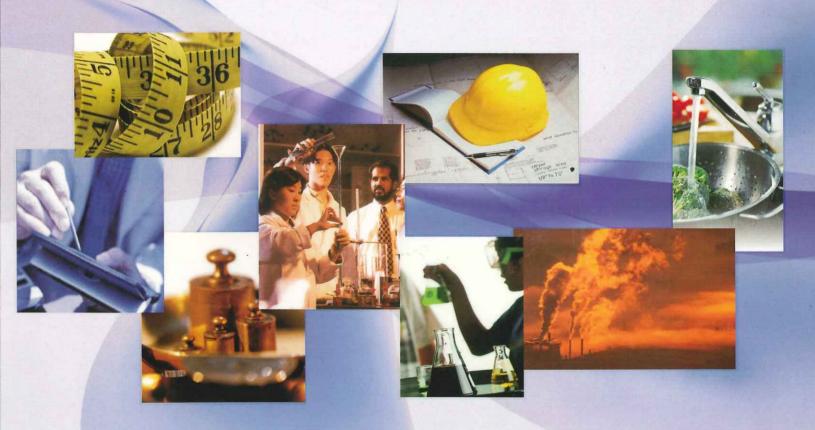
# the world of STANDARDS



Prepared for Malaysia (DSM)



Ministry of Science Technology and Innovation



Compiled and prepared by: The Malaysian Association of Standards Users



# foreword

The Malaysian Association of Standards Users is honoured to be given the responsibility to put together this publication on standards for the education of the general public. This book titled the World of Standards is aimed at the consumers at large.

The contents are arranged in such a way to facilitate easy reference and not to overwhelm consumers with tech-heavy contents. This book is an enhancement of a previous publication titled 'A to Z on Standardisation for the Consumer'.

In order to enhance consumer participation and involvement in providing valuable inputs to the standards development work in Malaysia, consumers must be well versed with the terms and definitions of standards and standardisation. This will enable them to participate actively.

Consumers must be active stakeholders in the standards development process and not just be at the receiving end. Otherwise standards will not have relevance, credibility and acceptance among users and consumers alike. Without acceptance, voluntary standards will be irrelevant even to the industry players. Consumers will lose two very important rights — the right to choose and the right to have the correct information before deciding on their purchases.

Standards Users hope to develop more beneficial and interesting publications and other promotional activities with DSM to educate consumers on the importance of standards.

Marimuthu Nadason

Jumes

President

The Malaysian Association of Standards Users

# message

Standards have always been an integral part of our daily lives but many may not have realized it. They have yet to appreciate how standards have ensured that our lives are better organized, dynamic and in many ways safer.

The Department of Standards Malaysia (DSM), an agency under the Ministry of Science, Technology and Innovation, has embarked on promoting awareness on the importance of standards and standardisation among the general public. Through this knowledge, consumers can drive businesses to embrace relevant standards which help to ensure safe and healthy consumer products and services.

As with other promotional efforts such as the essay writing competition on standards, this publication, the 'World of Standards', is targeted at the general public.

The book is an improved version of the A-Z on Standardisation for the Consumers, 2002, prepared for DSM by the Federation of Malaysian Consumers Associations (FOMCA). The content has been improved to include more graphics to provide interesting reading for the general consumers.

The book is divided into six sections:

- Accreditation
- 2. Certification
- Consumers and Standards

4. General

- 5. Standardisation
- 6. Standards Related Bodies

DSM believes that this book will also serve as one of the resource materials to improve the understanding and awareness of standards among consumers.

Fadilah Baharin

Director General

The Department of Standards Malaysia (DSM)

Ministry of Science, Technology and Innovation (MOSTI)

# accreditation

### Accreditation

- Accreditation means third party attestation relating to the conformity assessment bodies, i.e. testing and calibration laboratories, certification and inspection bodies. They have been assessed against internationally recognized standards to demonstrate their competency, impartiality and performance capability.
- Accreditation provides confidence in the credibility and competence of a conformity assessment body as a provider of certification, inspection and testing services.
- Accreditation is a term wrongly used in terms of ISO 9000 or ISO 14000 certification. Instead of certification, many people tend to use the term ISO 9001 or ISO 14000 accredited, which is wrong.



 Accreditation is given to certification bodies to qualify them to certify an organisation.

# **Accreditation Body**

- Authoritative body that performs accreditations, for example DSM (Malaysia's national accreditation body) gives
  official recognition to organisations with technical capabilities to carry out conformity assessment activities, i.e.
  certification, testing and calibration (laboratory) and inspection.
- DSM works based on ISO/IEC 17011:2004, Conformity assessment General requirements for accreditation bodies accrediting conformity assessment bodies.
   DSM is an agency under the Ministry of Science, Technology and Innovation.
- Other Accreditation bodies elsewhere in the world are UKAS-United Kingdom Accreditation Services, Joint Accreditation System, Australia & New Zealand (JAS-ANZ), among others.





# accreditation

### **Accredited**

Approved as complying with a prescribed standard for a certain conformity assessment activity.

### **IAF** - International Accreditation Forum

The International Accreditation Forum, Inc. (IAF) is the world association of Conformity Assessment Accreditation Bodies and other bodies interested in conformity assessment in the fields of management systems, products, services, personnel and other similar programmes of conformity assessment.



Malaysia is also a member of the IAF through DSM.

### SAMM - SKIM AKREDITASI MAKMAL MALAYSIA

### or National Laboratory Accreditation Scheme

- Laboratory accreditation based on ISO/IEC 17025 (formerly ISO/IEC Guide 25) was introduced in Malaysia on 1 July 1987.
- This was followed by the introduction on 15 August 1990 of a national unified laboratory accreditation scheme, known as Skim Akreditasi Makmal Malaysia (SAMM).
- The SAMM scheme was initially administered by a SAMM National Council that is directly under the authority of the Ministry of Science, Technology and Innovation (MOSTI).
- The primary objective of SAMM is to provide a credible accreditation service to testing and calibration laboratories and test houses such that ultimately SAMM endorsed test and calibration certificates are accepted internationally.

# accreditation

 The accepted mechanism for international recognition is by means of Mutual Recognition Arrangements framework of the International Laboratory Accreditation Co-operation (ILAC) and Asia Pacific Laboratory Accreditation Co-operation (APLAC).

# **UKAS - United Kingdom Accreditation Service**

 The United Kingdom Accreditation Service is the sole national accreditation body recognized by government to assess organisations that provide certification, testing, inspection and calibration services against internationally agreed standards.







### **Audit**

- A systematic, independent and documented process for obtaining evidence of conformity and evaluating it objectively to determine the extent to which set criteria are fulfilled.
- Quality audits examine the elements of a quality system in order to evaluate how well these elements comply with quality system requirements.
- For example, SIRIM QAS International Sdn. Bhd. conducts product certification audit to ensure that only products which meet certification standards are manufactured or produced.

There are generally three types of management system audits:

- > First party audit or an internal audit is carried out by the person or organisation on itself.-These organisations will have formally trained staff to conduct the audits as a form of self assessment.
- > Second party audit is carried out by a person or organisations that has a user interest in the products or services. For example, McDonalds conducts quality system audits on its meat suppliers.
- > Third party audit is carried out by a person or body that is independent of the organisation being audited. Eq. SIRIM QAS
  - International conducting certification audit on an automobile parts supplier for ISO 9001:2000 certification purposes.



SONA CRACKERS SDN BHD

EMS AUDIT REPORT

> Prepared By: LRJS Pte. Ltd

12 Sept. 2000

### **Auditor**

• A person who is competent (through education, qualification, skills and experience) to conduct audits based on requirements of relevant standards implemented by another person or organisation being audited.

### Certification

 Procedure by which a third party gives written assurance that a product, person, process or service conforms to specified requirements. (Example of specific requirements: MS ISO 14001 (EMS), MS 1: 1996 - Specification for protective helmets for vehicle users, OHSAS 18001 for occupational health and safety management system.

