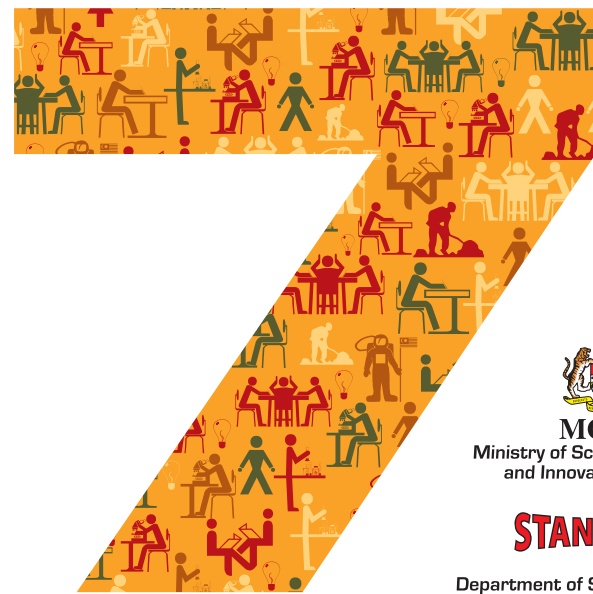




annual report

# Driving Innovation Through Human Capital Development





### **Cover Rationale**

People are an organization's greatest asset. They are the planners, movers and shakers. Competent and innovative people can create wonders and break unexplored frontiers that can push an organization to greater heights. STANDARDS MALAYSIA recognizes the importance of the people factor. We dedicate 2007 as the year to enhance our human capital in our endeavors to help drive innovation in Malaysia.

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STANDARDS MALAYSIA is a Government agency under the Ministry of Science, Technology and Innovation (MOSTI). As the sole National Standards and Accreditation Body, STANDARDS MALAYSIA oversees standards and accreditation activities in Malaysia under the guidance, advice and recommendation of the Malaysian Standards and Accreditation Council (MSAC).

### Vision

To lead the nation to be an effective global player in Standards & Accreditation by 2020: STANDARDS MALAYSIA will mobilize the nation's human capital to effectively represent Malaysia's interest in Standards & Accreditation at the international level



### Mission

To provide credible standardization and accreditation of conformity assessment services in order to facilitate Malaysian products and services to be competitive globally; to support Government policy makers and regulators; and to advance quality of life of Malaysians.

## Consolidating Human Capital in Advancing Innovation Agenda

In establishing our Vision Statement, we realize the responsibility that comes with it, and that is to deliver and turn the vision to become reality. As we continue to be “an effective player in Standards & Accreditation”, we will “mobilize the nation’s human capital to effectively represent Malaysia’s interest in Standards & Accreditation at the international level”. In 2007, we started to place greater focus on the second part of the Vision Statement that touches on the mobilization of human capital. Though mobilization of the nation’s human capital involves all the Government machinery complemented by the efforts of the private sector as well, the move within STANDARDS MALAYSIA in 2007 was largely focused on consolidating and strengthening its human capital. This was in line with the directions set by MOSTI, which has the bigger agenda of mobilization of the human capital towards meeting the nation’s needs to advance in science, technology and innovation.

The National Innovation Agenda spells out three main thrusts, namely developing a more focused research agenda based on the country’s areas of competitive advantage, with an emphasis on commercialization of output; developing intellectual capital in science and technology to propel the economy forward; and enhancing the country’s National Innovation System encompassing the entire innovation value chain (universities, research institutes, industry, fund providers and the public sector). The Government calls for all stakeholders to get themselves involved in this national agenda, and we at STANDARDS MALAYSIA are no exception.

We started by taking stock of our human assets and consolidated our position before embarking on restructuring the department with the emphasis of putting the right and capable people in the right places. This was

**As we continue to be “an effective player in Standards & Accreditation”, we will “mobilize the nation’s human capital to effectively represent Malaysia’s interest in Standards & Accreditation at the international level”**

given much focus last year and the “internal housekeeping” needed to be done in order to achieve our organizational objectives more effectively. After ten years of establishing the required infrastructure to advance and promote standards and accreditation in Malaysia at both the national and international levels, it was timely for us in 2007, which was the 11th year of STANDARDS MALAYSIA’s existence since our establishment in 1996, to bring the organization to the next level of growth. This entailed the development of our human capital to meet new challenges in the highly specialized fields of standardization and accreditation. In meeting the challenges, we have to be more innovative in our thinking and approaches. Being a department under MOSTI whose portfolio includes advancing innovation, we ourselves started to take the challenge to drive innovation through our own human capital development plan, hence the theme of the 2007 Annual Report.

We would like to commend everyone in STANDARDS MALAYSIA for their invaluable contributions in making 2007 a successful year as a result of our tireless efforts to advance standards and accreditation at both national and international levels.

## STANDARDS MALAYSIA: At the Forefront of Malaysia's Standards and Accreditation Activities

### MINISTER OF SCIENCE, TECHNOLOGY AND INNOVATION MALAYSIA

#### MALAYSIAN STANDARDS AND ACCREDITATION COUNCIL (MSAC)

Provide advisory services and submit recommendations to the Minister. Council members represent various interests, such as in standardization functions, Government and regulatory functions, in education, trade and industry, professional bodies and consumer bodies.

#### Malaysian National Accreditation Committee (MyNAC)

Provide advice on accreditation matters. Recommend accreditation criteria, requirements, policies and procedures. Assist in the review of accreditation procedures and operations.

#### Malaysian National Standards Committee (MyNSC)

Recommend strategies, programs and activities to promote industrial efficiency and development and to protect consumers through standardization. Recommend priorities, criteria and procedures related to standards development in Malaysia.

#### Malaysian Electro-technical National Committee (MyENC)

Represent Malaysia's interest in relevant working groups, the International Electro-technical Commission (IEC) and its various committees. Recommend national representation in meetings and submit appropriate documentations and proposals. Coordinate and formulate a national stand in respect of IEC-related matters.

#### Malaysian National Medical Testing Accreditation Committee (MyNMTAC)

Represent Malaysia's interest in all matters pertaining to medical laboratory accreditation. Recommend national representation in meetings and submit appropriate documentations and proposals. Coordinate and formulate a national stand in respect of all matters related to standardization and accreditation of medical laboratory.

#### MINISTRY OF SCIENCE, TECHNOLOGY AND INNOVATION MALAYSIA (MOSTI)

Secretary General

#### DEPARTMENT OF STANDARDS MALAYSIA (STANDARDS MALAYSIA)

Director General (as ex officio of MSAC)

#### STANDARDS DIVISION

##### Director of Standards

Implement policies and strategies for national standardization. Recommend approval of Malaysian Standards (MS) and promote their use. Represent Malaysia in international standardization activities. Promote cooperation in standardization activities in and outside Malaysia.

#### ACCREDITATION DIVISION

##### Director of Accreditation

Accredit organizations engaged in conformity assessment activities. Maintain a register of accredited organizations and their marks of conformity. Represent Malaysia in international accreditation activities. Facilitate international recognition of accredited organizations and certificates.

#### MANAGEMENT SERVICES DIVISION

##### Director of Management Services

Provide administrative support and management services, including human resource development and financial management.

## MINISTERIAL AND COUNCIL LEADERS



**Y.B. Dato' Sri Dr. Jamaludin b. Dato' Mohd. Jarjis**  
Minister of Science, Technology and Innovation



**Y.Bhg. Dato' Abdul Hanan Alang Endut**  
Secretary General, Ministry of Science, Technology and Innovation



**Y.Bhg. Tan Sri Dr. Ahmad Tajuddin Ali**  
Chairman, Malaysian Standards and Accreditation Council

## KEY EXECUTIVES OF STANDARDS MALAYSIA



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- Y.Bhg. Tan Sri Dr. Ahmad Tajuddin Ali • Y.Bhg. Dato' Abdul Hanan b. Alang Endut  
• Y.Bhg. Tan Sri Dato' Hj. Mohd. Ramli Kushairi • Y.Bhg. Hj. Yahaya b. Ahmad • Y.Bhg. Dato' Pian b. Sukro  
• Y.Bhg. Datuk Ir. Hamzah b. Hasan • Y.Bhg. Dato' Mohd. Yusof Hitam • Y.Bhg. Datuk N. Marimuthu  
• Mr. Mohamed Nor b. Abd. Aziz • Prof. Dr. Ho Chee Cheong • Ir. Dr. Andy K.H. Seo  
• Mrs. Rokhoun Nafsiah bt. Abd. Rashid • Mrs. Harjit Kaur a/p Chand Singh  
• Mrs. Zita Hj. Mohd. Fahmi and Mr. Harith Siddik.

**Ir. Mah Lok Abdullah**  
MyNAC Chairman

**Y.Bhg. Tan Sri Dato' Hj. Mohd. Ramli Kushairi**  
MyNSC Chairman

**Y.Bhg. Ir. (Dr.) Datuk Mohd. Annas Mohd. Nor**  
MyENC Chairman

**Y.Bhg. Datuk Dr. Noor Hisham b. Abdullah**  
MyNMTAC Chairman

## PUSHING FOR INNOVATION



**Y.B. Dato' Sri Dr.  
Jamaludin b.  
Dato' Mohd. Jarjis**  
Minister of Science,  
Technology and  
Innovation Malaysia  
(MOSTI)

**M**inister of Science, Technology and Innovation, Y.B. Dato' Sri Dr. Jamaludin b. Dato' Mohd. Jarjis steers MOSTI in efforts to drive the country towards achieving greater excellence through the development of science, technology and innovation.

The efforts to achieve excellence must be supported by innovative thinking and in order to be innovative, the development of human capital becomes more relevant and crucial. Minister of Science, Technology and Innovation, Y.B. Dato' Sri Dr. Jamaludin b. Dato' Mohd. Jarjis is at the helm of MOSTI to help drive the country to excellence through the advancement of science, technology and innovation. In so doing, he has also driven for innovative thinking to permeate within all the departments and agencies within MOSTI.

We have been consistently encouraged to empower ourselves with the capability and capacity to acquire knowledge and use it to sharpen our skill in order to be more productive, progressive and innovative.

We have to move in tandem with the progress made by our country, which has made major transformation in physical infrastructure, financial and social systems and now has moved into the globalised arena of information-driven economy. The next level of development involves the transformation into a knowledge-based economy characterized by the need for change, technology and innovation.

