

## Constant Evolution of the International System of Units (SI)

### Release:

May 20 is World Metrology Day, commemorating the anniversary of the signing of the Metre Convention in 1875. This treaty provides the basis for a coherent measurement system worldwide that underpins scientific discovery and innovation, industrial manufacturing and international trade, as well as the improvement of the quality of life and the protection of the global environment.

The theme for World Metrology Day 2018 is **Constant Evolution of the International System of Units (SI)**. This theme was chosen because in November 2018, the General Conference on Weights and Measures is expected to agree one of the largest changes to the International System of Units (the SI) since its inception. The proposed changes are based on the results of research into new measurement methods that have used quantum phenomena as the basis for standards that are fundamental. The SI will be based on a set of definitions each linked to the laws of physics and have the advantage of being able to embrace further improvements in measurement science and technology to meet the needs of future users for many years to come.

Across the world, national metrology institutes continually advance measurement science by developing and validating new measurement techniques at whatever level of sophistication is needed. The national metrology institutes participate in comparisons coordinated by the *Bureau International des Poids et Mesures* (BIPM) to ensure the reliability of measurement results worldwide. The BIPM also provides a forum for its Member States to address new measurement challenges. The *International Organization of Legal Metrology* (OIML) develops International Recommendations, the aim of which is to align and harmonize requirements worldwide in many fields.

World Metrology Day recognizes and celebrates the contribution of all the people that work in intergovernmental and national organizations throughout the year on behalf of all.

Further information, including a message from the Directors, posters, and a list of events, is available at [www.worldmetrologyday.org](http://www.worldmetrologyday.org) – Contact: [wmd@worldmetrologyday.org](mailto:wmd@worldmetrologyday.org)

### Notes for Editors:

*World Metrology Day is an annual event during which more than 80 countries celebrate the impact of measurement on our daily lives.*

*This date was chosen in recognition of the signing of the Metre Convention on 20 May 1875, the beginning of formal international collaboration in metrology. Each year World Metrology Day is organized and celebrated jointly by the International Bureau of Weights and Measures (BIPM) and the International Organization of Legal Metrology (OIML) with the participation of the national organizations responsible for metrology.*

*The international metrology community which works to ensure that accurate measurements can be made across the world endeavors to raise awareness each World Metrology Day through a poster campaign and web site. Previous themes have included topics such as measurements for the global energy challenge, for safety, for innovation, and measurements in sport, the environment, medicine and trade.*

### About the BIPM

*The signing of the Metre Convention in 1875 created the BIPM and for the first time formalized international cooperation in metrology. The Convention established the International Bureau of Weights and Measures and laid the foundations for worldwide uniformity of measurement in all aspects of our endeavors, historically focusing on and assisting industry and trade, but today just as vital as we tackle the grand challenges of the 21st Century such as climate change, health, and energy. The BIPM undertakes scientific work at the highest level on a selected set of physical and chemical quantities. The BIPM is the hub of a worldwide network of national metrology institutes (NMIs) which continue to realize and disseminate the chain of traceability to the SI into national accredited laboratories and industry.*

### About the OIML

*In 1955 the International Organization of Legal Metrology (OIML) was established as an Intergovernmental Treaty Organization in order to promote the global harmonization of legal metrology procedures with the Bureau International de Métrologie Légale (BIML) as the Secretariat and Headquarters of the OIML. Since that time, the OIML has developed a worldwide technical structure whose primary aim is to harmonize the regulations and metrological controls applied by the national metrological services, or related organizations.*