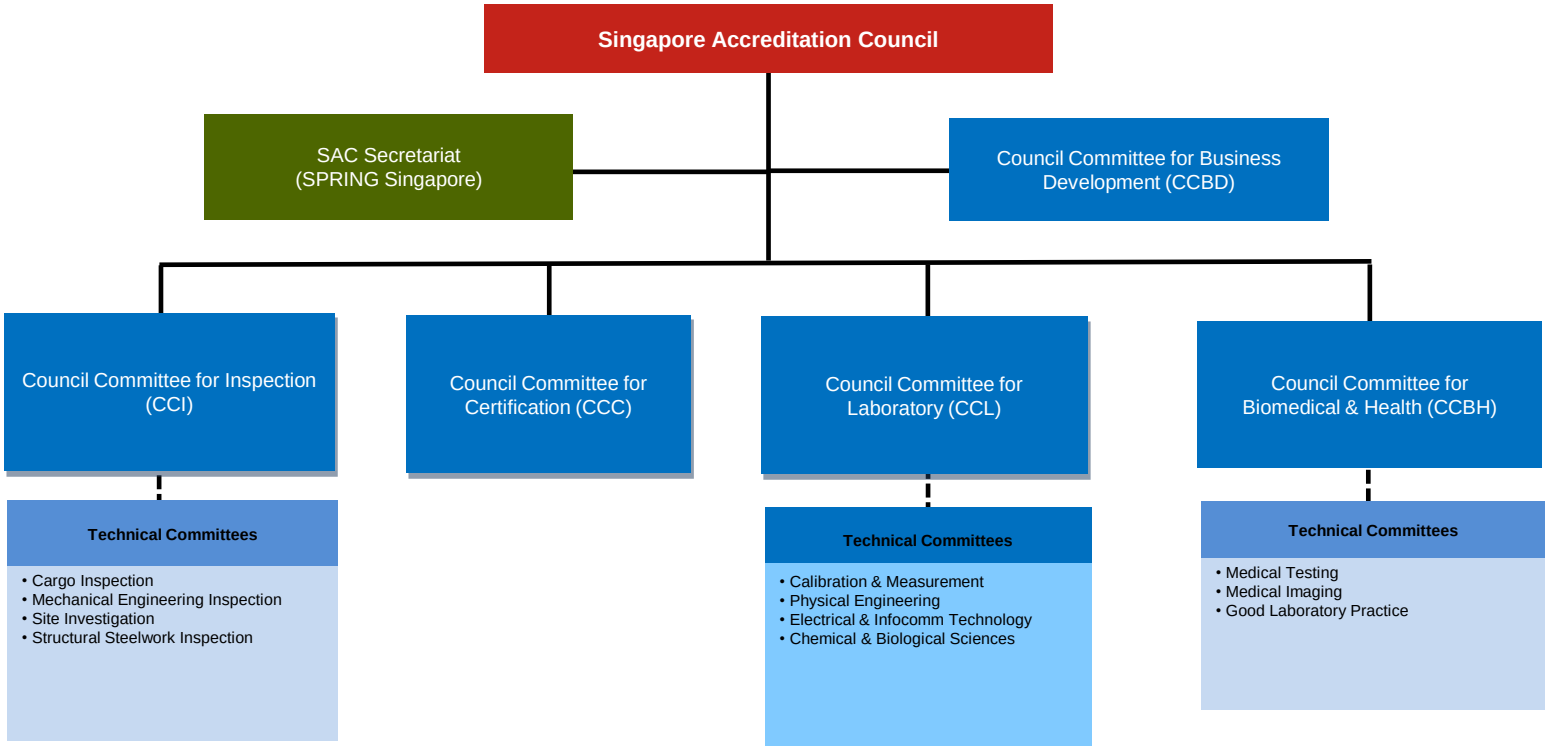
Singapore Accreditation Council



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Our Vision – Quality and Standards 2020

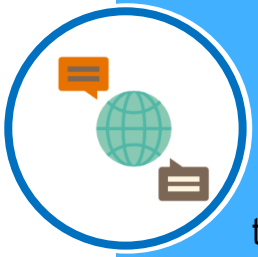
"Quality and Standards as a Key Pillar of the Future Economy "

Emerging Areas

Support enterprises to leverage Q&S for innovation and opportunities in emerging areas