The Minister has consistently pushed for the building of such an infrastructure that will also enable the generation, acquisition and usage of knowledge to produce goods and services that are competitive in the global market. This "knowledge

infrastructure" encompasses education, research and development (R&D), intellectual property (IP), technology transfer, innovative private sector, financial and eco-system.

STANDARDS MALAYSIA, as an implementation arm within MOSTI, is also part and parcel of the "knowledge infrastructure" in the way that we help push for the attainment of recognized standards and the use of accreditation practices to deliver globally accepted products and services. Standards and accreditation are powerful tools to propel the entry and acceptance of Malaysian products and services in the global markets. To compete globally, STANDARDS MALAYSIA recognizes the importance of equipping ourselves with the knowledge, skill and expertise. With the guidance of the Minister and his Ministry, STANDARDS MALAYSIA has charted the direction for us to harness our best ability and to be more innovative in not only the way we carry out our activities but also in our efforts to institute change through our human capital development plans. All these are possible with a leadership that supports positive change and is committed to helping us uplift our technological and innovative capabilities.





**Y.Bhg. Tan Sri  
Dr. Ahmad Tajuddin Ali**  
Chairman of  
Malaysian Standards and  
Accreditation Council  
(MSAC)

**M**SAC Chairman, Y.Bhg. Tan Sri Dr. Ahmad Tajuddin Ali leads MSAC in providing MOSTI with the necessary tools, advice and expertise on matters related to standardization and accreditation.

### Essential Advisory Roles

Standards and accreditation have become more relevant as the country moves towards attaining a higher level of development. The farsightedness of the MSAC led by its Chairman, Y.Bhg. Tan Sri Dr. Ahmad Tajuddin Ali, has largely made standards and accreditation part and parcel of the moves to push Malaysia to compete in an environment that is increasingly driven by innovation. Innovation is not all about creating new products but it is also about instituting change and making improvements in products, processes, technologies, services, marketing, financial and management systems, to name a few. It is also about changing the way we think and perceive and in the way we conceive, design and implement changes that will bring about positive expected value for the society or organization.

In STANDARDS MALAYSIA, we remain guided by MOSTI and MSAC in instituting change be it in the way we implement our plans and strategies or when we carry out the restructuring of our organization to make it a more effective outfit in meeting the objectives set out for us to achieve. Our key deliverables include the development of MS; creation of awareness of the importance of standards and accreditation; promotion of the use of standards and conformity assessment programs; measurement of the impact of standardization and accreditation activities on the Malaysia economy; and effective participation in both

standardization and accreditation activities at national and international levels.

MSAC has provided the necessary advice, guidance and expertise for us to perform our roles, and to further contribute to the demand for continuous improvement so that we will continue to remain relevant not only for the present but the future as well.

### Acknowledgement

STANDARDS MALAYSIA acknowledges the key roles played by the MOSTI Minister and the MSAC Chairman and members of MSAC in overseeing the country's standardization and accreditation activities. They have all played critical roles in the formulation of policies, programs and activities related to standardization and accreditation and the promotion of efficiency within STANDARDS MALAYSIA. We thank them for their unwavering support that enables us to continue focusing on developing and promoting standards and accreditation services, intensifying efforts to meet national standards and accreditation requirements, developing human resource capacity and capability and strengthening standards and accreditation infrastructure.

We would like to thank the Minister, MSAC Chairman, MSAC members, all staff members of STANDARDS MALAYSIA and all organizations and individuals who have contributed towards making STANDARDS MALAYSIA as an organization that could perform its roles and functions in advancing standardization and accreditation for the benefit of the nation.





**Fadilah Baharin**  
Director General

## OPERATIONAL REPORT

## Implementation of Human Capital Development Plan

In our efforts to consolidate and strengthen our human capital, we implemented a plan that involved, among others, promoting capable people to assume higher positions befitting their qualification, experience and capability; sending staff for relevant training both locally and overseas; and giving them the necessary exposure to excel in their fields.

**In our efforts to consolidate and strengthen our human capital, we implemented a plan that involved, among others, promoting capable people to assume higher positions befitting their qualification, experience and capability. It was a "People Enhancement" plan that needed to be implemented so that we could move forward and be more innovative in all areas under our care.**

Simply put, it was a "People Enhancement" plan that needed to be implemented so that we could move forward and be more innovative in all areas under our care.

The whole process of standards development has been revamped to allow for innovation. We not only promote standards development based on research and development (R&D) but also

one that is driven by innovation according to the demands of the industry. The whole standards development process and infrastructure have been skewed towards industry-demand concept. In doing so, we took the cue from the National Innovation Council, which formulated the National Innovation Agenda, to emphasize on market and technology-driven innovation for the creation of wealth and societal well-being. We made the shift towards this model with the collaboration and smart partnerships with the industry players, non-governmental organizations (NGOs) and other stakeholders. We encouraged the industry to come forward voluntarily to develop standards that would bring benefits to the industry as well as the consumers. We wanted the industry to be more proactive rather than reactive to the challenges affecting the industry. The industry must be able to foresee what needs to be done in order to advance further.

We have also placed greater emphasis on accreditation activities since the previous years but it was more aggressively done in 2007 not only domestically but also globally in line with the Malaysian Government's efforts





to go global. We continue to lend support to accredited certification bodies (CBs), especially the homegrown ones, in order for them to expand globally. We also enhanced our collaboration with professional associations and other external organizations with many Memoranda of Understanding (MoU) signed based on smart partnerships. One of the spin-off effects of the association with the external organizations was greater exposure in the mainstream media on issues affecting the industry and bringing attention to the need for standards and accreditation to push the industry to greater heights. An example is the collaboration with Malaysian Islamic Chamber of Commerce (*Dewan Perdagangan Islam Malaysia* – DPIM) in propagating *halal* standards with the long-term aim of making Malaysia the regional hub for *halal* products and services. *Halal* issues have always attracted attention and the aspect of conformance to the *halal* standards will always be pushed to the limelight. Another example is the aspect of safety of consumer products ranging from electrical items to toys. When safety is compromised, NGOs, media and other interested parties will always bring to light the necessity for conformance to standards and also accreditation.

The increasing relevance of standards and accreditation in industries today is the result of years of efforts put in. While we have made inroads in the development of MS and align many of these to international standards, we will continue to make accreditation more readily acceptable by the industry so that our products and services will receive greater acceptance and recognition in regional and international markets.

On the international front, a notable achievement last year was also our strong representation in the negotiations

relating to the Technical Barriers to Trade (TBT), particularly concerning conformance issues. Consultations were made with various experts on what Malaysia could best achieve from Free Trade Agreements (FTAs) with countries, such as the US and Chile. The negotiations saw the nation heading into the area of standards and conformity to the TBT at international level and within the Association of South East Asian Nations (ASEAN) as well. STANDARDS MALAYSIA has played a significant role in this aspect, which would help enhance the national conformance infrastructure further.

While we make progress in various areas and continue all the efforts of the previous years, we are also aware of the need to continuously assess our performance and further strengthen our human resources in order to move forward with new thinking and approaches. It is only with the total commitment of our people that we can achieve what we set out to do.

### Issues and Challenges

Without doubt, people are our greatest asset but it is also the people that pose the greatest challenge for us to advance. Hence, our emphasis on enhancing our human capital in 2007. We have always had to deal with the critical need for competent and trained personnel to keep abreast with the development of standards, new technologies, trade and economic environment. We have taken efforts to increase our staff's capabilities by providing sufficient training and adequate exposure both locally and overseas. The human capital resources in STANDARDS MALAYSIA are categorized by top management level, managerial and professional and support group. The department achieved 100% in filling up positions in the top management level and 88.46% in the support group in 2007. The filled-up positions for the

managerial and professional category was lower at 85.36%, however this percentage was higher than the achievement of 75.61% in 2006. We have taken steps to fill more positions in the managerial and professional category although we still faced the difficulty of engaging people with the right skills, competency, experience and qualifications. We have also looked at our pool of internal staff and upgraded the qualified ones to fill up higher positions and took efforts to build their competence so that they will be experts in their fields. Those with potential have been sent for training or given greater exposure and opportunity to enhance their skills with the long-term aim of absorbing them into the higher tier of the department.

STANDARDS MALAYSIA will continue to place priorities on training and capacity building so as to enhance the knowledge and skills of its human resource pool, including assessors that implement STANDARDS MALAYSIA's accreditation programs. We need to build up our internal staff to be more experienced and become experts in accreditation assessment. To achieve this, various training courses in conformity assessment field were organized throughout the year with assistance from competent trainers from established international accreditation bodies.

The approval of accreditation is a complex process that requires expert assessors. These assessors will have to be supported by accreditation scheme managers and officers who will have to approach non-accredited laboratories and CBs to explain to them the benefits of obtaining certification and urge them to come forward to do so. Once accreditation is approved, monitoring of the performance and competence of the laboratories and CBs by conformity assessment bodies (CABs) come into play and the CABs will be assessed periodically according to the forward plan schedule. STANDARDS MALAYSIA also needs to develop closer cooperation with the regulatory bodies and implementation agencies to ensure recognition



of accredited test results and certification for the benefit of the industry and consumer. Forging cooperation includes having one-to-one discussions to highlight the importance of accreditation and its various schemes, such as *Skim Akreditasi Makmal Malaysia* (SAMM), Accreditation of Certification Bodies (ACB) and Malaysia Inspection Bodies Accreditation Scheme (MIBAS), which require greater exposure for them to be more widely accepted.

In financial management, STANDARDS MALAYSIA continued to be prudent just as in previous years. In terms of operational expenditure for the year 2007, STANDARDS MALAYSIA used 98.31% of the revised allocation of RM18.0 million for its operations encompassing emolument, services, assets and grants. As for development expenditure, of the total of RM8 million received for development activities in 2007, 99.42% were used for the development of standards while the rest were incurred for proficiency testing for calibration under SAMM scheme and upgrading of STANDARDS MALAYSIA infrastructure. Total revenue collected for the year amounted to RM1.6 million from fees for accreditation scheme, processing fees, sales of documents and other

**Another issue that has to be dealt with in 2007 was to obtain the confidence of Malaysia's trading nations in accepting MS which are developed in accordance to international standards as well as the broader acceptance of our accreditation practices and activities.**

miscellaneous sources. While exercising prudence in financial management as well as in other aspects of management, STANDARDS MALAYSIA has also to ensure that the planned strategies for the year were carried out effectively.