# **Certification Body**

- A certification body is an impartial governmental or private legal entity possessing the necessary competence and reliability to operate a certification system.
- Certification bodies include bodies which offer \*:
  - Quality system certification (ISO 9001);
  - Environmental management system certification (ISO 14001, EMAS, Green Globe 21, etc.);
  - O Product certification (MS ISO 4001-1:2002 Passenger car tyres);
  - Food safety certification (HACCP / ISO 22000);
  - O Information security system certification.

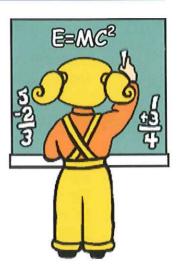




<sup>\* (</sup>See appendix for the list of certification bodies operating in Malaysia and accredited by DSM)

# **Competency**

 ISO 9000:2000 defines competence as the demonstrated ability to apply knowledge and skills. Competency is a combination of education, skills, experience and qualification.



# Compliance

Acting according to certain accepted standards (complying with standards).

# Conformity

- Conformity is about meeting requirements. (Standards state many requirements).
- If products, services, process or organisations meet these requirements, they conform to these requirements.
   When the requirements are not met or not fully met it is called non-conformity/non-conformance/non compliance.

# **Conformity Assessment**

- Conformity assessment is the demonstration that specified requirements relating to a product, process, system, person or body are fulfilled.
- Conformity assessment provides benefits to manufacturers and service providers, consumers and government regulators, as well as to international trade in general.
  - O For manufacturers and service providers, having their products assessed and certified as conforming to certain standards allows them to distinguish themselves from less reputable suppliers.
  - O Consumers benefit from conformity assessment because it provides them with a basis for selecting products or services. They may have more confidence in products or services that bear a mark or certificate of conformity that attests to quality, safety or other desirable characteristics.
  - O Regulators too benefit from conformity assessment which gives them a means of enforcing health, safety and environmental legislation.
- ISO and the World Trade Organisation work increasingly closely to ensure that the above benefits are realized.

### Consultant

- A consultant provides advice on the implementation of standards for product certification, management systems and risk assessment.
- ISO 10019:2005 'Guidelines for the selection of quality management systems consultants and use of their services' provides guidance on the factors to be considered when selecting a quality management system consultant.
- The selection of a consultant by an organisation is important to ensure that the resulting quality management system is capable of meeting the organisation's planned objectives in the most efficient and effective manner.

However, engaging a consultant is not mandatory. An organisation which has the capabilities in adopting/implementing certain standards may not require consultancy services.

### **Corrective Action**

- Corrective actions are steps taken to remove the causes of an existing nonconformity.
- Corrective actions address existing problems.



### Customer

 A customer is anyone who receives products or services from a supplier. An organisation generally has internal and external customers.

### **Documents**

 The term document refers to information and the medium that is used to bring the information into physical appearance (ISO 9001:2000).



### Dossier

 Originated from French word 'dos'. It means a collection of papers giving detailed information about a particular person or subject.



# **Eco-Labelling**

- Eco-labelling is a voluntary method of environmental performance certification and labelling that is practised around the world.
- An eco-label is awarded by an impartial third-party in relation to certain products or services that meet environmental criteria stated by standards for ecolabelling.
- There are many different voluntary and mandatory environmental performance labels and declarations. The International Organisation for Standardisation (ISO) has identified three broad types of voluntary eco-labelling fitting under the Type I designation (see below).
- Voluntary Environmental Performance Labelling ISO Definitions
  - O Type I a voluntary, multiple-criteria based third party program that awards a license authorizing the use of environmental labels on products indicating overall environmental preferability of a product based on life cycle considerations.
  - O Type II informative environmental self-declaration claims.
  - O Type III voluntary programs that provide quantified environmental data of products under pre-set categories of parameters set by a qualified third party and based on life cycle assessment, and verified by that or another qualified third party.







# **Environmental Management System**

- An Environmental Management System (EMS) is a set of processes and practices that enable an organisation to reduce its environmental impacts and increase its operating efficiency.
- The European Union has EMAS, or the Eco-Management and Audit Scheme, as its standard requirement for EMS. This was introduced by a European Union Council regulation (No.1836/93), requiring implementation in all European Union Member States. (\*taken from www.europa.eu.int)





Examples of international standards for EMS is the ISO 14000 series, Green Globe 21 etc.



### **Food Safety Management System**

- This is a system to manage risk in food handling and processing.
- An effective food safety management system based on a proven standard will help organisations achieve both safety and business goals.
- A common foundation for building a food safety management system is based on HACCP, or Hazard Analysis and Critical Control Point methodology. Other standards for safe food management systems are based on British Retail Consortium (BRC) and the ISO 22000.

# Food not covered





# Forest Management and Chain of Custody

- Forest management certification involves an inspection of the forest management unit by an independent FSC accredited certification body to check that the forest complies with the internationally agreed FSC Principles of Responsible Forest Management.
- The Forest Stewardship Council (FSC) is an international network to promote responsible management of the world's forests.
- FSC brings people together to find solutions to the problems created by bad forestry practices and to reward good forest management.
- If the forest complies with FSC standards, then the FSC accredited certification body issues a certificate for the
  operation. Certified forest operations can claim that the forest products they produced come from a responsibly
  managed forest.
- Chain of custody certification provides guarantee about the production of FSC-certified products.

From a customer perspective, the FSC label represents a promise that the operations have been independently verified by FSC chain of custody certification.



# **GAP - Good Agricultural Practice**

 Good Agricultural Practices refer to any collection of specific methods which when applied to agriculture, produce results that are in harmony with the values of the proponents of those practices.



# **Good Manufacturing Practices**

- Good Manufacturing Practice is an international set of guidelines to ensure the safety of manufactured food, drugs and medical devices, among others.
- GMP techniques involve regulating and documenting the production environment.

# **HACCP - Hazard Analysis and Critical Control Point**

- Hazard Analysis and Critical Control Point (HACCP) is a systematic method used in the food industry to identify potential food safety hazards, so that actions can be taken to reduce or eliminate the risk of the hazards being realised.
- The system is used at all stages of food production and preparation processes.



### Hazards

- In terms of food safety, hazard is a source of potential danger present in food. General meaning of hazard indicates a chance of being injured.
- With regards to safety of food, pharmaceuticals, cosmetics etc., hazard is classified into three:
  - O Biological hazard danger posed by presence of germs (micro-organisms) and parasites (worms, insects infestation etc.);



- O Physical hazard presence of foreign material not fit for human consumption (example: wood slivers, glass pieces, plastic pieces, stones, threads, etc.);
- O Chemical hazard presence of hazardous chemicals and those not intended for human consumption such as detergents, pesticides, lubricant oil, banned additives etc.

The Occupational Health and Safety Management System (OHS 18001) also identifies potential hazards at places of work. The system is implemented to eliminate, minimise or isolate the hazard/s identified.

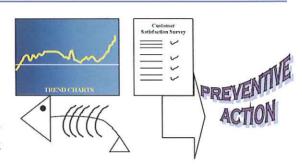
# Occupational Safety and Health (OSH) standards

- Occupational Safety and Health standards have been developed worldwide following many work place accidents and disasters, especially in mines.
  - These standards require conditions, or the adoption or use of one or more practices, means, methods, operations, or processes, reasonably necessary or appropriate to provide safe and healthy employment and places of work.



### **Preventive Action**

- Preventive actions are steps taken to make quality improvements to remove the causes of potential nonconformities.
- Preventive actions address potential problems that have yet to occur. In general, preventive action can be thought of as a risk analysis process.

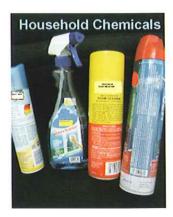


### **Product Certification**

- A scheme where certification bodies such as SIRIM QAS International Sdn Bhd certify products based on relevant product standards.
- Examples of these products are three pin plugs, power cable, tyres, chilli sauce, etc.

