training

25-27 June 2019, Kigali Convention Centre, Kigali, Rwanda

Regional **training** on **ISO/IEC 17025**,

General requirements for the competence of testing and calibration laboratories

RSB Rwanda Standards Board

Sweden Sverige

Regional **training** on **ISO/IEC 17025:2017**

(General requirements for the competence of testing and calibration laboratories)

Background

Within the framework of the ***ISO Action Plan for Developing Countries (APDC) 2016-2020***, ISO has emphasized the need to improve the dissemination, use of and compliance with standards and to provide effective and efficient services to standards users. This regional training in conducted under output 3.4 in the ISO APDC to raise awareness on the role and benefits of International Standards and their use.

Training objectives

The ISO regional training aims to achieve the following objectives:

- Understand the importance of ISO/IEC 17025 as the basis for laboratory management systems
- Highlight the differences between ISO/IEC 17025:2005 and ISO/IEC 17025:2017 and explain these changes
- Understand the application of the main clauses of ISO/IEC 17025 for testing and calibration laboratories through presentations, worked examples and group exercises
- Provide a forum for exchange of experiences and to promote discussion among the testing and calibration laboratories in the region

Training format

The training is organized over three days and hosted by the Rwanda Standard Board (RSB), the ISO member in Rwanda. It includes a set of interactive instructional methods (such as lectures, group activities and sharing experiences) to convey the information to the participants in an effective and practical manner.

Training participants

The training will target tentatively a total of 27 participants nominated by ISO members from the Eastern, Southern, Central and Western Africa regions. The participants represent staff members from the national accreditation bodies that accredit testing and calibration laboratories or National Accreditation Focal Point (NAFP) representatives and representatives from testing or calibration laboratories who have been accredited or in the process of being accredited and have an influence on the implementation and mainte-nance of laboratory management system.

Venue

Kigali **Convention Center** at Radisson Blu Hotel
Kimihurura Roundabout, Kigali, Rwanda

Trainers

The training will be facilitated by:

- **Carol Stewart**, *Group Head of Quality, Element Materials Technology, UK*
- **Georgette Macdonald**, *Director R&D, NRC Metrology, National Research Council, Canada*

25 June 2019

	Day 1
08:30-09:00	**Registration**
	Session 0 : Opening session
09:00-09:30	• *Official welcoming address by host*
	Session 1: Introduction and welcome
09:30-10:30	• *Introductions and presentation of the training agenda, objectives and outcomes*
10:30-11:00	Tea/Coffee break
	Session 2 : Overview of ISO/CASCO, international cooperations and sector schemes
11:00-12:00	• *Explore ISO, ISO/CASCO and the CASCO toolbox* • *Information about the international accreditation cooperations (IAF and ILAC)* • *Information on BIPM* • *Importance of ISO/IEC 17025 as a basis for laboratory management systems* • *How Sector Schemes fit in with ISO/IEC 17025*
12:00-12:30	• ***Group activity 1 :*** *Understanding how ISO/IEC 17025 operates in your country and its relationship to all components of the Quality Infrastructure (including feedback)*
12:30-13:30	Lunch break
	Session 3 : ISO/IEC 17025, history, revision timeline, key changes
13:30-14:00	• *History of the Standard, the revision process and timeline*
14:00-15:00	• *Key changes between the 2005 and 2017 versions*
15:00-15:30	Coffee/tea break
	Session 4 : Terms and definitions and process
15:30-16:00	• *Define terms used in the ISO/IEC 17025 requirements* • *Discussion on laboratory activities, risk and process flow*
16:00-16:45	• ***Group activity 2 :*** *Prepare a process flow of what you do when performing a laboratory activity from receipt of items to reporting. At each of the stages, consider where risks may present themselves in the process (including feedback)*
16:45-17:00	• *Recap, discussion and questions*
17:00	**End of day 1 and wrap up**

26 June 2019

	Day 2
	Session 5 : General and structural requirements
08:30-09:30	• *This session will discuss the mandatory compliance requirements of ISO/IEC 17025* • ***Group activity 3 :*** *Give a brief description of how your laboratory addresses the structural requirements of the Standard and compare this with the delegates in your Group*
	Session 6 : Resource requirements (Part 1)
09:30-10:30	• *This session will discuss the resourcing to be considered in establishing and operating a laboratory or site facility*
10:30-11:00	Coffee/tea break
	Session 6 : Resource requirements (Part 2)
11:00-11:30	• ***Group activity 4 :*** *What makes a competent laboratory ?* ▸ *Personnel* ▸ *Equipment and facilities* ▸ *Metrological traceability* ▸ *Externally provided products and services*
	Session 7 : Process requirements (Part 1)
11:30-12:30	• *This session will discuss the requirements for :* ▸ *Review of requests, tenders and contracts* ▸ *Selection, validation and verification of methods* ▸ *Sampling* ▸ *Handling of test or calibration items* ▸ *Technical records*
12:30-13:30	Lunch break
	Session 7 : Process requirements (Part 2)
13:30-14:15	• ***Group Activity 5 :*** *Considering the work performed in your own laboratories and in discussion with your group, outline when method verification may be applicable and when method validation may be more appropriate*
14:15-15:00	• *Evaluation of measurement uncertainty* • *Assuring the validity of results* • *Reporting results*
15:00-15:30	Coffee/tea break
	Session 7 : Process requirements (Part 3)
15:30-17:00	• ***Group activity 6 :*** *Based on the material provided generate a report which includes a statement of conformity*
	• *Recap, discussion and questions*
17:00	**End of day 2 and wrap up**

27 June 2019

	Day 3
	Session 7: Process requirements (Part 4)
08:30-10:30	• *Complaints* • *Nonconforming work* • *Control of data – Information management* • ***Group activity 7:*** *Discuss the different scenarios provided and determine if they are instances of nonconforming work and provide the relevant clauses of the Standard*
10:30-11:00	Coffee/tea break
	Session 8: Management requirements
11:00-12:30	• *Discussion option A and option B* • *Components of option A focussing on actions to address risks and opportunities* • ***Group activity 8:*** *Set up an internal audit plan and include a management review*
12:30-13:30	Lunch break
	Session 9: Closing ceremony
13:30-15:00	• *Recap of training purpose and objectives* • *Q & A* • *End of training evaluation and award certificates* • *Formal closure of the training*
15:00	**End of day 3 and training**

International Organization for Standardization

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