Another issue that has to be dealt with in 2007 was to obtain the confidence of Malaysia's trading nations in accepting MS which are developed in accordance to international standards as well as the broader acceptance of our accreditation practices and activities. Accreditation is part of conformity assessment and it plays a crucial role in the global trading environment. Different standards and conformity assessment requirements as well as technical regulations can pose as trade barriers and Malaysia has taken steps to negotiate FTAs with a few countries to facilitate trading. STANDARDS MALAYSIA is lending support and is actively involved in the negotiations.

Changing the mindset of regulators to use standards as a non-tariff requirement to stop sub-standard products from flooding the market continues to be a challenge for STANDARDS MALAYSIA. It is important to get the support of the regulators to impose standards to help protect consumers, the environment and industries as well. Regulators have to step out of their typical roles and help push standards for the benefits of all. STANDARDS MALAYSIA has taken efforts to have dialogues, forum and

meetings with the regulators to create greater awareness and understanding of the importance of imposing standards and regulations. Globally, there are also insufficient regulations to stop the penetration of sub-standard products, which do not conform to safety principles, therefore we are aware that this can be an uphill task but nevertheless, it is not insurmountable especially for the long run.



There is also a greater need for STANDARDS MALAYSIA to acquire the support of organizations to contribute towards the Trust Fund, which was set up in 2006 to help mobilize more standardization and accreditation activities. The fund assists deserving and interested parties, which do not have the financial ability to conduct standardization and accreditation activities on their own. The activities include standards development programs and participation in regional and international meetings and events. Contribution to the fund is on voluntary basis and STANDARDS MALAYSIA's task is to get the industries to understand the purpose of the fund better and explain how they could contribute towards standardization activities.



Issues and challenges aside, STANDARDS MALAYSIA will continuously assess its performance, introduce remedial measures and more importantly, become more innovative in ensuring that its plans and strategies are implemented to meet the desired results.

**It is important to get the support of the regulators to impose standards to help protect consumers, the environment and industries as well.**



### Strategic Plan 2006-2010

For the future, STANDARDS MALAYSIA will continue to be guided by its Strategic Plan 2006-2010, which was approved under the Ninth Malaysia Plan (9MP). The plan contains four key strategic thrusts:

- To **add value to the economic and social well-being of the nation** through timely delivery of sufficient numbers of market relevant MS and provide global market linkages through stakeholders participation and support for standardization at national, regional and international levels.
- To **enhance global acceptance** of Malaysian products and services through credible and internationally recognized accreditation.
- To **position STANDARDS MALAYSIA and Malaysia as a leader/international contributor** in standardization and accreditation at both national and international levels.
- To **build up capacity and capability of STANDARDS MALAYSIA** and to mobilize Malaysia's pool of technical resources for standardization and accreditation activities.





*Mr. Ridzwan Kasim.*

**W**hile our Human Capital Development Plan encompassed all of our staff members in various divisions at all levels, we gave special emphasis to the development in the highly specialized field of accreditation, which needed a boost in terms of expertise that must be brought on par with current demands and could also meet future needs.

The Accreditation Division of STANDARDS MALAYSIA led by its Director, Mr. Ridzwan Kasim hence gave a strong emphasis on the development of its human capital in order to enhance skill, capability, competency and

## Developing Accreditation Personnel

The Accreditation Division of STANDARDS MALAYSIA led by its Director, Mr. Ridzwan Kasim hence gave a strong emphasis on the development of its human capital in order to enhance skill, capability, competency and competitiveness.

These are crucial for the accreditation field that requires its staff, especially technical personnel, to be highly competent, knowledgeable and are kept up to date with current and future development in the field.

competitiveness. These are crucial for the accreditation field that requires its staff, especially technical personnel, to be highly competent, knowledgeable and are kept up to date with current and future development in the field. One of the ways to develop the personnel is by sending them for training, including training sessions and courses conducted by STANDARDS MALAYSIA's peers who are experts in the field, such as those from Australia and New Zealand.

Mr. Ridzwan himself is an elected executive member of Pacific Accreditation Cooperation (PAC) since 2006. He

was appointed as PAC's Quality Manager in charge of the quality systems and was one of those responsible for Malaysia holding the chairmanship of the ASEAN Consultative Committee for Standards and Quality (ACCSQ) Working Group on Regulations and Accreditation (WG 2). He has been involved in meetings and discussions on issues on policies, strategic direction and technical aspects concerning accreditation.

Besides Mr. Ridzwan, other STANDARDS MALAYSIA staff members have also been actively involved as experts for international standardization and accreditation activities. They include:

- Mr. Shaharul Sadri Alwi appointed as peer evaluator under Asia Pacific Laboratory Accreditation Cooperation (APLAC) for evaluating the Pakistan Accreditation Body (PNAC).
- Ir. Boey Hor Meng appointed as peer evaluator (trainee team leader) under PAC for evaluating the Vietnam accreditation body, the Bureau of Accreditation (BOA).
- Mr. Wan Rukiman Wan Mamat appointed to the Chair of ACCSQ WG2 at ASEAN level since 2007. He took over the Chair from Mr. Ridzwan.
- Mr. Ahmad Razif Abd. Rahim appointed as the Secretary for APLAC Proficiency Testing (PT) (APLAC PT) committee.

Staff members are also trained to be lead assessors. They are sent to join contract assessment teams to observe, learn and assess. By the end of 2008, three staff members are targeted to qualify as lead assessors.

STANDARDS MALAYSIA also sent its staff to undergo international training, including attachments with relevant organizations, such as the International Accreditation New Zealand, Inspection Bodies in the US and Japanese Accreditation Board for Conformity Assessment, Japan. Among those who underwent international training are Mr.

Wan Rukiman Wan Mamat, Mr. Mahadir Mohamed, Ms. Siti Mariam Mohd Din and Mr. Roslan Alias.

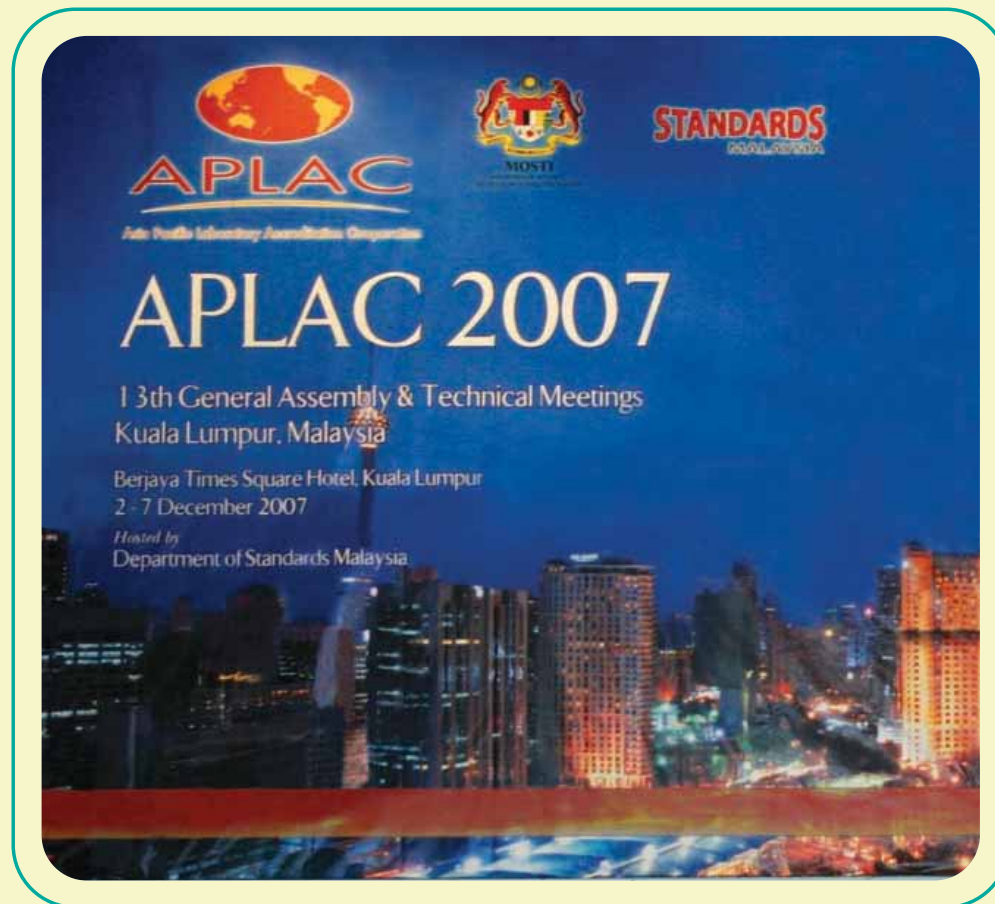
Human capital development also includes promotion of capable and qualified staff to assume higher positions that come with greater responsibility and accountability. For example, middle level management staff members have the opportunity to become lead assessors.

Many staff members are also involved in organizing STANDARDS MALAYSIA's activities at local, regional and international levels. These activities include exhibitions and road shows that provide exposure to the staff to learn and network, and at the same time, promote standards and accreditation.



*Mr. Shaharul Sadri Alwi.*





## KEY ACHIEVEMENTS

## Key Achievements

**S**TANDARDS MALAYSIA's activities in 2007 were aligned to the objectives of the National Standards Strategy and Action Plan. No efforts were spared to ensure that the objectives were met for the further advancement of standards and accreditation.

The following are selected highlights of the key achievements of STANDARDS MALAYSIA for 2007, including positive contributions made to several industries.

**The National Measurement System Act is crucial to the Malaysian economy because it provides the necessary technical means to ensure correct measurements through the implementation of a harmonized system of measurement, which comprises the International System of Units (SI), accurate measuring instrument complying with international standards and validated methods and procedures.**

### National Measurement System Act

STANDARDS MALAYSIA was instrumental in preparing the proposal to the Malaysian Cabinet to enhance national measurement infrastructure that will help facilitate and broaden trade of Malaysian goods in the global market.