## **Product safety**

- Product safety are characteristics of products which will ensure safety and health of users (consumers).
- Standards for safety and health outline such characteristics for products, services or organisations to comply with.

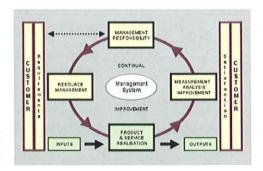


# Quality

- ISO 9000 definitions characteristics that make products or services fit for their purposes. A good quality product
  must be reliable, useable and repairable, among others. Similarly, service should be courteous, efficient and
  effective.
- In short, quality is a set of desirable characteristics that meet the needs and expectations of customers.

# **Quality Management System**

- ISO 9000 defines quality management system as a web of interconnected processes. Each process uses resources to turn inputs into outputs.
- All processes are interconnected by means of many input-output relationships.
  - O Every process generates at least one output, and this output becomes an input for another process. These input-output relationships bind all of these processes together and that's what makes it a system.



### Records

 According to ISO 9000, a record is a document that contains objective evidence of how well activities are being performed or what kind of results are being achieved. Records always document what has happened in the past.

### Consumers

- According to the Malaysian Consumer Protection Act 1999, consumer means a person who:
  - acquires or uses goods or services of a kind ordinarily acquired for personal, domestic or household purpose, use or consumption; and
  - O does not acquire or use the goods or services, or hold himself out as acquiring or using the goods or services, primarily for the purpose of
    - > resupplying them in trade;
    - consuming them in the course of a manufacturing process; or
    - > in the case of goods, repairing or treating, in trade, other goods or fixtures on land;



# Consumer Protection Act 1999 - Malaysia (CPA 1999)

- CPA 1999 is meant to protect the interests of consumers, for example by requiring businesses to disclose detailed information about products, particularly in areas where safety or public health is an issue, such as food.
- This Act prohibits misleading and deceptive conduct, false representation and unfair practice.
- The Act empowers the Minister to make regulations to prescribe safety standards in respects of goods and services. Under its provisions, the Minister may declare any good to be prohibited good where it has caused or is likely to cause injury to any person or damage to property, or is otherwise unsafe.
- The Ministry of Domestic Trade and Consumer Affairs administers several other Acts, which also protect the interest of consumers. These Acts are:

- O The Price Control Act, 1946;
- O The Control of Supplies Act, 1961;
- O The Trade Descriptions Act, 1972;
- O The Hire Purchase Act, 1967;
- O The Weights and Measures Act, 1972; and
- O The Direct Sales Act, 1993

These Acts have elements of consumer protection but they emphasise more on the punitive and preventive aspects.

### **Consumers International**

 Consumers International (CI) is a federation of consumer organisations dedicated to the protection and promotion of consumers' rights worldwide through empowering national consumer groups and campaigning at the international level. It currently represents over 230 organisations in 113 countries.



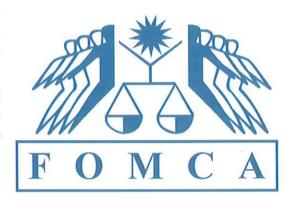
### COPOLCO

- This is ISO's committee on consumer policy
- It was established in 1978.
- ISO's objectives through COPOLCO are to:
  - study how consumers can benefit from standardisation;
  - O promote consumers' input to the development of standards, both nationally and internationally;
  - o encourage the exchange of experience on standards work of interest to consumers; and
  - O channel consolidated views from consumers both on current projects and on proposals for new work in areas of interest to them.
- Membership of COPOLCO is open to all ISO member bodies and correspondent members. Malaysia is also a member through DSM, an agency under the Ministry of Science, Technology and Innovation.

Two other international organisations have an official liaison with COPOLCO: Consumers International (CI) and the Organisation for Economic Co-operation and Development (OECD).

### **FOMCA**

- The Federation of Malaysian Consumers Associations (FOMCA) is a national non-governmental organisation, which is voluntary, non-profit, non-political, and civil minded. It is the umbrella body of registered consumer associations in Malaysia.
- FOMCA has represented consumer interests in the development of Malaysian Standards. In 2004, FOMCA with the support of the Department of Standards Malaysia (DSM) established the Malaysian Association of Standards Users (Standards Users).



# **Malaysian Association of Standards Users**

- The Malaysian Association of Standards Users is a non governmental, civil minded organisation. It was established to ensure that standards for consumer products are as comprehensive as possible and correspond to real consumer needs.
- Among the objectives of the association are:
  - encourage active participation of consumers as stakeholders in the development of standards; and
  - ensuring safety measures and benchmarks are incorporated into consumer product and services through usage of standards.



### AFTA - ASEAN Free Trade Area

- Members of ASEAN agreed in 1992 to create the ASEAN Free Trade Area (AFTA), a regional common market. It became effective in 1993.
- Tariffs among the six oldest ASEAN nations are to be phased out by 2007;
- The primary goals of AFTA are to:
  - Increase ASEAN's competitive edge as a production base in the world market through the elimination of 0 tariffs and non-tariff barriers within ASEAN; and
  - 0 Attract more foreign direct investment to ASEAN.

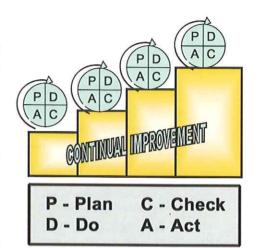
### **ASEAN**

- Association of Southeast Asian Nations (ASEAN), was established by the Bangkok Declaration (1967), linking the nations of Indonesia, Malaysia, the Philippines, Singapore and Thailand.
- Subsequently, Brunei (1984), Vietnam (1995), Laos (1997), Myanmar (1999), and Cambodia (1999) joined the organisation. The organisation's secretariat is in Jakarta.
- ASEAN seeks to promote socioeconomic progress and regional stability through, for example, political and economic cooperation in banking, trade, technology, agriculture, industry and tourism.



# **Continual Improvement**

- Continual improvement is a type of change that is focused on increasing the effectiveness and/or efficiency of an organisation to fulfil its policies and objectives.
- It is not limited to quality initiatives. Improvement in business strategy, business results and customer, employee and supplier relationships can be subject to continual improvement. Put simply, it means 'getting better all the time'.
- It is one of the principles of ISO 9001:2000 Quality Management System.



# **Continuous Improvement**

 Continuous improvement creates steady growth and improvement. It does this by keeping a business focused on its goals and priorities.



### **European Union**

- The European Union (EU) is a family of democratic European countries, committed to working together for peace and prosperity. It is not a State intended to replace existing States, nor is it just an organisation for international cooperation.
- It is an economic and political confederation of European nations and other organisations (with the same member nations) that are responsible for a common foreign and security policy and for cooperation on justice and home affairs.



 Twenty-five countries — Austria, Belgium, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Great Britain, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, and Sweden — are full members of the organisations of EU.

### **Food Irradiation**

- Food irradiation is the process of exposing food to ionizing radiation in order to disinfest, sterilize, or preserve it.
- Irradiation is subject to many controversies pertaining to safety.
- Labelling laws for irradiated food differ from country to country. In the US, as in many
  other countries, labelling regulations require the use of the Radura symbol at the
  point of sale together with the word "irradiated" or "treated by irradiation".



The Radura logo is used to show that food has been treated with radiation.

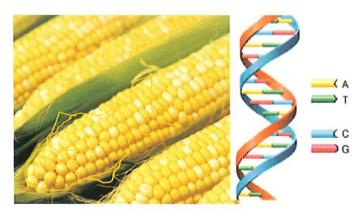
# **GATT - General Agreement on Tariffs and Trade**

- GATT is a former specialized agency of the United Nations.
- It was established in 1948 as an interim measure pending the creation of the International Trade Organisation.
- The agreement from the Uruguay Round in 1994 led to the creation of the more powerful World
   Trade Organisation (WTO) as a replacement for GATT, in 1995.



