

Metrology, Accreditation and Standards set the Framework for Global Developments

In celebration of the World Metrology Day, World Accreditation Day and World Standards Day, a seminar was held recently in Hong Kong, aiming to provide participants with a deeper understanding on how metrology, accreditation and standards play a pivotal role in supporting the quality infrastructure.

Quality infrastructure is essential for our society to function effectively and efficiently. A sound quality infrastructure can enhance our confidence in goods and services, foster innovation and competitiveness, and connect people around the world. As such, different administration and industry bodies in the three areas of metrology, accreditation and standardisation come together every year to share experience and exchange ideas for a better development of trade and infrastructure.

The seminar on the World Metrology Day (WMD), World Accreditation Day (WAD) and World Standards Day (WSD) 2016 was jointly organised by the Hong Kong Council for Testing and Certification; Government Laboratory; Hong Kong Accreditation Service, Standards and Calibration Laboratory, and Product Standards Information Bureau of Innovation and Technology Commission.

Measurements in a Dynamic World



Metrology is the science of measurement and accurate measurements are the prerequisite for scientific discoveries and innovation, industrial manufacturing and international trade. New ideas and developments emerge every day in all these aspects, improving the quality of life and protecting our environment. It is therefore essential to have continuous advancement in metrology for the ever-

evolving world.

“From the initial measurements of length for map and weight to electrical and chemical units nowadays, the International System of Units (SI) has been adapting to the world’s changes, and meeting the needs of development,” noted Dr Martin Milton, Director of International Bureau of Weights and Measures (BIPM).

As an international metrology organisation, BIPM comprises 58 member states and 40 associates of the General Conference involving 250 metrology institutes. Apart from ensuring the uniformity of SI Units around the world, the organisation addresses global issues like climate change for which research and standardised measurements on temperature and concentration of carbon dioxide in ambient air are in progress.

Meanwhile, WMD is an annual celebration of the significant Metre Convention – the international treaty on uniformity of measurement signed on 20 May 1875 by representatives of 17 nations. The Convention set the framework for global



(From left to right) Dr Junji Nomura, President of International Electrotechnical Commission; Mr Peter Unger, Chairman of International Laboratory Accreditation Cooperation; Mr Wong Wang Wah, Executive Administrator of Hong Kong Accreditation Service; and Dr Martin Milton, Director of International Bureau of Weights and Measures

collaboration in the science of measurement and in its industrial, commercial and societal applications.

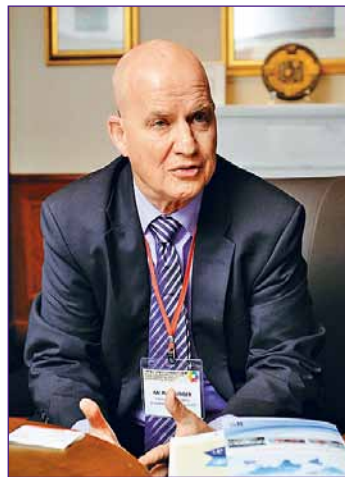
Accreditation: A Global Tool to Support Public Policy

Accreditation and conformity assessments are widely used by policy makers to deliver better regulations, safeguard fair markets, prevent fraud, and enhance consumers’ confidence and trust. Performance of private sector can be improved with conformity assessments, for example, through testing or inspection of their products as well as certification of their management system, and accreditation is often relied upon to verify these activities, ensuring their impartiality and competence.

Accreditation also supports the provision of local services, such as providing safe food and clean drinking water, delivering health and social care, or maintaining an unpolluted environment. In addition, it enhances the acceptance of products and services across national borders, thereby creating a framework for international trade by the removal of technical barriers. This is achieved through the mutual recognition arrangements between accreditation bodies around the world.

The mutual recognition arrangements are managed at the international level by both the International Laboratory Accreditation Cooperation (ILAC), in the fields of calibration, medical testing and inspection accreditation; and the International Accreditation Forum (IAF), in the fields of management systems, products, services, and personnel conformity assessment.

“Accreditation not only facilitates trade, but also enhances the quality of conformity assessment activities and helps protect consumer safety,” said Mr Peter Unger, Chairman of ILAC. “As a



global initiative, WAD (on 9 June) aims to raise awareness of the importance of accreditation, which makes sure that testing, inspections and certifications are credible worldwide.”

Standards Build Trust

Standards connect people with reliable modes of communication and trusted frameworks that are accessible to all for cooperation. A product conforming to an international standard provides a higher level of confidence to consumers worldwide in its quality and safety.

“For example, the export of an electrical appliance involves the collaboration of many parties, including manufacturers, traders and retailers, who are often from different economies. One of the concerns will be whether the appliance is safe to use in different places, and harmonised standards therefore play a critical role in introducing uniform requirements on the design of such a product,” explained Dr Junji Nomura, President of International Electrotechnical Commission (IEC).

The World Standards Day is celebrated internationally each year on 14 October to honour the efforts of the thousands of ‘unsung’ experts who develop voluntary standards in standards development organisations, such as the International Organization for Standardization (ISO), International Telecommunication Union (ITU) and IEC. The aim of WSD is to raise awareness among regulators, industry and consumers as to the importance of standardisation to the global economy.

