

BMC changing to CMC

Change in Terminology from Best Measurement Capability (BMC) to Calibration and Measurement Capability (CMC)

Best Measurement Capability (BMC) is defined in EA - 4/02, **Expression of Uncertainty of Measurement in Calibration**, as the smallest uncertainty of measurement that a laboratory can achieve within its scope of accreditation, when performing more or less routine calibrations of nearly ideal measurement standards intended to define, realize, conserve or reproduce a unit of that quantity or one or more of its values, or when performing more or less routine calibrations of nearly ideal measuring instruments designed for the measurement of that quantity.

The definition of best measurement capability implies that within its accreditation a laboratory is not entitled to claim a smaller uncertainty of measurement than the best measurement capability. Typically the equipment under calibration may give a contribution and the actual uncertainty of measurement can never be smaller than the best measurement capability.

National Metrology Institutes (NMIs) have used a similar term to describe this concept and this has been Calibration and Measurement Capability (CMC).

International Laboratory Accreditation Cooperation (ILAC) and BIPM (International Bureau of Weights and Measures/Bureau International des Poids et Mesures) produced a paper entitled Calibration and Measurement Capabilities in October 2007 and the ILAC General Assembly Resolution GA 11.20 accepted the paper as a significant step forward in the coordination of this concept between ILAC and BIPM.

In this paper it was agreed that CMC is a Calibration and Measurement Capability available to customers under normal conditions:

- (a) as published in the BIPM key comparison database (KCDB) of the CIPM MRA;
- or
- (b) as described in the laboratory's scope of accreditation granted by a signatory to the ILAC arrangement.

This paper noted that the meanings of the terms CMC (as used in the CIPM MRA) and BMC (as used historically in connection with the uncertainties stated in the scope of an accredited laboratory) are identical.

European Cooperation for Accreditation (EA) has decided to implement the change in terminology from BMC to CMC by 31 December 2010 and has stated that during this transition period reference to BMC and CMC should be considered equal by laboratories, their clients, the market and regulators.

INAB will implement this change to scopes of accredited calibration laboratories at routine surveillance visits in 2010.