# **Genetically Modified Food**

- A genetically modified (GM) food is a food product containing some quantity of any genetically modified organism (GMO) as an ingredient.
- Genetic modification uses a special set of technologies to alter the genetic makeup of living organisms such as animals, plants or bacteria.
- Combining genes from different organisms is known as recombinant DNA technology, and the resulting organism is said to be "genetically modified," "genetically engineered," or "transgenic." GM products include medicines and vaccines, foods and food ingredients, feeds, and fibers.



### Would you buy GM foods?

- Do you believe that GM food can reduce poverty and eventually feed the world?
- Do you think GM food is safe?
- People are still not sure if it is safe for human consumption and to the environment.
   Would you consume or feed your children GM food?
- What do you think will happen to the environment if we plant GM crops?

# **MOSTI** - Ministry of Science, Technology & Innovation

- The Ministry of Technology, Research and Local Government was established in 1973. In order to reflect the government's emphasis on science and technology (S&T), the Ministry was revamped and renamed in 1976 as the Ministry of Science, Technology and Environment. In 2004, the Ministry was revamped and renamed as Ministry of Science, Technology and Innovation (MOSTI).
- MOSTI's mission is "to create a conducive environment for the advancement of science and technology as a means of generating knowledge, wealth and raise the quality of life through sustainable development."
- The Department of Standards Malaysia (DSM) comes under MOSTI.



MOSTI

# Non-governmental organisation

- A non-governmental organisation (NGO) is not a part of a government.
- The term is generally restricted to social and cultural groups, whose goal is not commercial.
- Some people consider the "NGO" label misleading, as it implies that anything that is "not government" is NGO.

# **Policy**

 Policy statement defines or describes an organisation's commitment and goals such as environment protection, quality, safety, human rights, women welfare etc.

# ABD Sdn Bhd QUALITY POLICY The company is dedicated to uphold the mission and its objectives to fulfill all customer expectations and the requirements of the ISO 14001 EMS standards to support sustainable consumption and clean production. John Doe Managing Director

### **Products**

- Anything that can be offered to a market to satisfy a want or need.
- However it is much more than just a physical object. It is the complete bundle of benefits or satisfactions that buyers perceive they will obtain if they purchase the product.
- It is the sum of all physical, psychological, symbolic and service attributes. Thus, safety is a need that has to be fulfilled to ensure consumer safety.









# Regulations

 Authoritative and specific rules or orders issued by a government agency that often have the force of law.



### **Services**

According to the Consumer Protection Act 1999, "services" include rights, benefits, privileges or facilities that are
or are to be provided, granted or conferred under any contract but does not include rights, benefits or privileges in
the form of the supply of goods or the performance of work under a contract of service.

# **SME - Small and Medium Enterprises**

Small and Medium Enterprises or SMEs. An enterprise is considered an SME based on the annual sales turnover
or number of full-time employees as shown in the tables on page 27.

### Based on the number of full-time employees:

	Primary Agriculture	Manufacturing (including Agro- Based) & MRS*	Services Sector (including ICT**)
Micro	Less than 5 employees	Less than 5 employees	Less than 5 employees
Small	Between 5 & 19 employees	Between 5 & 50 employees	Between 5 & 19 employees
Medium	Between 20 & 50 employees	Between 51 & 150 employees	Between 20 & 50 employees

### Based on annual sales turnover:

	Primary Agriculture	Manufacturing (including Agro- Based) & MRS*	Services Sector (including ICT**)
Micro	Less than RM200,000	Less than RM250,000	Less than RM200,000
Small	Between RM200,000 & less than RM1 million	Between RM250,000 & less than RM10 million	Between RM200,000 & less than RM1 million
Medium	Between RM1 million & RM5 million	Between RM10 million & RM25 million	Between RM1 million & RM5 million

<sup>\*</sup>MRS : Manufacturing-Related Services
\*\* ICT : Information and Communication Technology

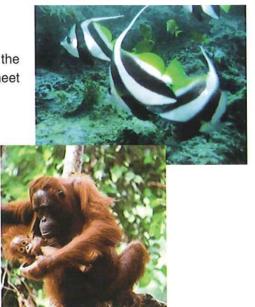
<sup>\*</sup>MRS : Manufacturing-Related Services
\*\* ICT : Information and Communications Technology

# **SR - Social Responsibility**

 Responsibility demonstrated by entities to show that they are contributing to the betterment of society at large and not just improving the bottom line.

# Sustainable Development

- Sustainable development is development that meets the needs of the present without compromising the needs of future generations to meet their needs. It contains two key concepts:
  - O The concept of needs, in particular the essential needs of the world's poor, to which overriding priority should be given; and
  - O The idea of limitations imposed by the state of technology and social organisation on the environments ability to meet present and future needs.

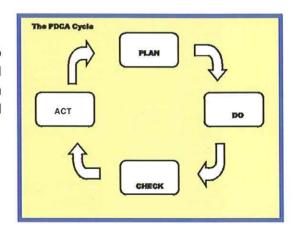


### TBT - Technical Barriers to Trade

- Technical Barriers to Trade (TBT) are regulations and/or standards governing the sale of products to national
  markets. Their objectives are to correct market inefficiencies due to aspects (externalities regional, national,
  trans-national or global) associated with the production, distribution and consumption of these products.
- For instance, technical trade barriers may be adopted when:
  - a country's regulators conclude that market mechanisms alone will fail to prevent or correct negative externalities that arise when imported goods may be accompanied by pests or diseases that may reduce domestic output and/or increase production costs; or
  - O regulators or industry representatives believe that information about the health, hedonistic, or ethical attributes of agricultural products is either unknown or asymmetrically distributed between producers and consumers, and the transaction costs of obtaining this information are prohibitively high for consumers; among others.

# **TQM - Total Quality Management**

 Total Quality Management (TQM) is a management strategy to instil awareness of quality in all organisational processes. TQM is not limited in its application and has been widely used in manufacturing, education, government, service industries, as well as NASA space and science programs

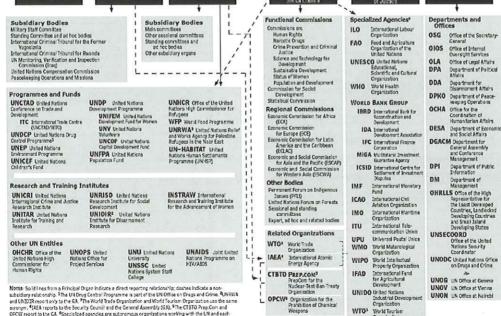


### **UN - United Nations**

- The United Nations was established immediately after World War II to replace the League of Nations. When the UN was founded in 1945, there were 51 members. Now 191 countries are members of the United Nations.
- The principal organs of the United Nations, as specified in the charter, are the General Assembly, the Security Council, the Economic and Social Council, the Trusteeship Council, the International Court of Justice, and the Secretariat.



# The United Nations system PRINCIPAL ORGANS Trusteesing Dornol Security Council General Assembly Specificance and Security Council General Assembly Specificance and Specifican



Secretarial

other through the coordinating machinery of the ECOSOC at the intergovernmental level, and through the Chief

Executives Board for coordination (CEE) at the inter-secretariat level.

# WTO - World Trade Organization

- World Trade Organisation (WTO) was established in 1995 after the final round of the General Agreement on Tariffs and Trade (GATT) negotiations, called the Uruguay Round.
- The WTO is responsible for monitoring national trading policies, handling trade disputes, and enforcing the GATT agreements, which are designed to reduce tariffs and other barriers to international trade and to eliminate discriminatory treatment in international commerce.
- The WTO is headquartered in Geneva and also holds international ministerial conferences; it has currently 147 members (2005).