The proposal resulted in the approval of the National Measurement System Act 2007 by the Malaysian Government. Its scope applies to all measurements within Malaysia made for any legal purpose, including health, safety, forensic and environmental measurement. Trade measurement also falls within the scope, but in addition, the provisions of the Weight and Measures Act 1972 still apply.

The act also provides for measurement traceability for use in industry and science and for the purposes of international trade.

The National Measurement System Act requires a measurement made for any legal purpose to comply with the requirement of the act. The act does not make it illegal to make measurement, which does not comply with the act; rather, a measurement not in compliance with the act has no meaning in law so it cannot be used for a legal purpose, such as prosecution for violating a safety or environmental code. The act does not contain enforcement provisions and penalties. These provisions come in other acts, such as the Weight and Measures Act 1972.

The National Measurement System Act is crucial to the Malaysian economy because it provides the necessary technical means to ensure correct measurements through the implementation of a harmonized system of measurement, which comprises the International System of





Units (SI), accurate measuring instrument complying with international standards and validated methods and procedures. Measurement enters into practically all commercial operations, from trading in bulk goods, such as petroleum, natural gas and palm oil, to the retail sale of goods to the public in the marketplace. The act also completes the infrastructure for an integrated measurement system similar to those implemented at the international level, for example in European Union countries, Japan, New Zealand and Australia. The system enhances Malaysia's capability in international trade hence making Malaysian products and services more competitive.

### Hosting of the 13th APLAC General Assembly and Technical Meetings

The 13th APLAC General Assembly and Technical Meetings held from December 2-7, 2007 marked the first time ever Malaysia hosted the prestigious event. The country through STANDARDS MALAYSIA welcomed more than 100 delegates from 36 countries, including Malaysia to the event held at Berjaya Times Square Hotel & Convention Center in Kuala Lumpur.

Officiating at the event was the Deputy Minister of Science, Technology and Innovation, YB Dato' Kong Cho Ha, who in his speech applauded the shared understanding and commitment among APLAC member countries to promote accreditation activities in the Asia Pacific region. The credible activities and success stories of APLAC to harmonize accreditation practices and to establish, develop and expand its mutual recognition arrangements (MRA) among accreditation bodies in the region has gained recognition by the Asia Pacific Economic Cooperation (APEC) towards facilitating trade among APEC economies.

APLAC MRA is a regional network of accredited and competent laboratories and inspection bodies in the Asia Pacific region. The special network aims to facilitate the acceptance by Government and industry of test, calibration and inspection reports of products in the Asia Pacific region, thus contributing to the facilitation of trade globally.

Malaysia through STANDARDS MALAYSIA is one of the 26 accreditation bodies who are signatories to the APLAC MRA. Malaysia's acceptance as a signatory is a testimony to STANDARDS MALAYSIA's technical competencies as a National Accreditation Body as well as the credibility of accredited laboratories in Malaysia.

## Industry-driven Standards and Accreditation

**S**TANDARDS MALAYSIA consistently undertakes efforts to ensure the relevance of standards and accreditation to industries. In fact, STANDARDS MALAYSIA continues to emphasize on industry-driven standards and derive the participation and commitment of the industry in the development and promotion of standards so as to better accommodate their needs. At the same time, STANDARDS MALAYSIA helps protect the interests of consumers through the development of credible standards and the implementation of strict accreditation practices.

The strategies adopted in 2007 include the delivery of market relevant MS, which help provide global linkages through stakeholder participation and support for standardization at three levels i.e. national, regional and international. STANDARDS MALAYSIA also endeavors to enhance global acceptance of Malaysian products and services through credible and internationally recognized accreditation. These are in accordance to STANDARDS MALAYSIA's Strategic Plan 2006-2010 as approved by MSAC.

The following are selected highlights of STANDARDS MALAYSIA's roles in the advancement of standards and accreditation in several industries.

### Information and Communication Technology (ICT)

ICT is a dynamic industry in which the players themselves drive their own standards. STANDARDS MALAYSIA however provides standards development infrastructural support in terms of the formation of the Industrial Standards Committee (ISC) on Information Technology (IT) comprising ICT experts from both the public and private sectors as well as NGOs. STANDARDS MALAYSIA also helps chart the course for the industry to prioritize.

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In 2007, STANDARDS MALAYSIA took these initiatives for the industry:

- **Common Criteria for Information Technology Security Evaluation**

Another ICT area which received the attention of STANDARDS MALAYSIA was the standard for Information Technology Security Evaluation. This standard, MS ISO/IEC 15408, is an adopted international standard that is widely used for an independent security evaluation and certification of ICT products.

Malaysia, through MOSTI, was recognized as Consuming Participant in March 2007 and the country has agreed to accept the security testing results produced by other participants of the Common Criteria Recognition Arrangement (CCRA). As the Authorizing Participant, Malaysia will maintain a compliant certification authority for the security evaluation and authorize the use of Common Criteria certificates globally. CyberSecurity Malaysia, an agency under MOSTI, is developing all the required components of the Common Criteria under a project in the 9MP. The components are:

- Development of the Malaysian Common Criteria Evaluation and Certification (MyCC) Scheme.
- Development of a Malaysian Common Criteria Certification Body (MyCB) based on ISO/IEC Guide 65.
- Development of the Malaysian ICT Security Evaluation Facilities (MySEFs) based on the ISO/IEC 17025.

These components are required to enable STANDARDS MALAYSIA to conduct the assessment and accreditation process targeted to be established in 2009.

- **Information Security Management Systems (ISMS)**

The aspect of information security has become increasingly more important in today's borderless world. Information must be protected using appropriate level of security so that the information will not be abused or used by unauthorized parties.

Many ISO/IEC standards, such as ISO/IEC 27001 Information technology security techniques – Information security management systems – Requirements and 27002 Information technology – security techniques – Code of practice for information security management emphasized the importance of creating risk awareness among consumers as a key aspect of information security best practices. In line with this initiative, Malaysia is also reinforcing IT security by becoming a participating member of the ISO/IEC JTC 1/SC 27 on IT Security Techniques as well as developing the MS for ISMS. This is undertaken by the ISC for IT, Communication and Multimedia (ISC G).

Malaysia has also adopted it as MS in 2006. In the field of accreditation, the ACB Scheme has offered the ISMS program, which was developed according to global standards for use by CBs. CBs that apply for this accreditation will be assessed based on the MS ISO/IEC Guide 62: 1999 (in transition to ISO/IEC 27006) plus the ACB-ISMS, which specifies requirements and provides guidance for bodies providing audit and certification of ISMS.

With both standards and accreditation in place for protecting ISMS, consumers, including organizations, have at hand some best practices for IT security controls.



## Environmental Management - Energy Efficiency

STANDARDS MALAYSIA is involved in the development of standards pertaining to Environmental Management towards achieving energy efficiency. STANDARDS MALAYSIA participates in International Organization for Standardization (ISO) TC on Environmental Management and its sub-committees.

In line with the global progress in the field of energy efficiency, Malaysia through STANDARDS MALAYSIA also took the initiative to update the relevant indigenous standard i.e. MS 1525:2007 Code of Practice on Energy Efficiency and Use of Renewable Energy for Non-Residential Buildings. This standard encourages the design and construction of public buildings that will minimize the use of energy without compromising creativity, functionality, comfort and productivity and at the same time achieve cost efficiency. The new version MS 1525: 2007 was approved by the Minister of Science, Technology and Innovation in June 2007.

## Electrical and Electronic Equipment

Malaysia supports the ASEAN Vision 2020 to establish the ASEAN Economic Community by 2015 as well as the agreement on the ASEAN Harmonized Electrical and Electronic Equipment (EEE) Regulatory Regime. The agreement signed in 2005 addressed issues that the Joint Sectoral Committee (JSC) for EEE (JSC EEE) needs to focus on when moving forward in the integration effort of the electrical and electronic sector. The fourth meeting of the JSC EEE was held in November 2007 in Kuala Lumpur. It was attended by representatives from ASEAN members.



## Social Responsibility (SR)

With widespread concern that organizations should respect the social, economic and environmental dimensions that make up sustainable development and their impact on business competitiveness, there is a growing need for guidance in implementing practices related to SR. One of the major initiatives at the ISO level is the development of a proposal on SR, which is an emerging issue requiring agreed objectives as to what constitutes an effective SR program. The ISO has formed a WG to develop a standard on SR – ISO 26000, Guidance on Social Responsibility, which will increase the awareness among organizations of the need to adopt best practices that will bring positive impact on the economy, environment and social make-up of a country. The standard document, to be published in 2010 is expected to have a significant impact on the business community, industry, NGOs and also the entities of Governments.

In line with the development at ISO level, Malaysia has established a National Mirror Committee to the ISO Committee on SR. The Malaysian Mirror Committee is chaired by STANDARDS MALAYSIA and it comprises representatives of various stakeholders, including the Government, services and support, industry, trade unions, NGOs and consumer groups. The committee will address a range of SR issues as well as propose guidelines from the Malaysian perspectives that will have an influence on the standard development effort at the ISO level.

In 2007, STANDARDS MALAYSIA through the Malaysian Association of Standards Users (Standards Users) conducted road shows in Kuala Lumpur, Penang and Johor Bahru to create awareness on SR among the public.



### Halal Cosmetics

The standard for *halal* cosmetics: Islamic Consumer Goods – Part 1 – Cosmetic and Personal Care – General Guidelines is at the drafting stage. The draft standard was developed by the Technical Committee (TC) on *Halal* Food and Islamic Consumer Goods chaired by the Department of Islamic Development Malaysia (*Jabatan Kemajuan Islam Malaysia* – JAKIM). The draft is the first part established in the series of *Halal* Standards for Islamic Consumer Goods, which is part of the initiatives of making Malaysia the hub for *halal* products in the region.

The standard prescribes practical guidelines for *halal* cosmetics and personal care industry. It also serves as a basic requirement for cosmetics and personal care industry and trade or business in Malaysia. This standard should be used together with the Guidelines on Cosmetic Good Manufacturing Practices (GMP) issued by the National Pharmaceutical Control Bureau (NPCB). The standard however does not contain all requirements, which may be required for certification.

