

Auditing, Traceability and Auditing Traceability: getting ready for the upcoming ISO/IEC 17025:2017 – Scope

This workshop examines the principles of auditing, the concepts of metrological traceability and tools to apply auditing principles in demonstrating the chain of traceability for measurement results. Auditing concepts such as objective evidence, the internal audit process, and interpersonal skills for auditors will be presented. In the traceability section, emphasis will be placed on the importance of appropriate records for all aspects of the management system and their interdependency with metrological traceability and reporting of results. Using the described auditing principles, both companies with new or mature quality systems will have a better understanding of the auditing process and the records necessary to demonstrate the metrological traceability of their measurement results to the International System of Units (SI).

Within those discussions, we will discuss the upcoming changes to the new ISO/IEC 17025 expected to be published late 2017 and how the internal audit process could be used to prepare for the transition.

Intended audience

Anyone with responsibilities for quality, measurement assurance, auditing or an interest in the laboratory management.

Learning objectives

After this tutorial participants will be able to:

- Identify the components of risk as they apply in metrology,
- List common sources of measurement related risks and
- Evaluate actions and maintain current knowledge of risks in a measurement system

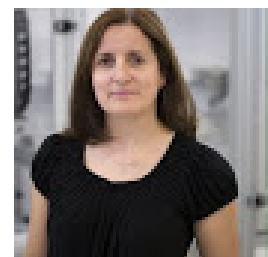
After this tutorial participants will be able to apply:

- Qualitative and quantitative risk analysis techniques for measurement related risks and
- Apply risk based decision making in a measurement or testing environment.

Participants will be better prepared for the transition when ISO/IEC 17025:2017 is published.

Biographical note

In her current position as Leader, Quality System at the National Research Council of Canada (NRC), Isabelle works with the Measurement Science and Standards (MSS) calibration, testing and reference materials production teams to plan, coordinate, develop, implement and maintain the quality system meeting the expectations of the International Committee for Weights and Measures (CIPM) Mutual Recognition Arrangement (MRA) and based on the requirements of



ISO/IEC 17025 (General requirements for the competence of testing and calibration laboratories) and ISO Guide 34 (General requirements for the competence of reference material producers). She coordinates the planning and implementation of the internal audit program and Peer Review activities.

As a Technical Advisor for the Calibration Laboratory Assessment Service (CLAS), Isabelle plans and leads third-party assessments of private and government calibration laboratories seeking accreditation by the Standards Council of Canada and she is responsible for the maintenance and improvement of the CLAS quality system.

Prior to joining the NRC, Isabelle was employed with the Standards Council of Canada as Client and Program Manager, Laboratory Accreditation, leading and overseeing assessment activities of about 100 testing and calibration laboratories. Isabelle was also the lead trainer for technical and lead assessors. Prior to joining the SCC, as a Research and Development (R&D) engineer and project manager at France Telecom in France, Isabelle was responsible for electromagnetic compatibility and spectrum engineering studies. She contributed and attended twice the World Radio Conference of the International Telecommunications Union. She was also the technical secretary of the Radio Spectrum Matters working group at the European Telecommunications Standards Institute for five years.

Isabelle holds a Bachelor degree and a Master degree in Electrical Engineering from National Institute of Applied Sciences, Rennes, France and University of Science, Rennes, France. She is a certified quality auditor and she has also successfully passed the ISO/IEC 17011 international peer evaluator course of the Inter American Accreditation Cooperation (IAAC) and is listed as an IAAC peer evaluator for testing and calibration.

Isabelle enjoys training others and presenting on topics such as principles of measurement traceability and assessing quality systems.

She has been working with NRC since October 2013.