



## Declaration on traceability to the SI of the Certificates issued by the CEM and its LL.AA.

The Spanish Centre of Metrology is, in accordance with article 17 of Law 32/2014 of Metrology, of December 22<sup>nd</sup>, the national institute of metrology of Spain.

One of its main functions (to comply with Article 3.2 of Chapter II of Royal Decree 244/2016, of June 3<sup>rd</sup>, which develops Law 32/2014 of Metrology), is the realization and maintenance of the national standards of the legal units of measurement (International System of Units, SI), according to the state of the art and the international agreements, as well as their dissemination in the fields of scientific, industrial and legal metrology, constituting the apex of the metrological pyramid in Spain, together with its Associated Laboratories (LL.AA.), designated as such by the Government.

The CEM, along with other national metrology institutes (NMI) and designated institutes (DIs), including the LL.AA. is a signatory of the Mutual Recognition Agreement of the International Committee of Weights and Measures (CIPM-MRA) (<u>http://www.bipm.org/en/cipm-mra</u>). As result of this agreement, the CEM and the LL.AA. offer a set of calibration and measurement capabilities (CMCs) recognized by all the signatories of the Agreement and national accreditation Bodies, which guarantee the metrological traceability to the SI.

These calibration and measurement capabilities (CMCs) are publicly accessible through Annex C of the CIPM-MRA Agreement (<u>http://kcdb.bipm.org/appendixC/default.asp</u>). <u>Certificates issued based</u> on these CMCs can be identified, optionally, by means of a specific CIPM-MRA logo.

In addition to these CMCs, and derived from them, the CEM and the LL.AA. offer other calibration and measurement services with traceability to the SI, in the quantities in which they are depositories of the corresponding standards. These services, covered by a Quality System based on UNE-EN ISO/IEC 17025 and UNE-EN ISO 17034 standards, are supported by relevant technical documentation, required by these standards, as

- Records of calibration methods validation (UNE-EN ISO/IEC 17025 p. 5.4.5, UNE-EN ISO 17034 p 7.6)
- Procedures for estimation of uncertainty based on GUM and its supplements (UNE-EN ISO/IEC 17025 p. 5.4.6, UNE-EN ISO 17034 p 7.13)
- Documentation for traceability of measurements (UNE-EN ISO/IEC 17025 p. 5.6, UNE-EN ISO 17034 p 7.9)
- Documentation for assuring the quality of calibration results (UNE-EN ISO/IEC 17025, p. 5.9, UNE-EN ISO 17034 p 7.16)
- Documentation for competence of staff (UNE-EN ISO/IEC 17025 p. 5.2, UNE-EN ISO 17034 p 6.1)
- Documentation for accommodation and environmental conditions (UNE-EN ISO/IEC 17025, p. 5.3, UNE-EN ISO 17034 p 6.4)
- Audits of the calibration laboratory (UNE-EN ISO/IEC 17025, p. 4.14, UNE-EN ISO 17034 p 8.7)

The results of these services are issued in certificates with the logos of both CEM and the corresponding Associated Laboratory.

Based on all of the above, the CEM and the LL.AA. DECLARE that the calibration and measurement certificates they issue provide metrological traceability to the corresponding unit of the SI System, carried out and maintained by themselves.

Hence its validity for accredited laboratories, by allowing them to guarantee the stipulations of paragraph 2, points 1) and 3a) of document ILAC-P10 01/2013 *ILAC Policy on the Traceability of Measurement Results*.

For more information, see the document <u>http://www.bipm.org/utils/common/pdf/cipm-ilac\_joint\_statement.pdf</u>.