Industry Transformation

Work with industry leads to identify gaps that can be addressed through Q&S to support transformation efforts



Leverage International and Regional Fora

Strengthen the Singapore brand and reduce technical trade barriers for market access

Develop a Q&S-Competent Workforce

Build a workforce equipped to use Q&S practises for strategic growth

Work through Partners

- Economic Growth
- Productivity & Competitiveness
- Market Access
- Health, Safety & Environment

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Economic Growth | **Productivity & Competitiveness** | **Market Access** | **Health, Safety & Environment**

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Key Objective

To enhance effective utilisation of S&C for business growth through quality assurance, productivity and innovation

Key Outcomes

Enable Enterprises

Build Skills & Competencies

Key Partners

Business Leaders and BDMs

Trade Associations and Chambers

Institutes of Higher Learning

Industry Professionals

Government Agencies

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National Initiatives

Incorporate critical S&C knowledge in sectoral **Skills Frameworks**, which is an integral part of SG's **industry transformation and manpower plan**

For the industry, by the industry:
Developed by the government in partnership with employers, industry associations, unions and professional bodies

Addressing over 25 sectors:
Highlights career pathways, skills and competencies required for job roles. *S&C knowledge and skills are included within respective sectors*

Industry Engagement

Strengthen workforce competency in S&C through **partnerships with industry multipliers**

Leverage industry partners:
Work with key trade associations to organise industry dialogues and workshops for business leaders, which address market insights and industry best practices

Work with other key government agencies:
Work closely with other agencies to scope and support industry-led initiatives, and incorporate S&C-related outcomes where relevant

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Young Standards Professionals

To develop **standards professionals** equipped with S&C competencies, and hence build a **pipeline of experts** whom can be involved in future standardisation activities

Organise introductory workshops:
Work closely with SDOs to organise awareness workshops introducing our standardisation programme

Organise standards induction workshops:
Invite the YPs who had expressed interests to join the Singapore standardization programme as observers

Institutes of Higher Learning

To provide resources to build S&C content into curriculum programmes and materials

Importance of S&C for businesses and industry development:
Use of case studies in Business classes to show how S&C is incorporated in business' strategy, and sector-specific knowledge can be incorporated in Engineering courses

Co-develop certification and diploma programmes for industry professionals
Develop diploma programmes preparing lab specialists and graduates for work in accredited laboratories

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Successful S&C Case Studies

Promoting customer satisfaction with standards

Kah Hong Hardware Engineering Pte Ltd is using standards to improve customer service and boost revenue.

For more than 25 years, Kah Hong Hardware Engineering has built its success on long lasting relationships with its customers. But as customer expectations rise and deadlines for housing, rail and other infrastructure projects become more urgent, the company has to work even harder to fulfil its orders and maintain customer satisfaction.

Kah Hong is a family run business that has been supplying hardware tools and safety equipment to the construction, industrial and marine industry since 1989. Its fleet of trucks dig on district-to-
products to sites across Singapore every
achieve their targets.

"On occasion when things go wrong, th
delivered because staff have not been
of the product order," says the company
Hsien. "These are costly mistakes for
they can delay projects."

So in 2014, the company decided to implement ISO 9001 – an international standard that helped the company improve its processes and manage its business more effectively by putting in place a quality management system. A quality management system is a combination of business policies, processes and procedures that ultimately drive improved business performance.

Customer focus

"Thanks to the process of implementing ISO 9001, we identified various areas of our business that needed attention," says Mr Boon.

For example, the company realised it needs to put in place a formal process to record customer orders. "Now our staff know exactly the right questions to ask when our customers call, and this helps us provide them with the materials they need, when they need them," he explains. "We also asked them to send us

FRESHENING TAK ON STANDARDS

Freshening Industries leverages international standards, to achieve

Freshening Industries, a leading local manufacturer of disposable wet paper towels, attains international standards, bringing assurance of its supply chain resilience and conformity to the highest industry standards.