### Product Safety

Standards assure consumers that the products they use or consume are safe. It is also STANDARDS MALAYSIA's roles to ensure that standards can be applied to protect the consumers. The following areas have received greater attention in 2007:

- **Food Safety**

Unsafe food is a risk for all – consumers can become seriously ill and food industry players can face costly actions to rectify problems. Hence, raising awareness of potential hazards throughout the entire food chain from producer to consumer is crucial. One of the ways to deal with food safety hazards is to have adequate control and to adopt and apply safety standards throughout the food production and supply chain process.

STANDARDS MALAYSIA has developed the MS pertaining to food safety. These are MS 1480: 2007 – Food Safety According to Hazard Analysis and Critical Control Point (HACCP) System; MS 1514: 2001 – General Principles of Food Hygiene and MS 1500: 2004 – Halal Food Production, Preparation, Handling and Storage – General Guidelines.

STANDARDS MALAYSIA also continues to promote the HACCP Based Food Safety Systems Accreditation Program. HACCP is an internationally recognized food safety certification system involving the analysis of hazards associated with food as well as the control methods and the monitoring of food safety requirements.



STANDARDS MALAYSIA's accreditation program for HACCP Based Food Safety Systems was launched in 2005, enabling CBs to apply for accreditation in this field. CBs wishing to be accredited by STANDARDS MALAYSIA under this program will be assessed under the MS ISO/IEC Guide 62 (to be replaced by MS ISO/IEC 17021) and the ACB-HACCP, which is a guidance document developed by appointed Technical Working Group (TWG) consisting of the regulatory body and experts, including academia, in the field of HACCP and food safety. The MS used by organizations to obtain HACCP Based Food Safety Systems certification is the MS 1480: 2007.

- **Safe Toys**

Standards on toy safety came into light with reports of high lead content in children's toys. STANDARDS MALAYSIA has developed a series of standards on toy safety based on international standards, which specify that the lead content in toys must not exceed 90ppm. These standards contain comprehensive requirements for all expected risks.



### Involvement in Malaysia's Space Program - Food Testing

Malaysia sent its first astronaut (*angkasawan*) to space on October 10, 2007 under the National Space Program aimed at generating interest in space science and technology among Malaysians. Malaysia's first *angkasawan*, Dr Sheikh Muszaphar Shukor conducted several experiments, including those on cancer cells, bacteria and protein crystallization as well as experiments on tropical disease microbes.

The experiment would benefit medical research as it was related to studies on the growth of liver cancer and leukemia cells with the hope of finding a cure for cancer and osteoporosis. Another experiment would benefit the local industries as it was a study on the crystallization of lipase and protein commonly used in manufacturing products, such as textiles and cosmetics.

Following the space experiments, STANDARDS MALAYSIA has identified 33 out of 63 laboratories with the capability to carry out food testing. The 33 laboratories have the necessary expertise and facilities to conduct specific microbiology tests on food samples as required by MOSTI as a follow up to the tests done under the space program.

### Tourism



The Malaysian Government recognizes the need to develop standards and accreditation for the tourism industry, which is the second biggest contributor to the country's revenue, after the manufacturing industry. The tourism industry must prepare itself for the next level of growth and this will encompass the development of standards so that the country will be able to compete better for the tourist dollars. It is however acknowledged that the industry is highly varied and it also encompasses other sectors, such as transportation and food and beverage.



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In terms of the development of MS for the industry, STANDARDS MALAYSIA played key roles in the development of the following:

- **MS for Malaysian Handicraft: *Batik and Songket***

The handicraft industry received a boost in 2007 with the development of MS 692 for handcrafted *Batik* Malaysia and the MS 1747 for *Songket* Malaysia. Both MS cover among others the aspects of materials and tools used as well as designs and quality of *batik* and *songket*.

The definitions, material requirements, specifications, techniques, processes, test methods and labeling of textiles defined as Malaysian *batik* and *songket* were clearly spelt out in the standards documents which are essential in creating awareness on the impact of standards to the handicraft industry. The standards will ensure the quality of the traditional fabrics that will also help uplift the skills and competency of the craft makers so as to better market the Malaysian handicraft locally and internationally.

- **MS for Better Public Toilets**

The Malaysian Government has been concerned about the poor state of cleanliness in public toilets and has called for actions to be taken in terms of design and cleanliness requirements of public toilets. This issue is of particular interest to the tourism industry. The cleanliness of public toilets reflects the image of the country and the people, especially among foreign

tourists. In efforts to help address the issues of cleanliness and maintenance of public toilets in a comprehensive manner, the Government through STANDARDS MALAYSIA has developed the relevant standards – MS 2015: Part 1: 2006 Public Toilets – Part 1: Minimum design criteria; MS 2015: Part 2: 2006 Public Toilets – Part 2: Inspection criteria; MS 2015: Part 3: 2006 Public Toilets – Part 3: Rating criteria; and MS 2015: Part 4: 2006 Public Toilets – Part 4: Code of practice for maintenance.

Launched in 2006 and steered by the Consumer Products, Personal Safety and Services ISC (ISC C), the MS 2015: 2006 Part 1 to 4 serves as guidance documents to facilitate better toilet design and ease of maintenance to ensure continuous hygiene and cleanliness are practised for public toilets. The MS, complemented by the MS 1331: 2003 – Code of Practice for Access of Disabled Persons Outside Buildings and the MS 1184: 2002 – Code of Practice for Access of Disabled Persons to Public Buildings, proactively meets the needs of the country in terms of improving the quality of life and protecting the health and safety of its people as well as the environment. It also enhances the image of the country among tourists hence helping to promote the tourism industry.

The first model toilet for Malaysian schools in accordance to MS 2015: 2006 was constructed at Sekolah Kebangsaan Perbandaran Sibul, Sarawak. The model toilet was officially opened on August 11, 2007.

## Other Highlights of Achievements

### On Track in MS Development

The development of MS continued to grow healthily in 2007 with 547 new MS developed for the year. This exceeded the year's target of developing 400 MS by 136.75%. Total effective MS developed as at December 31, 2007 was 5,060, of which 53.24% were aligned to international standards.

STANDARDS MALAYSIA is close to achieving the national target of developing 6,000 MS by year 2010. With 5,060 MS already developed by the end of 2007, STANDARDS MALAYSIA needs only develop 940 MS or 15.67% more in order to achieve the target set for 2010. Based on the performance in 2007, STANDARDS MALAYSIA is confident of meeting the target.

The MS 2027: 2006 - Good Animal Husbandry Practice (GAHP) is one of the MS launched in 2007. The Director General of STANDARDS MALAYSIA launched the MS on January 17, 2007 in conjunction with the seminar on Good Animal Husbandry Practice aimed at creating awareness on the development impact of the standard to the local livestock farming industry. The seminar also provided updates on GAHP requirements in the livestock industry in Malaysia.

### Progress in Accreditation

STANDARDS MALAYSIA made commendable progress in accreditation in 2007. The number of accredited laboratories increased from 360 in 2006 to 381 in 2007, while the number of accredited CBs in year 2007 were 3, from the field of Quality Management System (QMS), Occupational Safety and Health (OSH) and HACCP Based Food Safety Systems, which contributed to the total of 11

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bodies for QMS, 7 for Environmental Management System (EMS), 2 for Product Certification System (PCS) and 1 for HACCP. Accredited certification under QMS increased to 4,336 from 4,089; EMS to 667 from 593; and OSH to 213 from 184, whilst PCS and HACCP were 240 and 7 respectively in 2007 (refer to Figure 9 on page 42).

The existing signatory to APLAC and ILAC MRA for testing and calibration field, as well as PAC and International Accreditation Forum (IAF) Multilateral Recognition Arrangements (MLA) for QMS and EMS were successfully maintained in the year 2007. STANDARDS MALAYSIA will further initiate to include more programs in the coming years.

The ACB Scheme program was also expanded to include new field: Forest Management Certification (FMC), which was launched in October 2007. This new accreditation program was designed to accredit CBs competent to certify organizations in the field of forest



management in ensuring the functional integrity of forest resources would be well protected and managed properly. Forest certification would also help ensure that people who live in or close to forests would benefit from its management and use.

### Stronger Presence in International Arena

Malaysia's interests continue to be protected and pursued by STANDARDS MALAYSIA with its representation in both the IEC and ISO. STANDARDS MALAYSIA maintains its seat in the ISO Council for 2007-2008, which is the highest international policy-making body for standardization. STANDARDS MALAYSIA also continues to hold the Secretariat position in four ISO TCs, namely for Rubber and Rubber Products, Rubber and Plastic Hoses, Rubber Products, other than Hoses and Mechanical Contraceptives.

The country's participation is also secured with it becoming 'P' participating member in six new TCs and as 'O' observer member in five ISO TCs and Sub-Committees (SCs) in 2007. It is also a 'P' participating member in one new TC of the IEC. In total, Malaysia's 'P' memberships in ISO and IEC are 113 and 17 respectively.

In order to ensure that the country's standards remain relevant, STANDARDS MALAYSIA continues its active participation in international meetings including those organised by ISO, IEC and regional meetings of ACCSQ, Asia-Pacific Economic Cooperation Sub-Committee on Standards and Conformance (APEC-SCSC) and Pacific Area Standards Congress (PASC). In the field of accreditation, STANDARDS MALAYSIA participated in many meetings involving ILAC, IAF, APLAC, PAC, ISO Conformity Assessment Committee (ISO/CASCO) and others so as to get continuous updates and pursue the interests of Malaysia.



### Hosting of Meetings at Regional and International Levels

STANDARDS MALAYSIA became host for the following meetings/programs held in 2007:

- ISO/TC 69/WG 3 on Statistical Interpretation of Data Meeting held from January 11-12, 2007.
- ACCSQ Product Working Group (PWG) Meeting on Rubber Based Products Meeting held from March 6-7, 2007.
- ACCSQ PWG for Wood Based Products Meeting held from March 7-9, 2007.
- ISO/TC 45/SC 4 on Rubber and Rubber Products (Other than Hoses) – Elastomeric Isolators Meeting held from June 21-22, 2007
- ASEAN-EU APRIS 2 Program: Electrical & Electronics Equipment Sub-Component Regional Training on Post Market Surveillance held from June 26-27, 2007.
- PWG on Prepared Foodstuff Meeting held from July 16-17, 2007.
- ACCSQ PWG on Pharmaceuticals Products Meeting held from July 23-27, 2007.
- ACCSQ PWG on Wood Based Products Meeting held on November 6-7, Kuala Lumpur
- ACCSQ Joint Sectoral Committee (JSC) Electrical and Electronic Equipments Meeting held from November 19-22, 2007.
- IEC/TC 61 on Household Appliances Meeting held from November 19-23.
- APEC Joint Advisory Committee (JAC) Electrical Electronic Mutual Recognition Arrangements (EE MRA) Meeting held from November 21-22, 2007.
- IEC/TC 31 on Equipment for Explosive Atmosphere Meeting held from November 29-December 9, 2007.
- The 13th APLAC General Assembly & Technical Meeting held from December 2-7, 2007.