# standardisation

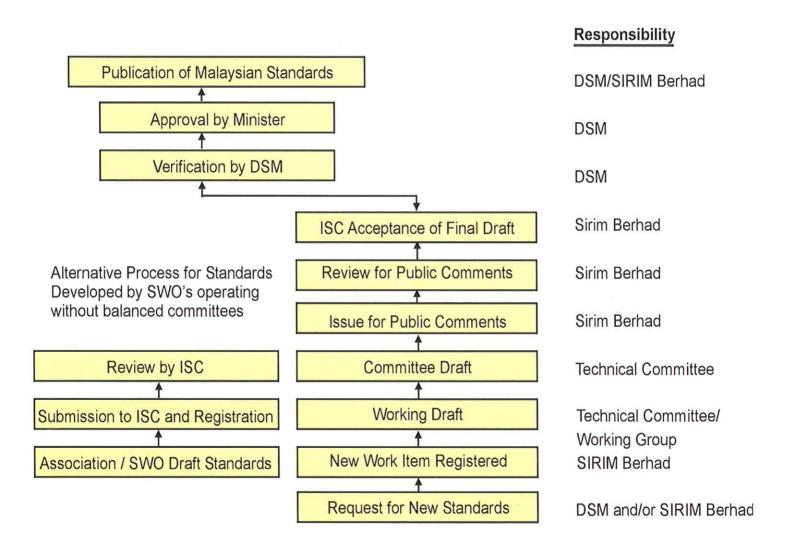
### **Code of Practice**

- Set of guidelines formulated by industry or management of an organisation or professional bodies. The guidelines state requirements such as how service should be provided by service providers or on the conduct of service providers.
- In the medical field, code of practice states, among others, the minimum requirements for a health check, clinical
  waste management, licensing etc. There are codes of practice for lawyers, doctors, nurses, safety officers, oils
  ridge operators, account auditors, IT professionals, etc.
- Codes of practice generally vary among countries but in some cases it is accepted industry wide. Some codes
  of practice have been adopted into local legislation, for example the requirements that must be fulfilled by legal
  and medical practitioners in Malaysia.

### **Draft Standard**

- Is a stage where a document (proposed standards) is being deliberated (available for comments or voting) before
  it is approved as a standard.
- For Malaysian Standards (MS), the figure on page 33 illustrates the process.

# standardisation



### **EMC - Electromagnetic Compatibility**

- Electromagnetic compatibility refers to the ability for an electronics system to function properly in its intended electromagnetic environment without causing interference.
- In particular, the aim of EMC is the correct operation of different equipments which involve electromagnetic phenomena in their operations.
- EMC must satisfy three criteria:
  - does not interfere with the operations of other systems;
  - it is immune from the emissions of other systems; and
  - it does not interfere with its own operation.
- An example of EMC standards used in Malaysia is the MS IEC 61000-3-12:2005; Electromagnetic compatibility (EMC) - Part 3-12: Limits - Limits for harmonic currents produced by equipment connected to public low-voltage systems with input current greater than 16 A and less than and equal to 75A per phase.

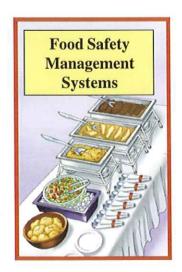


### EQA 1974 - Environmental Quality Act 1974

- EQA 1974 was enacted to prevent pollution and to enhance the health of the environment, or for other related purposes.
- The three strategies embodied in EQA 1974 are:
  - O the regulation of pollution;
  - O preventing and abating any form of pollution; and
  - O bringing the law and other environmentally-related laws into effect,

#### Food Act 1983

- Several Acts and Regulations ensure the safety and security of food consumed by the people in Malaysia.
- The Food Act 1983 and the Food Regulations 1985 form the backbone of the food safety programme
- Other legislation that have an impact on food safety are the Pesticides Act 1974, Fisheries Act 1983, the Veterinary Surgeon Act 1974 and the Animal Ordinance 1953. These laws are enforced by the Ministry of Agriculture and Agro-based Industry. Another important legislation is the Trade Description Act which comes under jurisdiction of the Ministry of Domestic Trade and Consumer Affairs.



#### Generic

Set of standards which does not state specific requirements and can be used by any organisation or process. It
is basically a set of general requirements, for example, the ISO 9001:2000 - Quality Management System
Requirements and Good Manufacturing Practices.

#### **ICS - International Classification of Standards**

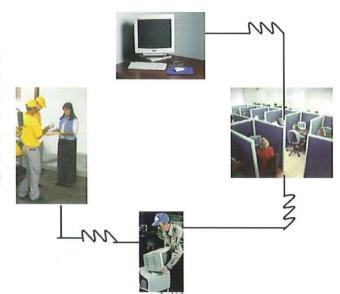
- The International Classification for Standards (ICS) is intended to serve as a structure for catalogues of international, regional and national standards and other normative documents, and as a basis for standing-order systems for international, regional and national standards.
- It may also be used for classifying standards and normative documents in databases, libraries, etc.
- ICS should facilitate the harmonisation of information and ordering tools such as catalogues, selective lists, bibliographies, and databases on magnetic and optical media, thus promoting the world-wide dissemination of international, regional and national standards and other normative documents.

### **Inter-changeability**

- A condition which exists when two or more items are capable of being exchanged one for the other without changing the ability to perform the same functions or fulfilling the same requirements.
- For example, nuts and bolts, which are made to particular standards enables a nut made by one manufacturer to fit a bolt made by another elsewhere. Another example is the removable disk, i.e. pen drive or thumbdrive which can be used on any computer with a USB port.

### Interconnectivity

- This term is used in the ICT industry where standards and standardisation ensures that various implementations by user can interoperate and integrate.
- For example, by using the Internet's TCP/IP communications protocol, virtually any component on a network can talk to another component, creating an infrastructure for collaborating and coordinating resources across the globe.



#### **International Standards**

- Existing (WTO) definition states that all standards prepared by international standardising bodies should be treated as international standards.
- ISO defines an international standardising organisation as one whose membership is open to the relevant bodies from every country. There are many such organisations, but the three international organisations having the highest international recognition are the International Organisation for Standardisation, the International Electrotechnical Commission, and the International Telecommunication Union.
- The three organisations have existed for more than 50 years (founded in 1947, 1906, and 1865 respectively) and they are all based in Geneva, Switzerland.
- They have established tens of thousands of standards covering almost every conceivable topic.
- Many of these standards have been adopted worldwide, replacing various incompatible 'homegrown' standards.

### **Interoperability**

- The capability of two or more devices, or software to work harmoniously together. For example, in an Ethernet network, display adapters, hubs, switches and routers from different vendors must conform to the Ethernet standard and interoperate with each other.
- Standards and standardisation of CPUs, and USB port for example have allowed the use of portable data storage devices (thumbdrives, pendrives) in any computer around the world.



### **ISC - Industry Standards Committee**

- Industry Standards Committee (ISCs) are established by the National Standards Committee (MyNSC) and the National Electrotechnical Committee (MyENC) to oversee and coordinate the standards development process within their respective scopes.
- There are currently 21 ISCs in various field of standardisation.
- The committees are managed by SIRIM Berhad. They are responsible for approving the draft of Malaysian Standards and later recommending it to the Department of Standards Malaysia for final approval as Malaysian Standards by the Minister.
- The ISCs may establish Technical Committees and Working Groups for the purpose of developing Malaysian Standards.
- ISCs shall identify the current needs and recommend priorities of national standardisation within its scope and approve the annual programme for standards development.

### **MyNSC - National Standards Committee**

- The main functions of the MyNSC are:
  - O To recommend to the MSAC (Malaysian Standards and Accreditation Council) the strategies, programmes and activities to promote industrial efficiency and development and for consumer protection through standardisation;
  - O To recommend to the Council on priorities in respect to standardisation, both national and international, to ensure maximum effectiveness;
  - O To recommend to the Council criteria and procedures relating to standards development in Malaysia;



- O To establish the Industry Standards Committees (ISCs) in all sectors, except the electrotechnical sector, which includes membership composition, appointment of chairmen, scopes and their terms of references; and
- O To perform any other functions as may be determined or delegated by the Council.