INTERNATIONAL STANDARDS

- ISO 9001 – Quality Management System Standard
- ISO 22301 – Business Continuity Management System Standard
- ISO 28000 – Supply Chain Security System Standard
- ISO CLASS 8 – Cleanroom Standard

ORGANISATIONAL BENEFITS

- Efficient processes
- Secure supply chain
- Increased market share through internationalisation
- High quality and differentiated products
- Organisational resilience
- Customer assurance and satisfaction

BUSINESS SUCCESS

- Markets and distributes 14 brands of wipes and food service products
- Gained foothold in more than 2,500 food services, healthcare and hospitality facilities
- Exports to 35 countries globally
- 140 employees worldwide

COMPANY
Chew's Group Limited

STAFF STRENGTH – 150

INDUSTRY
Food Manufacturing

CORE BUSINESS
- Producer of fresh eggs, including designer eggs and generic eggs, as well as pasteurised liquid eggs

STANDARDS & CERTIFICATIONS
- ISO 22000 Food Safety Management System Standard

Certified success with globally recognised standards

Chew's Group Limited (Chew's) is one of Singapore's leading producers of fresh eggs. With over 30 years' experience, the company has built a reputation for good quality, safe and wholesome egg products.

Chew's produces up to 450,000 fresh eggs a day. Its offerings include generic eggs as well as 'designer' eggs for health-conscious consumers, and pasteurised 'liquid' eggs.

CHALLENGE & SOLUTION

Recently, with business costs on the rise in Singapore, the company decided that it would need to expand its business in order to stay competitive.

"Over 70% of the eggs come from Malaysia," says Mr Chew Chee Bin, Chew's Group's Executive Chairman. "We knew that if we didn't diversify, we wouldn't survive in this industry." As a first step, the company decided in 2014 to adopt the ISO 22000 standard with support from SPRING's Capability Development Grant. The international standard puts in place a food safety management system to help ensure a company has effective processes and procedures that guarantee food quality and safety along the food chain.

"It assures our customers of our commitment to producing wholesome, safe and hygienic eggs," Mr Chew explains. Implementing ISO 22000 meant the company had to review its production process, as well as validate its cleaning procedures and measuring equipment with an accredited conformity assessment body.

Since adopting ISO 22000, we have increased exports of our egg products to Hong Kong, and now supply to all the major supermarkets there.

Mr Chew Chee Bin
Executive Chairman, Chew's Group Limited

to take the necessary next steps in expanding its production activities.

BENEFITS

"After we had adopted the standard and worked with the food safety and quality control system for a while, we felt more confident about expanding our business offerings, explains Mr Chew. "Subsequently, we produced chicken stock."

The results speak for themselves. The company's production capacity has improved and it has seen an increase in customers, sales and brand recognition.

"We have increased exports of our egg products to Hong Kong, and now supply to all the major supermarkets there.

As consumers become more knowledgeable about food safety, nutrition and health, Chew's believes that ISO 22000 will have a bigger role to play. "With standards, we've been able to boost customer loyalty as they are more confident in the quality of our products. We

ABOUT ISO 22000

ISO 22000 Food Safety Management System is an international standard that establishes a set of systems and controls for food safety and hygiene for companies involved in food production, and covers food processing equipment, packaging materials and ingredients.

For information on how SPRING can help your company adopt standards, visit www.spring.gov.sg/EGS.

To purchase international

A RECIPE FOR SUCCESS

OOD QUALITY AND AFETY STANDARDS

The Soup Spoon delivers trusted products and is globally competitive with ISO 22000, Food Safety Management System Standard.

How to deliver trusted products?

1. **Implement Food Management System** – Establish best practices such as: Regular microbial tests; Regular cleaning schedule; Temperature control; Staff training
2. **Ensure Good Traceability** – Put in place well-documented processes for inventory tracking of raw materials to finished products
3. **Ensure Safety and Quality of Products** – Conduct regular visual checks and sending for laboratory tests
4. **Exceed Customers' Expectations** – Achieve high standards and maintain commitment to customers

How to be globally competitive?

5. **Leverage International Standards** – Adopt widely recognised international standards to gain customers' confidence
6. **Use Innovative Packaging** – Research international trends and developed innovative packaging to extend shelf life
7. **Ensure Quality Control** – High pressure processing and stringent internal quality controls for optimal freshness

ISO

The Soup Spoon!

The Quality

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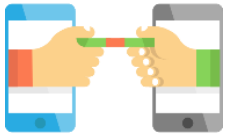
Key Issues:



Partners lack access to network of experts

Content development is resource intensive and has long lead time

Partners are interested but may have too many priorities

Opportunities for Collaboration:

Continued sharing of resources and best practices

Cross pollination of ideas and suggestions on the way forward

Support and drive common, strategic areas of interests

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Thank You

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