### Promotion, Awareness and Capacity Building Programs

Promotion and the creation of awareness on the activities of STANDARDS MALAYSIA as well as on the importance of standardization and accreditation remained a priority in 2007. Numerous activities and programs were implemented so as to reach out to a varied audience comprising the public, the industry, NGOs and other parties. STANDARDS MALAYSIA also gave priority to further strengthen the relationships and networking with relevant ministries, statutory boards, trade associations and consumer associations so as to advance the country's standardization and accreditation agenda.

Promotion, awareness and capacity building programs held in 2007 include:

- Accreditation promotion program to reach out to potential laboratories and potential clients to CBs (industries) in various sectors around the country. It was carried out to promote STANDARDS MALAYSIA's accreditation schemes as it was crucial to enhance awareness on either generic information or on specific accreditation requirements so as to facilitate more CABs to seek accreditation. The program was held in four zones:
  - Penang (North Region): April 3-4, 2007
  - Klang Valley (Central Region): May 29-30, 2007
  - Sarawak (East Malaysia) : June 13-14, 2007
  - Johor (South Region): July 4-5, 2007
- Forum with accredited laboratories was held on June 28, 2007. This annual event was attended by about 210 participants, mostly laboratory managers and other key personnel. STANDARDS MALAYSIA views the dialogue with the laboratories as one of the avenues to gauge inputs to further improve and enhance its accreditation programs.
- Coordination of APLAC PT Program took place in February 2007. As a signatory to APLAC, STANDARDS MALAYSIA offered for the first time the PT program at APLAC level aimed at comparing the calibration results of accredited laboratories within APLAC in the field of Direct Current (DC) measurement. A total of 34 laboratories from 17 APLAC members participated in this program.
- Forum with CBs in Malaysia was held on September 6, 2007 at PJ Hilton. The objectives of the forum were to update the accredited and non-accredited CBs on the development of the ACB Scheme, progress on conformity assessment field nationally, regionally and internationally, introduce new policy and discuss issues, which were raised by the CBs. Certain relevant regulatory bodies were also invited during this forum to further enhance cooperation and collaboration with STANDARDS MALAYSIA.



### Participation in Exhibitions

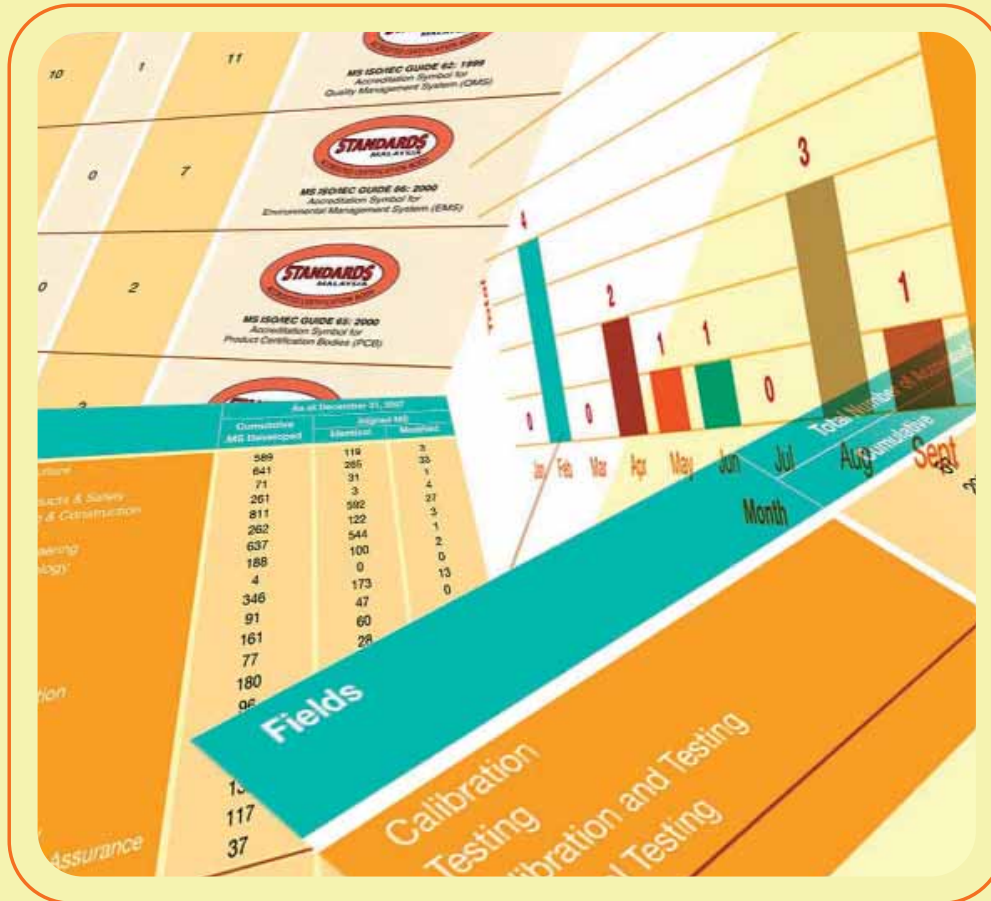
STANDARDS MALAYSIA maintained its active participation in exhibitions comprising those in which it was involved as organizer or co-organizer or those which were organized by external parties. STANDARDS MALAYSIA was involved in these exhibitions in 2007:

- World Halal Forum/Expo 2007 organized by the Halal Development Corporation (HDC) from May 7-8, 2007.
- Malaysia International *Halal* Showcase (MIHAS 2007) organized by the Malaysia External Trade Development Corporation (MATRADE) from May 9-12, 2007.
- Exhibition in conjunction with the seminar on *Halal* Food Standards Realization – MS 1500:2004 jointly organized by STANDARDS MALAYSIA, Malaysian Islamic Chamber of Commerce and the State of Negeri Sembilan held from June 5-6, 2007.
- SMIDEX 2007 organized by the Small and Medium Industries Development Corporation (SMIDEC) from June 6-8, 2007.
- One Village One Product Showcase organized by the Ministry of Entrepreneur and Cooperative Development held from July 5-8, 2007.
- Malaysia International Food and Beverage exhibition organized by Kumpulan Utusan from July 12-14, 2007.
- Exhibition in conjunction with the seminar on *Halal* Food Standards Realization – MS 1500: 2004 jointly organized by STANDARDS MALAYSIA, Malaysian Islamic Chamber of Commerce and the State of Kelantan held from August 6-7, 2007.
- National Toilet Expo and Forum 2007 organized by the Ministry of Housing and Local Government & Quality Restroom Association of Malaysia (QRAM) from August 9-12, 2007.
- 24th World Congress of Pathology & Laboratory Medicine organized by College of Pathologist, Academy of Medicine Malaysia from August 20-24, 2007.
- Asian Exposition on Chemicals Instrumentation (CI Asia) 2007 organized by *Institut Kimia Malaysia* (IKM) held from August 23-25, 2007.
- Exhibition in conjunction with International Medical Universities Convention on Quality organized by the university from August 29-30, 2007.
- BioMalaysia 2007 organized by MOSTI and BioCorp held from November 26-28, 2007.
- Exhibition in conjunction with the seminar on *Halal* Food Standards Realization – MS 1500:2004 jointly organized by STANDARDS MALAYSIA, Malaysian Islamic Chamber of Commerce and the state of Perlis held from December 3-4, 2007.
- Exhibition in conjunction with the National Meeting on Food and Food Safety organized by the Ministry of Health held on December 10, 2007.

STANDARDS MALAYSIA also forged smart partnerships and collaborations with external parties in various programs related to standards and accreditation, as follows:

- Collaboration with Standards Users
  - Essay Writing and Photography Competition on Standards.
  - Awareness Training Program for Educators.
  - Development of Train the Trainer Module.
  - Dissemination of information through both the electronic and print media.
  - Promotion of standards pertaining to SR via website and brochures, training programs, talks, debates and forum.
- Collaboration with DPIM
  - Seminar road shows on *Halal* Food Standards Realization in Penang, Negeri Sembilan, Kelantan and Perlis.
- Collaboration with Malaysian Islamic Consumer Association (Persatuan Pengguna Islam Malaysia – PPIM)
  - Media campaign on *Halal* Standard through radio IKIM.fm (from April-September 2007).
- Collaboration with QRAM & Sibu Municipal Council (SMC)
  - Creation of a mock up design for public toilets and the establishment of the first model toilet for Malaysian school in accordance to MS 2015:2006 in Sibu, Sarawak.
- Collaboration with IKM
  - Capacity building.
  - Training of assessors, officers, stakeholders and potential accredited laboratories.
- Collaboration with SIRIM Berhad
  - Seminar on Malaysian Standard for Good Animal Husbandry.
  - Workshop on ISMS.
  - Forum on the direction of teaching Eurocode/Malaysian Standards on Code of Practice (COP) for the Design of Concrete and Steel Structures in universities.
  - Seminar road shows on MS for OSH Management Systems – Requirements and Guidelines.
  - Seminar on Restriction of Hazardous Substances Directive (RoHS) /IEC TC 111 on Environmental standardization for electrical and electronic products and systems.
  - Seminar on Standardization Activities in Geographical Information System (GIS).
  - Seminar on Indoor Air Quality in collaboration with the University of Malaya.
  - Roundtable discussion with International Electro-technical Commission Scheme for Certification to Standards Relating to Equipment for use in Explosive Atmosphere (IECEX Scheme) Secretary.
  - Seminar on Energy Efficiency in Building.
  - Seminar on Industrial Textiles.
  - Seminar on Good Agricultural Practices (GAP).
  - Seminar on Software Engineering.
  - Seminar on Equipment for Explosive Atmospheres in conjunction with IEC/TC 31 Meeting.
  - Awareness Seminar on IEC/TC 111 on Environmental standardization for electrical and electronic products and systems (with IEC/Asia Pacific Regional Centre – APRC).
  - Seminar on latest update on ISO 9000 Family of Standard.





