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### **Economic Commission for Europe**

- 2 Steering Committee on Trade Capacity and Standards
- 3 Working Party on Regulatory Cooperation
- 4 and Standardization Policies (WP.6)
- 5 Thirty-third session

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- 6 Geneva, 23–24 November 2023
- 7 Item XX of the provisional agenda
- 8 Advisory Group on Market Surveillance

# **Recommendation K: Metrological Assurance of Conformity Assessment and Testing, 3<sup>rd</sup> revised version**

#### Submitted by the MARS Chair

#### Summary

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Mandate:

Working Party 6 Programme of Work for 2023, paragraph 10c: "Review for possible updates the Recommendation K on Metrological Assurance of Conformity Assessment and Testing"

Proposed decision

"The Working Party adopts the Recommendation K: Metrological Assurance of Conformity Assessment and Testing, 2nd revised version."

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#### I. Introduction

- 1. The Working Party on Technical Harmonization and Standardization Policies,
- 2. **Recognizing** that results of measurements are the basic facts on which decisions are taken in conformity assessment and testing;
- 3. **Noting** that metrological traceability serves as a means for establishing confidence in the necessary quality of conformity assessment and testing;
- 4. **Considering** that there may be differences between principles, methods and means for estimating the uncertainty of measurement results;
- 5. **Realizing** that such differences can create non-tariff barriers to international trade:
- 6. **Taking into consideration** that the harmonization of the above-mentioned principles, methods and means is required for:
- (a) Creating preconditions for the mutual recognition of conformity assessment and test results by establishing confidence in the results of measurements which serve as their basis:
- (b) Ensuring the possibility of independent assessment and documentary confirmation of the competence of conformity assessment bodies and testing laboratories.

## II. Recommended practice

#### 7. **Recommends that:**

- K.1 Governments should support the development and implementation of fully harmonized standards¹, guides and technical regulations promoting methods and means of metrological traceability on the basis of the international documents, standards, guidelines and recommendations of the International Bureau for Weights and Measures (BIPM), the International Organization of Legal Metrology (OIML), the International Laboratory Accreditation Cooperation (ILAC), the International Organization for Standardization (ISO) and the International Electro-technical Commission (IEC).
- K.2 National technical regulations relevant to international trade and industrial cooperation should contain requirements for the technical competence of conformity assessment bodies and calibration and testing laboratories, taking due note of appropriate international standards that set criteria and the possibility to utilize accreditation as away of assuring competence, and under the ILAC and IAF arrangements for mutual recognition. It is noted, that conformity assessment activities such as inspection and product certification may also include testing and/or calibration.
- K.3 Conformity assessment bodies and test laboratories should have the necessary competence, including an appropriate scope, to ensure that the metrological assurance is established thus ensuring a high level of confidence when estimating parameters characterizing the products from the point of view of their safety, influence on health and environment and consumer protection.

<sup>&</sup>lt;sup>1</sup> In science and technology, the English word "standard" is used with two different meanings: as a widely adopted written technical standard, guide, technical regulation or similar document (in French "norme") and also as a measurement standard (in French "étalon"). This Recommendation is concerned with both meanings and the qualifier "written" is generally omitted for brevity.

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K.4 The choice of which decision rule (how measurement uncertainty is addressed when it impacts on the conformity assessment outcome) is to be followed will depend on the application and should be clearly stated. Particular regard should be paid to the methods and means of obtaining measurement information used for the evaluation of the uncertainty of measurement which are the basis for conformity assessment decisions and test results.

- K.5 General stipulations, rules and requirements for competence, including metrological traceability in national standards and technical regulations should, as far as appropriate be based on published international documents, standards, guidelines and recommendations and to assure that:
  - requirements for the competence of testing and calibration laboratories are followed;
  - if reference materials are required that the producers are competent;
  - internationally recognised vocabulary is used for metrological terms to avoid confusion:
  - internationally accepted methods are used to evaluate measurement data, and particularly for the handling of measurement uncertainty in the context of making a conformity assessment decision;
  - inspection and examination involve conformity assessment and that the particular guidance on competence of these bodies may also be relevant.

By following such international documents, standards, guidelines and recommendations, or where not appropriate by adopting other measures, there can be confidence in, for example:

- instruments subject to legal control procedures (including during their lifetime use);
- qualification of instruments, metrological traceability of measurement data;
- validation of test methods and procedures and computer software;
- appropriate evaluation of measurement uncertainty;
- selection of conformity assessment decision rule appropriate to the application.
- K.6 When developing national standards and technical regulations the Governments should take into account the "Joint BIPM, OIML, ILAC and ISO Declaration on Metrological Traceability" which strongly encourages legislators and regulators to refer to the international standards and guidelines, Mutual Recognition Arrangements and Certification Systems, and to accept measurement results made within them, thereby helping avoid technical barriers to trade.
- K.7 Manufacturers, suppliers or customers submitting products for testing have the right to check the documentation of the test laboratory and/or its claim of being capable of achieving the desired level of technical competence required for measurement and testing. However, it should be noted that various international mechanisms exist to help ensure confidence and to reduce the burden of checking claims of competence related to measurement and testing.