Seminar promoting metrology, standards and accreditation

People tend to take weights and measures for granted, but for individuals intimately involved with these everyday aspects of life, measuring up knows no bounds.

A multitude of standards for the world

If the CIPM is responsible for the accuracy and applicability of a uniform measurement, the ISO works on setting a standard for each subject area, as well as the standardisation of the process itself. With over 160 members, the ISO is among the world’s most internationally-recognised standards organisations. In its catalogue there are about 20,000 standards ranging from everything such as nuts and bolts to standards on a camera, from the ISO fixed child seat system to social responsibility.

Established in 1947 as a response to various issues following the end of WWII, the ISO very quickly became more and more broad, according to Mr Steele, first regionally and then along with the growth of bilateral and international trade. The ISO, like the CIPM, reduces some of the technical barriers of trade between countries.

Standards put things in perspective, while standardisation is all about confidence. Mr Steele demonstrated his idea with the help of a credit card, which is an ISO standard, he pointed out. There are standards for the size of the card, the inscription face and other elements. “Standardisation is all about confidence. You as a customer have confidence that no one else is able to access your account. Equally, the banks have confidence, or they won’t give it a credit card to you.”

The ISO Secretary-General revealed that there are about 230 technical groups covering different subject areas. Currently, the organisation’s groups are working on about 4,000 standards, while producing roughly 1,100 standards per year. On the rise is the energy area, added Mr Steele, and the organisation is increasingly looking at total energy usage.

“Having new components can add maybe one or two per cent energy efficiency. But having a systematic approach to energy efficiency management can save somewhere up to 20 to 30 per cent,” he said, noting the significance of energy efficiency. The standard actually brings energy efficiency management into the board room, creating an energy strategy for businesses.

Here in Hong Kong, some ISO members have been working on a certification scheme for the standard (ISO 15001) which accords to Mr Steele, who also notes an increasing number and proportion of new standards being developed in China, is a source of competitive advantage or increased profitability.

Accreditation to reduce the cost of international trade

Last but certainly not least among the trio was Dr Barry Inglis, President of the International Committee for Weights and Measures (CIPM), who has been involved with national laboratory accreditation since 1978. In addition to the ISO’s work on technical standards, the CIPM is responsible for the accuracy and quality of measurement units. Established in 1977, the ILAC looks into is conformity assessment. This has significant implications on the wider community. “Reliable conformity assessments ensure product safety, product quality, and product impact on the environment,” Mr Inglis said, adding that conformity ensures that all companies make a correct assessment of product quality, whereas in the area of health assessments, the failure of a test may lead to mistreatment or misdiagnosis, which could be the difference between life and death.

In an attempt to raise the public’s awareness of the significance of the respective organisations’ activities, the three international organisations have a day of their own. World Metrology Day is held each year on May 20, commemorating the signing of the Metre Convention in Paris in 1875. World Accreditation Day is on June 9, whereas World Standards Day is on October 14, the latter of which is observed not only by the ISO, but also by the International Electrotechnical Commission and the International Telecommunication Union.

It should now be obvious that there are committed professionals who are watching our backs, so to speak, and keeping the world we live in harmony and safe.

* The seminar was organised by The Hong Kong Council for Testing and Certification, the Government Laboratory; the Hong Kong Accreditation Service, as well as the Standards and Calibration Laboratory and the Product Standards Information Bureau of the Innovation and Technology Commission.

CIPM President Dr Barry Inglis emphasises the importance of uniformly recognised measurement units.

Secretary-General of the ISO Mr Rob Steele notes the rising trend of the establishment of energy standards.

ILAC Chairman Mr Peter Unger talks about the conformity assessment and accreditation.