## PERFORMANCE INDICATORS

## Performance Indicators

### Standards

**FIGURE**  
**1**

**Number of MS Developed by Sectors in 2007**

Food & Agriculture	55
Chemicals	56
Consumer Products & Safety	0
Civil Engineering & Construction	16
Electro-technical	121
Mechanical Engineering	32
Information Technology	49
Petroleum & Gas	6
<i>Halal</i> Products	0
Plastics	35
Packaging	8
Road Vehicles	12
Fire Safety & Fire Protection	0
Rubber	12
Iron & Steel	14
Textiles	24
Medical Devices	65
Occupational Health & Safety	26
Quality Management & Quality Assurance	1
Environmental Management	15
<b>TOTAL</b>	<b>547</b>

Total MS developed in 2007 was 547 with the Electro-technical sector recording the highest number at 121 MS, followed by the Medical Devices sector (65) and the Chemicals sector (56).

FIGURE  
2**Status of Development of MS in 2007**

MS Development	Target 2007	MS Developed in 2007	Difference	
			Number	%
Adopted	210	393	183	187.14%
Indigenous / Adapted	90	53	37	58.89%
Revision	100	101	1	101.00%
<b>TOTAL</b>	<b>400</b>	<b>547</b>	<b>147</b>	<b>136.75%</b>

Total MS developed in 2007 was 547, which exceeded the target of developing 400 MS for the year by 136.75%.

FIGURE  
3**Cumulative Number of MS Developed by Sectors as at December 31, 2007**

Food & Agriculture	589
Chemicals	641
Consumer Products & Safety	71
Civil Engineering & Construction	261
Electro-technical	811
Mechanical Engineering	262
Information Technology	637
Petroleum & Gas	188
<i>Halal</i> Products	4
Plastics	346
Packaging	91
Road Vehicles	161
Fire Safety & Fire Protection	77
Rubber	180
Iron & Steel	96
Textiles	242
Medical Devices	117
Occupational Health & Safety	132
Quality Management & Quality Assurance	117
Environmental Management	37
<b>TOTAL</b>	<b>5,060</b>

Cumulative number of MS developed up to December 31, 2007 was 5,060 with the highest number of MS developed in the Electro-technical sector (811) followed by Chemicals (641) and Information Technology (637). The lowest number of MS developed was in the *Halal* Products sector (4).

FIGURE  
4**Status of Development of MS as at December 31, 2007**

Target by Year 2010	Achieved as at end 2007	% Achieved	Difference	
			Number	%
6,000	5,060	84.33	940	15.67

Cumulative total number of effective MS developed as at December 31, 2007 were 5,060 or 84.33% of the national target of developing 6,000 MS by year 2010. The remaining MS to be developed up to the year 2010 are 940 or 15.67%.



FIGURE  
5

## Alignment of Cumulative MS to International Standards as at December 31, 2007

Sectors	As at December 31, 2007		
	Cumulative MS Developed	Aligned MS	
		Identical	Modified
Food & Agriculture	589	119	3
Chemicals	641	265	33
Consumer Products & Safety	71	31	1
Civil Engineering & Construction	261	3	4
Electro-technical	811	592	27
Mechanical Engineering	262	122	3
Information Technology	637	544	1
Petroleum & Gas	188	100	2
Halal Products	4	0	0
Plastics	346	173	13
Packaging	91	47	0
Road Vehicles	161	60	12
Fire Safety & Fire Protection	77	28	2
Rubber	180	96	19
Iron & Steel	96	35	8
Textiles	242	48	0
Medical Devices	117	63	1
Occupational Health & Safety	132	104	0
Quality Management & Quality Assurance	117	108	2
Environmental Management	37	25	0
<b>TOTAL</b>	<b>5,060</b>	<b>2,563</b>	<b>131</b>
<b>RATE OF ALIGNMENT</b>		<b>53.24%</b>	

The percentage of cumulative MS developed and aligned to international standards as at December 31, 2007 was 53.24%. The Electro-technical sector achieved the highest number of MS aligned to international standards (619) followed by Information and Technology (545) and Chemicals (298).

FIGURE  
6

## Total Mandatory Standards by Sectors as at December 31, 2007

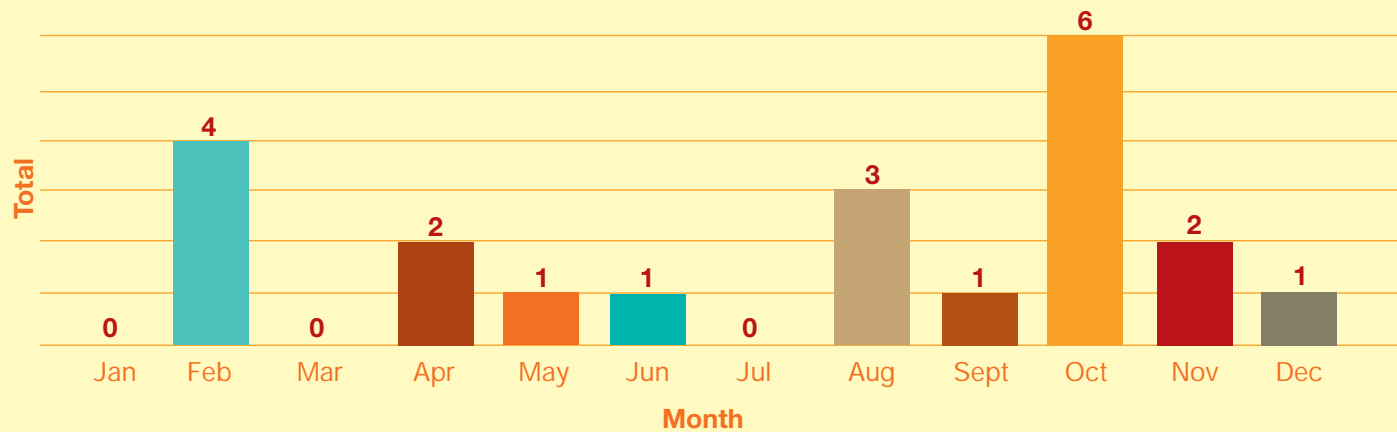
Sectors	Cumulative MS Developed	Mandatory Standards
Food & Agriculture	589	3
Chemicals	641	4
Consumer Products & Safety	71	0
Civil Engineering & Construction	261	39
Electro-technical	811	57
Mechanical Engineering	262	6
Information Technology	637	0
Petroleum & Gas	188	4
Halal Products	4	0
Plastics	346	0
Packaging	91	0
Road Vehicles	161	3
Fire Safety & Fire Protection	77	8
Rubber	180	1
Iron & Steel	96	2
Textiles	242	0
Medical Devices	117	0
Occupational Health & Safety	132	0
Quality Management & Quality Assurance	117	0
Environmental Management	37	0
<b>TOTAL</b>	<b>5,060</b>	<b>127</b>

Of the total of 5,060 MS developed, 127 standards have been made mandatory. Mandatory standards are highest in the Electro-technical sector (57) followed by Civil Engineering and Construction (39) and Fire Safety and Protection (8).

## Accreditation

FIGURE  
7

Total Accredited Laboratories in 2007



In 2007, STANDARDS MALAYSIA accredited a total of 21 laboratories.

FIGURE  
8

Number of Malaysian Laboratories Accredited by Standards Malaysia as at December 31, 2007

Fields	Total Number of Accredited Laboratories	
	Cumulative	Active
Calibration	67	48
Testing	297	253
Calibration and Testing	13	12
Medical Testing	4	4
<b>Total</b>	<b>381</b>	<b>317</b>

The cumulative total number of accredited laboratories as at December 31, 2007 was 381, of which 317 remained active.

FIGURE  
9

## Accredited Certification by Sectors as at December 31, 2007

## TYPES OF CERTIFICATION

NO.	SECTORS	QMS ISO 9001:2000	EMS ISO 14001:2004	OSH		HACCP	PCS
				OHSAS 18001:1999	MS 1722 Part 1:2005		
1	Agriculture, including Fishing	18	2	-	-	-	-
2	Mining and Quarrying	26	7	-	-	-	-
3	Food Products, Beverages and Tobacco	239	94	83	2	7	-
4	Textiles and Textile Products	56	3	-	-	-	-
5	Leather and Leather Products	10	-	-	-	-	-
6	Wood and Wood Products	44	5	-	-	-	-
7	Pulp, Paper and Paper Products	102	26	6	1	-	-
8	Publishing Companies	6	1	-	-	-	-
9	Printing Companies	38	11	1	-	-	-
10	Manufacture of Coke and Refined Petroleum Products	20	7	3	-	-	-
11	Nuclear Fuel	1	-	-	-	-	-
12	Chemicals, Chemical Products and Fibers	212	40	13	2	-	-
13	Pharmaceuticals	7	1	1	-	-	-
14	Rubber and Plastic Products	384	77	9	-	-	-
15	Non-metallic Mineral Products	52	8	-	-	-	140
16	Concrete, Cement, Lime, Plaster, etc	123	9	8	-	-	11
17	Basic Metals and Fabricated Metal Products	456	67	14	1	-	17
18	Machinery and Equipment	130	12	4	1	-	72
19	Electrical and Optical Equipment	364	151	25	3	-	-
20	Shipbuilding	9	-	-	-	-	-
21	Aerospace	8	1	1	-	-	-
22	Other Transport Equipment	50	20	6	1	-	-
23	Manufacturing Not Elsewhere Classified	57	3	-	-	-	-
24	Recycling	11	22	-	-	-	-
25	Electricity Supply	38	17	7	1	-	-
26	Gas Supply	1	1	-	-	-	-