### **MyENC - National Electrotechnical Committee**

- The main functions of the MyENC are:
  - O To represent Malaysia's interest in all matters pertaining to the working of the IEC and its various committees;
  - O To promote and encourage the participation in the IEC activities by the local stakeholders in electrotechnical industry;

- O To promote and facilitate domestic and international trade through services provided by the IEC;
- O To recommend to the Malaysian Standards and Accreditation Council strategies, programmes and activities to promote industrial efficiency and development and for consumer protection through standardisation in the electrotechnical sector;
- O To recommend to the Council on priorities in respect to standardisation, both national and international, to ensure maximum effectiveness in the electrotechnical sector;
- O To recommend to the Council criteria and procedures relating to standards development in Malaysia in the electrotechnical sector;
- O To establish the Industry Standards Committees (ISCs) in the electrotechnical sector, which include membership composition, appointment of chairmen; scopes and their terms of references; and
- O To perform any other functions as may be determined or delegated by the council.

### **MS – Malaysian Standards**

- Malaysian Standards (MS) is a consensus document developed by Standards Development Committee (SDC) within the Malaysian Standards Development System.
- MS is approved by the Minister of Science, Technology and Innovation in accordance with Standards of Malaysia Act 1996 (Act 549).
- MS is a technical document that specifies the minimum requirements of quality and safety for voluntary use by the public.



### **Mandatory Standards**

- A standard becomes mandatory when a regulatory agency enforces its use through the relevant Act and Regulations.
- These standards are, in effect, laws.
- Failure to follow such standards would result in legal penalties and liabilities. They are generally adopted out of concern for safety, and disseminated by the Federal government or one of its agencies or departments.

## **MSAC - Malaysian Standards and Accreditation Council**

- The Malaysian Standards and Accreditation Council (MSAC) was established under Section 13 of the Standards of Malaysia Act 1996 (Act 549).
- The Council advises the Minister on policies, criteria and procedures for the administration of a national standardisation and accreditation system.
- The members of the Council are appointed by the Minister of Science, Technology and Innovation.
- The Council has established a National Accreditation Committee (MyNAC), National Standards Committee (MyNSC) National IEC Committee (MyENC) and National Medical Testing Accreditation Committee (MyNMTAC) under subsection 14 of the Standards of Malaysia Act 1996, for the discharge of its duties or for any purpose arising out of or connected with any of its duties or functions related to accreditation.

### Plenary meeting

A high level meeting attended by all qualified members of an organisation.



### Requirements

According to ISO 9000; a requirement is a need, expectation or obligation.
 It can be stated or implied by an organisation, its customers, or other interested parties. There are many types of requirements. Some of these include quality requirements, customer requirements, management requirements, and product requirements.

#### Resolutions

 A formal expression of opinion, will, or intention voted by an official body (such as a legislature) or assembled group.





#### SIRIM Berhad

- SIRIM Berhad, formerly known as the Standards and Industrial Research Institute of Malaysia, is a governmentowned company under the Minister of Finance Incorporated.
- SIRIM Berhad's functions are:
  - O To promote and undertake scientific industrial research;
  - O To boost industrial efficiency and development;
  - O To provide technology transfer and consultancy services;
  - O To develop Malaysian standards and to promote standardisation and quality assurance for greater competitiveness; and
  - O To enhance public and industrial welfare, health and safety.

### **Specifications**

- These are documented requirements (refer requirements). As per the Standards of Malaysia Act 1996, "specification" means a description of a product, process, practice or service by reference to its nature, such as:
  - O quality, strength, purity, quantity, origin, age and expiry date

#### Standardisation

- Standardisation is the process of establishing a technical standard among competing entities in a market, which will bring benefits without hurting competition.
- It can also be viewed as a mechanism for optimising economic use of scarce resources such as forests, which are being threatened by paper manufacture. For example, Europe now uses 230 volt 50 Hz AC mains grids and GSM cell phones, and (at least officially) measures lengths in metres.
- According to the Standards of Malaysia Act 1996, "standardisation" means the activity of establishing, with regard to actual or potential problems, provisions for common and repeated use, aimed at the achievement of the optimum degree of order in a given context;

#### **Standards**

- A standard is a consensus document. It is a set of rules that control how people develop and manage materials, products, services, technologies, processes and systems.
- ISO's standards are agreements. ISO refers to them as agreements because its members must agree on content
  and give formal approval before they are published.
- ISO standards are developed by technical committees. Members of these technical committees come from many countries. Therefore, ISO standards tend to have very broad support.
- The Standards of Malaysia Act 1996 defines "standard" as a document approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for products or related processes and production methods, with which compliance is not mandatory; and which may also include or deal exclusively with terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method.

### Standards of Malaysia Act 1996

 An Act to make new provisions in the law relating to standards and for other matters connected with standards in Malaysia.

#### TC - Technical Committee

- TCs are established by the relevant ISCs. They are responsible for developing, preparing and reviewing Malaysian Standards for general and specific scope.
- TCs are responsible to approve release of draft Malaysian Standard for the purpose of soliciting public comments and reviewing the feedbacks.
- The TCs are responsible for supporting its parent ISC by studying and commenting and/or voting on the relevant draft international standards.
- The TCs may establish working groups for the purpose of undertaking specific tasks.
- At the ISO level, TCs are ISCs equivalent. Whereas the ISO TCs' sub-committees are equivalent to our national TCs.

### **Technical Management Board**

- The International Organisation for Standardisation Technical Management Board (ISO/TMB) informs and advises the body's Council on issues relating to the organisation and management of the organisation's technical work.
- DSM was on the ISO Technical Management Board (ISO TMB) for the 2000 2002 term. DSM has been reelected to sit in the ISO TMB for the 2003 - 2005 term.
- It approves the establishment of the ISO/TCs and revisions of the directives for the work of technical committees.
   This committee basically monitors all technical matters of the ISO.
- By achieving the above two status in the ISO committee, Malaysia, through DSM, an agency under the Ministry
  of Science, Technology and Innovation, is able to participate in the formulation of international standards policies
  that concern trade and at the same time protect Malaysia's interest.

### **Voluntary Standards**

- Standards which are voluntary in terms of usage.
- It is widely used to ease manufacturing process, interchangeability and safety.
- All Malaysian Standards (MS) are voluntary, unless specified in regulations or enforced by regulatory bodies in Malaysia.

### WG - Working Group

 Working Group is a committee comprising experts established by TC (Technical Committees) for the purpose of undertaking specific task (deliberating a specific standards development project).

#### ANEC

- ANEC is the European consumer voice in standardisation. It was set up in 1995 as non profit association under Belgian law.
- ANEC defends consumer interests in the process of standardisation and certification.
- It represents consumer organisations from the European Union and the European
   Free Trade Association (EFTA) countries.



#### **ANSI - American National Standards Institute**

 ANSI is a membership organisation founded in 1918. It coordinates the development of US voluntary national standards in both the private and public sectors.



Just as DSM for Malaysia, ANSI, the US national standards body, represents the United States at ISO and IEC.

#### **ASTM International**

- Formerly known as the American Society for Testing and Materials (ASTM), United States, it develops and produces technical standards for materials, products, systems and services. It was formed in 1898 in the United States as the American Society for Testing and Materials by a group of scientists and engineers, led by Charles Benjamin Dudley.
- ASTM International currently maintains more than 12,000 standards. Membership in the organisation is open to anyone with an interest in ASTM International's services. Members represent manufacturers, users, governments and academia from 100 countries.
- ASTM Standards are also used widely.
- ASTM Standards compliance is voluntary but in the United States, ASTM Standards have been incorporated into
  or are referred to by many federal regulations.

#### **BSI - British Standards Institute**

BSI is the world's first national standards body. BSI works with manufacturing and service industries, businesses, governments and consumers to facilitate the development of British, European and international standards.



- As the United Kingdom's National Standards Body (NSB), BSI represents UK's interests across all of the European and international standards organisations and their committees.
- British Standards pioneered the development of BS 5750, which has become ISO 9000, the world's most popular management system series.

