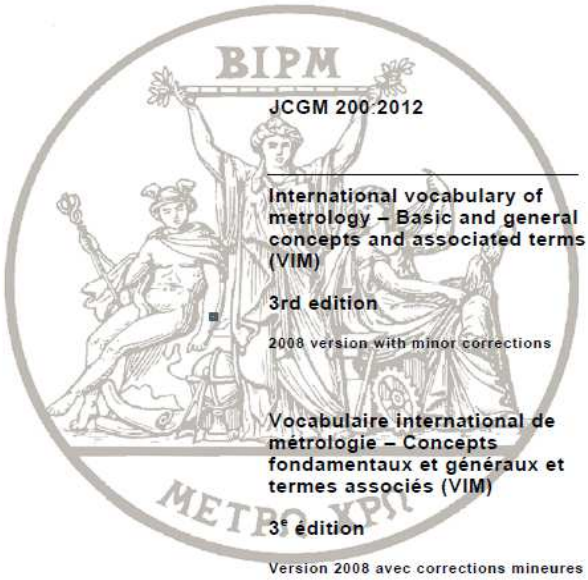
Eurofins | mgt EnviroNote 1057

Metrological Traceability

According to the VIM[1] Section 2.41 (6.10) **metrological traceability** is defined as "*property of a measurement result whereby the result can be related to a reference through a documented unbroken chain of calibrations, each contributing to the measurement uncertainty*."



In October 2015, NATA released its most recent revision of PC11 "Policy on Metrological Traceability" that was first published in 2003. This newly improved interpretation provides advice to acknowledge that metrological traceability is required for all equipment having a significant effect on the accuracy and validity of the results. This has always been a requirement of ISO/IEC 17025:2005 Clause 5.6.1.

At Eurofins | mgt we have been aware of these requirements for some time and have worked with NATA and our suppliers to embrace these conditions. Eurofins | mgt have now implemented the obligations of PC11 across all its laboratories and sites in Australia and in recent NATA audits this item has been proved to be in compliance and given approval.

Internationally, Eurofins have been working with accreditation bodies and suppliers to ensure all consumables and equipment that they purchase meet the obligations of metrological traceability. This includes all standards and certified reference materials to be supplied with ISO Guide 34 certificates of analyses that provides the value of the specified property, its associated uncertainty, and a statement of metrological traceability. (Clause 2.1.2 of ISO Guide 30:2015).

The metrological traceability requirements are not new and since 1889 the magnitude of the kilogram has been defined as the mass of an object called the *international prototype kilogram*, often referred to in the professional metrology world as the "IPK". National prototypes, stored in Australia, Austria, Belgium, Brazil, Canada, China in Hong Kong, Czech Republic, Denmark, Egypt, Finland, France, Germany, Hungary, India, Indonesia, Israel, Italy, Japan, Kazakhstan, Kenya, Mexico, Netherlands , North Korea, Norway, Pakistan, Poland, Portugal, Romania, Russia, Singapore, Slovakia, South Africa, South Korea, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, United Kingdom and the United States of America ensure that a kilogram is the same all over the world in a similar fashion to chemical measurements that we report every day.

You can be assured that results you receive are compliant with NATA's Policy on Metrological Traceability and therefore comparable with results generated by other compliant laboratories. If you would like further specialist discussion please contact our National Technical Manager Dr. Bob Symons – BobSymons@eurofins.com

[1] VIM3: International Vocabulary of Metrology – Basic and general concepts and associated terms (VIM) 3rd edition
JCGM 200:2012 (JCGM 200:2008 with minor corrections)

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