27	Water Supply	23	1	-	-	-	-
28	Construction	343	13	6	2	-	-
29	Wholesale and Retail Trade; Repair of Motor Vehicles, Motorcycles and Personal and Household Goods	152	16	-	-	-	-
30	Hotels and Restaurants	19	6	1	1	-	-
31	Transport, Storage and Communication	160	13	11	1	-	-
32	Financial Intermediation; Real Estate; Renting	123	4	-	-	-	-
33	Information Technology	58	2	-	-	-	-
34	Engineering Services	230	4	9	2	-	-
35	Other Services	139	11	3	-	-	-
36	Public Administration	181	7	-	-	-	-
37	Education	141	1	-	-	-	-
38	Health and Social Work	229	-	2	-	-	-
39	Other Social Services	76	4	-	-	-	-
<b>TOTAL</b>		<b>4,336</b>	<b>667</b>	<b>213</b>	<b>18</b>	<b>7</b>	<b>240</b>






FIGURE  
10






## Number of CBs Accredited by STANDARDS MALAYSIA

Accreditation Program	CBs Accredited in 2007	Total Cumulative Number of Accredited CBs as at December 31, 2007
OMS	1	11
EMS	0	7
PCS	0	2
OSH	1	2
HACCP	1	1
ISMS	0	0
FMC	0	0

FIGURE  
11

## Number of Accredited Conformity Assessment Bodies as at December 31, 2007

Scheme	Cumulative up to 2006	2007	Cumulative up to 2007	Accreditation Symbols
ACB (QMS Program)	10	1	11	 <p>MS ISO/IEC GUIDE 62: 1999 Accreditation Symbol for Quality Management System (QMS)</p>
ACB (EMS Program)	7	0	7	 <p>MS ISO/IEC GUIDE 66: 2000 Accreditation Symbol for Environmental Management System (EMS)</p>
ACB (PCB Program)	2	0	2	 <p>MS ISO/IEC GUIDE 65: 2000 Accreditation Symbol for Product Certification Bodies (PCB)</p>
ACB (OSH Management System)	1	1	2	 <p>MS ISO/IEC GUIDE 62: 1999 Accreditation Symbol for OSH Management System (OSH MS)</p>
ACB (HACCP Based Food Safety Systems)	0	1	1	 <p>MS ISO/IEC GUIDE 62: 1999 Accreditation Symbol for Hazard Analysis and Critical Control Point (HACCP)</p>

Scheme	Cumulative up to 2006	2007	Cumulative up to 2007	Accreditation Symbols
ACB (ISMS)	0	0	0	 <p>ISO/IEC Guide 62: 1999 Accreditation Symbol for Information Security Management Systems (ISMS)</p>
ACB (FMC)	-	0	0	 <p>MS ISO/IEC 17021 Accreditation Symbol for Forest Management Certification (FMC)</p>
SAMM	360	21	381	 <p>MS ISO/IEC 17025 Accreditation Symbol for Laboratories (Testing and Calibration)</p>  <p>MS ISO 15189 Accreditation Symbol for Laboratories (Medical Testing)</p>
MIBAS	0	0	0	 <p>MS ISO/IEC 17020 Accreditation Symbol for Inspection Bodies</p>

Note: Accredited conformity assessment bodies are allowed to use STANDARDS MALAYSIA accreditation symbols as indicated in Figure 11.

## Participation at ISO/IEC Level

FIGURE  
12

Summary of Malaysia's Participation in ISO TCs/SCs

Type	TC		SC		Total	
	2006	2007	2006	2007	2006	2007
'P' Member	6	4	4	2	10	6
'O' Member	4	3	0	2	0	5

Malaysia has increased its 'P' participating membership in 6 new TCs and as 'O' observer member in 5 TCs and SCs of the ISO. The 6 new TCs of which STANDARDS MALAYSIA is a 'P' member are:

- ISO/TC 67/SC 7 Offshore structures for petroleum and natural gas industries.
- ISO/TC 146/SC 4 General Aspects.
- ISO/TC 194 Biological Evaluation of Medical Devices.
- ISO/TC 232 Educational Services.
- ISO/TC 234 Fisheries and Aquaculture.
- ISO/TC 212 Clinical Laboratory Testing and Invitro Diagnostic Test Systems.

STANDARDS MALAYSIA 'O' memberships in the ISO are in the following:

- ISO/TC 17 Steel.
- ISO/TC 17/SC 16 Steels for the Reinforcement and Pre-stressing of Concrete.
- ISO/TC 17/SC17 Steel Wire Rod and Wire Products.
- ISO/TC 222 Personal Financial Planning.
- ISO/TC 223 Societal Security.



FIGURE  
13**Summary of Malaysia's Participation in IEC TCs**

Type	TC		SC		Total	
	2006	2007	2006	2007	2006	2007
'P' Member	2	1	4	0	6	1
'O' Member	0	0	0	0	0	0

In the IEC, Malaysia is a 'P' member in one TC in 2007, namely IEC/TC 111 Environmental Standardization for Electrical and Electronic Products and Systems while it does not hold any 'O' membership.

FIGURE  
14**Total Number of Participating 'P' Membership of ISO and IEC in 2007**

ISO	IEC
113	17

Malaysia's total 'P' memberships in both ISO and IEC in 2007 are 113 and 17 respectively.

FIGURE  
15**Number of ISO TC/SC Secretariat Held from 1995 to 2007**

- ISO/TC 45 (Rubber and Rubber Products)
- ISO/TC 45/SC1 (Rubber and Plastic Hoses)
- ISO/TC 45/SC 4 (Rubber Products, other than hoses)
- ISO/TC 157 (Mechanical Contraceptives)

STANDARDS MALAYSIA still holds four Secretariat positions in the ISO's TC/SC. These positions were held from 1995 to 2007. The chairman and secretaries for ISO/TC 45, ISO/TC 45/SC 1 and ISO/TC 45/SC 4 are representatives of the Malaysian industry and SIRIM Berhad respectively. STANDARDS MALAYSIA holds the Secretariat of ISO/TC 157 while the TC's chairman is Y.Bhg. Dato' Dr. Ong Eng Long of the Malaysian Rubber Export Promotion Council, Malaysia. Dr. Kook Weng Chan is the chairperson of ISO TC 207/SC 7 – Green house gas management and related activities. Malaysia is also the convener for TC 45/SC 3/WG 4 on Natural Rubber, 45/SC 4/WG 5 on Synthetic Rubber, TC 61/SC2/WG 2 on Hardness and Surface Properties and TC 69/AHG on Applications of Statistical Methods.

## Abbreviations

9MP	Ninth Malaysia Plan	MATRADE	Malaysia External Trade Development Corporation
ACB	Accreditation of Certification Bodies	MIBAS	Malaysia Inspection Bodies Accreditation Scheme
ACC SQ	ASEAN Consultative Committee for Standards and Quality	MIHAS	Malaysian International <i>Halal</i> Showcase
APEC	Asia Pacific Economic Cooperation	MLA	Multilateral Recognition Arrangements
APEC-SC SC	Asia Pacific Economic Cooperation Sub-Committee on Standards and Conformance	MOSTI	Ministry of Science, Technology and Innovation
APLAC	Asia Pacific Laboratory Accreditation Cooperation	MOU	Memoranda of Understanding
APRC	Asia Pacific Regional Centre	MRA	Mutual Recognition Arrangements
ASEAN	Association of South East Asian Nations	MS	Malaysian Standards
BOA	Bureau of Accreditation	MSAC	Malaysian Standards and Accreditation Council
CAB	Conformity Assessment Bodies	MyCB	Malaysian Common Criteria Certification Body
CASCO	Conformity Assessment Committee	MyCC	Malaysian Common Criteria Evaluation and Certification
CB	Certification Bodies	MyENC	Malaysian Electro-technical National Committee
CCRA	Common Criteria Recognition Arrangement	MyNAC	Malaysian National Accreditation Committee
CI Asia	Asian Exposition on Chemicals Instrumentation	MyNMTAC	Malaysian National Medical Testing Accreditation Committee
COP	Code of Practice	MyNSC	Malaysian National Standards Committee
DC	Direct Current	MySEF	Malaysian ICT Security Evaluation Facilities
DPIM	<i>Dewan Perdagangan Islam Malaysia</i>	NGO	Non-governmental Organizations
EE MRA	Electrical & Electronic Mutual Recognition Arrangements	NPCB	National Pharmaceutical Control Bureau
EEE	Electrical & Electronic Equipment	OSH	Occupational Safety and Health
EMS	Environmental Management System	PAC	Pacific Accreditation Cooperation
FMC	Forest Management Certification	PASC	Pacific Area Standards Congress
FTA	Free Trade Agreement	PC	Product Certification
GAHP	Good Animal Husbandry Practice	PCB	Product Certification Bodies
GAP	Good Agricultural Practices	PCS	Product Certification System
GIS	Geographical Information System	PNAC	Pakistan Accreditation Body
GMP	Good Manufacturing Practices	PPIM	Malaysian Islamic Consumer Association ( <i>Persatuan Pengguna Islam Malaysia</i> )
HACCP	Hazard Analysis and Critical Control Point	PT	Proficiency Testing
HDC	Halal Development Corporation	PWG	Product Working Group
IAF	International Accreditation Forum	QMS	Quality Management System
ICT	Information and Communication Technology	QRAM	Quality Restroom Association of Malaysia
IEC	International Electro-technical Commission	R&D	Research and Development
IECEX	IEC Scheme for Certification to Standards Relating to Equipment for use in Explosive Atmosphere	RoHS	Restriction of Hazardous Substances Directive
IKM	<i>Institut Kimia Malaysia</i>	SAMM	<i>Skim Akreditasi Makmal Malaysia</i>
ILAC	International Laboratory Accreditation Cooperation	SC	Sub-Committee
ISC	Industry Standards Committee	SI	International System of Units
ISC C	ISC for Consumer Goods, Safety and Personal Services	SMC	Sibu Municipal Council
ISC G	ISC for IT, Communication and Multimedia	SMIDEC	Small and Medium Industries Development Corporation
ISMS	Information Security Management Systems	SR	Social Responsibility
ISO	International Organization for Standardization	STANDARDS USERS	Malaysian Association of Standards Users
ISO/CASCO	ISO Conformity Assessment Committee	TBT	Technical Barriers to Trade
IT	Information Technology	TC	Technical Committee
JAC	Joint Advisory Committee	TWG	Technical Working Group
JAKIM	<i>Jabatan Kemajuan Islam Malaysia</i>	WG	Working Group
JSC	Joint Sectoral Committee		
JSC EEE	Joint Sectoral Committee for Electrical & Electronic Equipment		