#### **CASCO**

- CASCO is ISO's policy development committee on conformity assessment.
- CASCO was established in 1985 to study means of conformity assessment, prepare documents concerning the practice and operation of conformity assessment, and to promote their use.
- The International Standards and Guides on conformity assessment, developed by ISO/CASCO facilitate fair and free international trade.

#### CEN

- CEN (Comite' Europe'en de Normalisation in French) is the European Committee for Standardisation.
- It is the European Regional Standards Body (in areas other than Electrotechnical).
- It was founded in 1961 by the national standard bodies in the European Economic Community and EFTA countries.
- CEN contributes to the objectives of the European Union and European Economic Area with voluntary technical standards (EN standards) which promote free trade, the safety of workers and consumers, interoperability of networks, environmental protection, exploitation of research and development programmes, and public procurement.



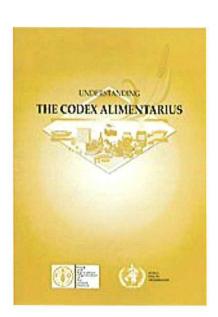
#### CENELEC

- CENELEC (French: Comité Européen de Normalisation Electrotechnique) is the European Committee for Electrotechnical Standardisation.
- CENELEC is the European Regional Standards Body responsible for European Standardisation in the area of electrical engineering.
- CENELEC was founded in 1973. The members are the national electrotechnical standardisation bodies of most European countries.



#### CODEX

- The Codex Alimentarius Commission or Codex was created in 1963 by FAO and WHO to develop food standards, guidelines and related texts such as codes of practice under the Joint FAO/WHO Food Standards Programme.
- The main purposes of this programme are protecting consumer health and ensuring fair trade practices in the food trade, and promoting coordination of all food standards work undertaken by international governmental and nongovernmental organisations.
- The Codex Alimentarius is a collection of international food standards that have been adopted by the Codex Alimentarius Commission. Codex standards cover all the main foods, whether processed, semi-processed or raw.
- The Codex Alimentarius can safely claim to be the most important international reference point in matters concerning food quality.



- Examples of Codex Standards are:
  - CODEX STAN 231 2001 General Codex Methods for the Detection of Irradiated Foods;
  - CODEX STAN 232 2001 Aflatoxin M1 in Milk: Maximum Level;
  - O CODEX STAN 234 Recommended Methods of Analysis and Sampling 1999 0 0;
  - O CODEX STAN 235 2003 Patulin in Apple Juice and Apple Juice Ingredients in other Beverages: Maximum Level;
  - O CODEX STAN 1 1985 General Standard for the Labelling of Prepackaged Foods; and
  - O CODEX STAN 243 2003 Standard for Fermented Milks.

#### COPANT

- The Pan American Standards Commission, better known by its Spanish acronym COPANT, is a regional standards body of the Americas region.
- It is a private, non-profit association that promotes standardisation and related activities for its member organisations of the Americas region.
- COPANT's full members are the national standards bodies of 28 countries of the Americas (North America, Central America, Caribbean, South America).



#### **CSA - Canadian Standards Association**

- The Canadian Standards Association is a not-for-profit membership-based association serving business, industry, government and consumers in Canada and the global marketplace.
- CSA works in Canada and around the world to develop standards that address real needs, such as:
  - O Enhancing public safety and health;
  - O Advancing the quality of life;
  - O Helping to preserve the environment; and
  - Facilitating trade.

15



### **DSM - Department of Standards Malaysia**

- The Department of Standards Malaysia (DSM) is the national standards body in Malaysia. It is also the national accreditation body.
- It was officially launched on 28 August 1996 by the then Minister of Science, Technology and the Environment, Dato' Seri Law Hieng Ding.
- DSM is governed by the Standards of Malaysia
   Act 1996 (Act 549).

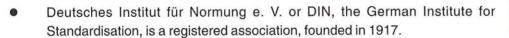




#### **DEVCO**

- ISO has established a policy committee, called DEVCO, specifically to address the needs of developing countries.
- DEVCO's membership comprises some 117 national standards bodies from industrialized as well as developing countries (as of 18 January 2005).

#### DIN





- Its head office is in Berlin. Since 1975, it has been recognized by the German government as the national standards body and represents German interests at international and European level.
- The function is similar to DSM as the national standards body.

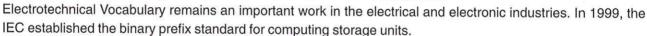
### **FAO - Food and Agriculture Organisation**

- The Food and Agriculture Organisation (FAO) of the United Nations leads international efforts to defeat hunger.
- FAO acts as a neutral forum where all nations meet as equals to negotiate agreements and debate policy.
- FAO and WHO work together to develop standards for the safety of food production.
- ISO adopts FAO standards or work together with FAO to develop standards relating to food safety and security.

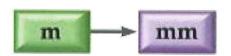


### **IEC - International Electrotechnical Commission**

- The International Electrotechnical Commission (IEC) is a standards organisation dealing with electrical, electronic and related technologies.
- ISO and IEC also work together to develop standards.
- The IEC was instrumental in developing and distributing standards for units of measurement, particularly the gauss, hertz, and weber. They are also the first to propose a system of standards, the Giorgi System, which ultimately became the SI units. In 1938, it published an international translating vocabulary to unify electrical terminology. This effort continues, and the International



Gauss meter detects and measures weak energy fields (milligauss) and sources of electromagnetic energy contamination.







 $\frac{1 \text{ mm}}{0.001 \text{ m}}$ 

#### **IFAN - International Federation of Standards Users**

The International Federation of Standards Users is an independent, non profit-making international association of national organisations for the application of standards, companies, professional and trade associations, and governmental agencies, concerned with the use of standards.

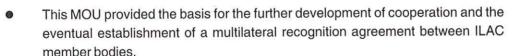


 It was founded in 1974 when eleven national standards organisations met in Paris for an international conference.



## **ILAC - International Laboratory Accreditation Co-operation**

- ILAC is an international cooperation between the various laboratory accreditation schemes operated throughout the world.
- Founded in 1978, ILAC was formalised as a cooperation in 1996 when 44 national bodies signed a Memorandum of Understanding (MOU) in Amsterdam.



 Malaysia is also a member of the ILAC through DSM, an agency under the Ministry of Science, Technology and Innovation.

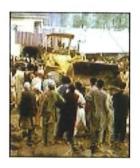


## **ILO - International Labour Organisation**

- The International Labour Organisation is the UN specialized agency seeking to promote social justice and internationally recognized human and labour rights.
- It was founded in 1919 and became the first specialized agency of the UN in 1946.
- The ILO formulates international labour standards in the form of conventions and recommendations, setting minimum standards of basic labour rights: freedom of association, the right to organize, collective bargaining, abolition of forced labour, equality of opportunity and treatment, and other standards regulating conditions across the entire spectrum of work related issues.









## ISO - International Organisation for Standardisation

- The International Organisation for Standardisation (ISO) is an international standard-setting body made up of representatives from national standards bodies.
- Founded on 23 February 1947, the organisation produces world-wide industrial and commercial standards.
- ISO cooperates closely with the International Electrotechnical Commission (IEC), which is responsible for standardisation of electrical equipment.
- Malaysia is a member of ISO through DSM, an agency under the Ministry of Science, Technology and Innovation.



### ITU - International Telecommunication Union

- The International Telecommunication Union (ITU) is an international organisation established to standardise and regulate international radio and telecommunications.
- It is a specialised organisation under the United Nations.
- It was founded as the International Telegraph Union in Paris on 17 May, 1865, and is today the world's oldest international organisation.
- Its main tasks include standardisation, allocation of the radio spectrum, and organizing interconnection arrangements between different countries to allow international phone calls.
- The international standards produced by ITU are referred to as "Recommendations" (with the word ordinarily capitalized to distinguish its meaning from the ordinary sense of the word "recommendation").





