



**International
Standard**

ISO 33400

Reference materials — Vocabulary

Matériaux de référence — Vocabulaire

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 334, *Reference materials*.

This first edition cancels and replaces the third edition (ISO Guide 30:2015), which has been technically revised.

The main changes are as follows:

- order of presentation of the terms and definitions has been revised and regrouped;
- definitions of certified reference material and certified value have been revised;
- definition of indicative value has been revised to be more consistent with the typical characteristics and intended uses of such values.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

Reference materials (RMs) are widely used for the calibration of measuring systems, for the evaluation of measurement procedures, and for the internal or external quality control of measurements and laboratories. They can also enable the expression of functional properties in arbitrary units, for instance in certain cases relevant for biology or material sciences. RMs play an important role in national and international standardization activities and in the accreditation of laboratories.

This document defines terms used in connection with the production and use of RMs and certified reference materials (CRMs). It aims to ensure use of consistent terminology by organizations worldwide that work with RMs and CRMs.

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