### JIS - Japanese Industrial Standards

- Japanese Industrial Standards (JIS) is Japan's national standards which specify the standards used for industrial activities in the country.
- The standardisation process is coordinated by the Japanese Industrial Standards Committee (JISC), the national standards body of Japan and published through Japanese Standards Association (JSA).



# OECD - Organisation for Economic Co-operation and Development

- The OECD group of member countries share a commitment to democratic governments and the market economy.
- OECD ((

- The OECD is best known for its publications and its statistics.
- Its work covers economic and social issues from macroeconomics to trade, education, development and science and innovation.
- The OECD plays a prominent role in fostering good governance in the public service and in corporate activity.
- It helps governments to ensure the responsiveness of key economic areas with sectoral monitoring. It is well known for its individual country surveys and reviews.
- The OECD produces internationally agreed instruments, decisions and recommendations to promote rules of the game in areas where multilateral agreement is necessary for individual countries to make progress in a globalised economy.

### WHO - World Health Organisation

- WHO is an agency of the United Nations established in 1948 to further international cooperation in improving health conditions.
- Although the World Health Organisation inherited specific tasks relating to epidemic control, quarantine measures, and drug standardisation from the Health Organisation of the League of Nations (that was set up in 1923) and from the International Office of Public Health at Paris (established in 1909), WHO was given a broad mandate under its constitution to promote the attainment of "the highest possible level of health" by all people.
- WHO defines health positively as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity."









#### **WSSN - World Standards Services Network**

- World Standards Services Network (WSSN) is a network of publicly accessible World Wide Web servers of standards organisations around the world. Through the Web sites of its members, WSSN provides information on international, regional and national standardisation and related activities and services.
- Direct links from the WSSN site are provided to the Web sites of:
  - O International Organisation for Standardisation (ISO);
  - O International Electrotechnical Commission (IEC);
  - O International Telecommunication Union (ITU):
  - O International standardising bodies;
  - Regional standardising bodies;
  - O National members of ISO and IEC; and
  - O Other international/regional organisations with related activities.



# web references

1www.dsm.gov.my
2www.ilac.org
3www.jas-anz.com.au
4 IAFwww.iaf.nu
5 SAMMwww.dsm.gov.my
6 UKAS www.ukas.com
7 Auditor www.cartoonstock.com
8 Competency
9 Eco labellingwww.iisd.org/trade/handbook/5_4_1.htm
10 Environmental Management Systemwww.europa.eu.int/comm/environment/emas
11 Forest Management and Chain of Custody www.fsc.org
12www.fsc-info.org
13www.windhorsefarm.org
14 Product Safetywww.kids4research.org
15 Consumer
16 Consumers Internationalwww.consumersinternational.org
17 ASEAN www.aseansec.org
18 European Union www.europa.eu.int
19 Food Irradiationhttp://www.fda.gov/opacom/catalog/irradbro.html
20 GATT and WTOwww.answers.com
21 Genetically Modified Foods
22 Small and Medium Enterpriseswww.smeinfo.com.my
23 Social Responsibility fdsg
24
25www.peopleandplanet.net/doc.php?id=2492
26www.scubadivesites.com/malaysia/images/sipadan_island_malaysia_27.jpeg
27 United Nationswww.un.org/geninfo/faq
28 Codes of Practices and Draft Standard www.dsm.gov.my

# web references

29 Environmental Quality Act 1974	www.doe.gov.my
30 Food Act 1983	www.moh.gov.my
31 ANEC	www.europa.eu.int/comm/enterprise/standards_policy/links/
32 ANSI	www.ansi.org
33 ASTM International	www.astm.org
34 BSI	www.bsi-global.com
35 CASCO	www.iso.org/iso/en/comms-markets/conformity/iso+conformity.html
36 CEN and CENELEC	
37 CODEX	www.codexalimentarius.net
38 COPANT	www.copant.org/English/ArticleDetail.asp?CategoryId=14767&ArticleId=209479
39 CSA	
40 DEVCO	www.iso.org/iso/en/aboutiso/isostructure/DEVCO.html
41 DIN	
42 FAO	www.fao.org
43 IEC	www.iec.ch
44 IFAN	www.ifan.org
45 ILAC	www.ilac.org
46 ILO	www.ilo.org
47 ISO	www.iso.ch
48 ITU	www.itu.int
49 JIS	www.jisc.go.jp/eng
50 OECD	www.oecd.org
51 WHO	www.who.int/about/en/
52 WSSN	www.wssn.net/WSSN/index.html

## literature references

- Annual Report 2004
   Department of Standards Malaysia
- The ABC of EMC, pg 2, Standards and Quality News, Vol. 11. No.5, Sept – Oct 2004.
- 3. The A-Z on Standardisation for the Consumer, 2002, Published by the Federation of Malaysian Consumers Association.
- 4. Wu Min Au; Consumer Protection Act 1999, Supply of Goods and Services; Pearson Education Malaysia Sdn. Bhd. 2000

# appendix

#### **DSM Accredited Certification Bodies:**

(Updated Until 31 April 2006)

### Quality Management System

- SIRIM QAS International Sdn.Bhd.
- Moody International Certification (Malaysia) Sdn. Bhd.
- CI Certification Malaysia Sdn. Bhd.
- SGS (Malaysia) Sdn. Bhd.
- TUV NORD (Malaysia) Sdn. Bhd.[formerly known as RWTUV (Malaysia) Sdn.Bhd]
- Lloyd's Register of Shipping (M) Bhd.
- Independent European Certification (M) Sdn. Bhd.
- AJA EQS Certification (M) Sdn. Bhd.

### **Environmental Management System**

- Moody International Certification (Malaysia) Sdn.Bhd
- SIRIM QAS International Sdn.Bhd.
- SGS (Malaysia) Sdn. Bhd.
- Independent European Certification (M) Sdn. Bhd.

### **Product Certification System**

SIRIM QAS International Sdn. Bhd.

### Occupational Safety And Health Management System

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## DSM is the National Standards and Accreditation Body and a member of the ISO and IEC



#### **DEPARTMENT OF STANDARDS MALAYSIA**

MINISTRY OF SCIENCE, TECHNOLOGY AND INNOVATION



#### THE ORGANISATION

The Department of Standards Malaysia (DSM), under the ambit of the Ministry of Science, Technology and Innovation Malaysia, is the National Standards Body (NSB) as well as the National Accreditation Body (NAB). DSM was officially launched on August 28 1996 and was established following the corporatisation of the Standards and Industrial Research Institute of Malaysia (SIRIM). DSM took over the statutory roles in standardisation formerly carried out by SIRIM. In addition, DSM is also entrusted with the responsibilities of accreditation previously undertaken by the Malaysian Accreditation Council (MAC). In performing

its duties and functions, DSM is governed by the Standards of Malaysia Act 1996 (Act 549).

**Standards** are essential in consumer protection, safety and public welfare. They form the basis for industrial efficiency, product quality, innovation and development.



Accreditation ensures the integrity of conformity assessment services, and accuracy of test reports and data that contribute towards having better, safer and more efficient methods, products and services.



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**Department of Standards Malaysia** 

Ministry of Science, Technology and Innovation

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#### About MALAYSIAN ASSOCIATION OF STANDARDS USERS

The Malaysian Association of Standards Users is a national non-governmental organisation that is voluntary, non-political and civil minded. Its main concern is to ensure that standards for consumer products are as comprehensive as possible and correspond to real consumer needs.

**Malaysian Association of Standards Users** will ensure users influence in standardization.i.e. by providing the means to communicate the needs, views and concerns of consumers. It also plays a major role in influencing the development of strategies and policies in standardization, conformity assessment and other related matters concerning standards users.

Malaysian Association of Standards Users will ensure that consumers are provided access to vital information of the latest trends on national and international standardization, which will help companies in becoming more marketable and to anticipate greater growth. Overall, its aim is to create more informed consumers that will indirectly encourage the demand of products or services which adhere to standards.

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