

QUALITY IS OUR STANDARD

**BAHAMAS NATIONAL STANDARD** 

General requirements for the competence of testing and calibration laboratories

BNS ISO/IEC 17025:2017

Bahamas Bureau of Standards & Quality (BBSQ) Source River Centre, 1000 Bacardi Road

P.O. Box N- 4843, Nassau, New Providence, Bahamas Tel: (242) 362-1748 thru 56

Fax: (242) 362-9172

Email: <a href="mailto:standards@bbsq.bs">standards@bbsq.bs</a>
Website: <a href="mailto:www.bbsq.bs">www.bbsq.bs</a>



Website: www.bbsq.bs

© BBSQ – All rights reserved. No part of this publication is to be reproduced without the prior written consent of BBSQ.

ISBN 978-976-8268-16-7

## **NOTICE**

Standards are subjected to periodic review.

in the self-2' up-to-'

	The next amendment will be sent without charge if you return not receive this label we have no record that you wish to be kept	
	are not exclusive of a revision of the document.	up-to-date. Flease note amendment
	Our address:	
	Bahamas Bureau of Standards & Quality (BBSQ)	
	Source River Centre	
	1000 Bacardi Road	
	P.O. Box N- 4843	
	Nassau, New Providence Bahamas	
	( cut along the perforated line	)
	BNS ISO/IEC 17025:2017	
	NAME:	
7/	TANIE.	_
	COMPANY/DESIGNATION:	
	dominity business.	
	ADDRESS:	
	TID DICESS.	

## AMENDMENTS ISSUED SINCE PUBLICATION

AMENDMENT NO.	DATE OF ISSUE	TYPE OF AMENDMENT	NO. OF TEXT AFFECTED	TEXT OF AMENDMENT

BBSQ-FOR REVIEW & PUBLIC COMMENT

REVIEW & PUBLIC COMMENTS ONLY & PUBLIC COMMENTS ON A PUBLIC COMMENTS ONLY & PUBLIC COMMENTS ON A PUBLIC COMMENTS ON A

# **BBSQ** Foreword

This national standard is identical with the English version of International Standard ISO/IEC 17025:2017, General requirements for the competence of testing and calibration laboratories. The national committee responsible for reviewing this standard is Technical Committee 13 Conformity Assessment. This standard contains requirements that are relevant for The Bahamas.

# **BBSQ Committee Representation**

This ISO International Standard was adopted as a National Standard under the supervision of the National Technical Committee for Conformity Assessment (NTC 13) hosted by the Bahamas Bureau of Standards and Quality which at the time comprised the following members:

Member	Representing
Dr. Ismae Whyms (Chairperson)	Princess Margaret Hospital
Mr. Raymond Baillou (Vice Chairman)	QALS Partners
Mr. Lindy Hall (Technical Secretary)	Ministry of Works
Mr. Nathaniel E. Lloyd (Technical Secretary)	Royal Bahamas Police Force Forensic Lab Biology Unit
Ms. Bria Dean (Recording Secretary)	Antiquities and Museums Corporation
Ms. Patrice Nairn (Recording Secretary)	Premier Clinical Lab
Mr. Brian B. Beneby	Water & Sewerage Corporation
Ms. Sybil Bullard	BAMT
Ms. Margaret Daxon	Diabetes Education on the Move
Ms. Deborah Deal	BCCEC
Ms. Bernadette Ellis	Health Professions Council
Dr. M. Anthony C. Frankson	University of the West Indies School of Clinical Medicine and Research Bahamas
Ms. Alexandra Hall	Higgs & Johnson
Dr. Raveenia Hanna	Bahamas Agriculture and Marine Science Institute
Dr. M. Isaacs	Department of Agriculture
Ms. Renee Johnson	Bahamian Touch Products
Ms. Tyrhonda Knowles	Department of Information Technology
Mr. Andre A. Moss	Sun Oil Engineering – Projects
Dr. Patrizia Pasini	
Mrs. Erika Perpall	Department of Information Technology

OMLY

## BNS ISO/IEC 17025:2017

Ms. Kendra Pratt Department of Information Technology

Mr. Olsen J. Smith Water & Sewerage Corporation

Ms. Jaime Strachan Registrar General's Office

Ms. Avis Richardson Food Technology and Safety Laboratory (FSTL)

Mr. Edwin Yurlow Ministry of Works

Museums Ms. Eunae Wright Antiquities, Monuments and

Corporation – Accounts

Royal Bahamas Police Force - Scientific Support Mrs. Veronica Ferguson

Services

Department of Environmental Health Ms. LoAnn Johnson

BBSQ FOR REVIEW & PUBL The National Insurance Board - Health and Mr. Wellington Ferguson

Safety Management

**Contents** Page

For	ewor	'd	vii	
Int	roduc	tion	ix	
1	S	cope	1	
2		ormative references		
3	T	erms and definitions	S1	
4	G	eneral requirements	$N_{\perp}$	
-	4.1	Impartiality	3	
	4.2	Confidentiality	3	
5	Si	tructural requirements	4	
6	D	esource requirements		
U	6.1	General		
	6.2	Personnel		
	6.3	Facilities and environmental conditions		
	6.4	Equipment	6	
	6.5	EquipmentMetrological traceability	8	
	6.6	Externally provided products and services	8	
7	p	rocess requirements		
•	7.1	Review of requests, tenders and contracts		
	7.2	Selection, verification and validation of methods		
	7.3	Sampling		
	7.4	Handling of test or calibration items		
	7.5	Technical records		
	7.6	Evaluation of measurement uncertainty	13	
	7.7	Ensuring the validity of results	14	
) -	7.8	Reporting of results	15	
	7.9	Complaints		
	7.10	Nonconforming work		
	7.11	Control of data and information management	19	
8	M	lanagement system requirements	20	
	8.1	Options		
	8.2	Management system documentation (Option A)	20	
	8.3	Control of management system documents (Option A)		
	8.4	Control of records (Option A)	21	
	8.5	Actions to address risks and opportunities (Option A)	21	
	8.6	Improvement (Option A)	22	
	8.7	Corrective actions (Option A)		
	8.8	Internal audits (Option A)		
	8.9	Management reviews (Option A)	23	
An	nex A	(informative) Metrological traceability	25	
An	nex B	(informative) Management system options	27	
Bib	Bibliography			

### **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. In the field of conformity assessment, ISO and the International Electrotechnical Commission (IEC) develop joint ISO/IEC documents under the management of the ISO Committee on Conformity assessment (ISO/CASCO).

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 documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="https://www.iso.org/directives">www.iso.org/directives</a>).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

This document was prepared by the ISO Committee on Conformity Assessment (CASCO) and circulated for voting to the national bodies of both ISO and IEC, and was approved by both organizations.

This third edition cancels and replaces the second edition (ISO/IEC 17025:2005), which has been technically revised.

The main changes compared to the previous edition are as follows:

- the risk-based thinking applied in this edition has enabled some reduction in prescriptive requirements and their replacement by performance-based requirements;
- there is greater flexibility than in the previous edition in the requirements for processes, procedures, documented information and organizational responsibilities;
- a definition of "laboratory" has been added (see 3.6).

## Introduction

This document has been developed with the objective of promoting confidence in the operation of laboratories. This document contains requirements for laboratories to enable them to demonstrate they operate competently, and are able to generate valid results. Laboratories that conform to this document will also operate generally in accordance with the principles of ISO 9001.

This document requires the laboratory to plan and implement actions to address risks and opportunities. Addressing both risks and opportunities establishes a basis for increasing the effectiveness of the management system, achieving improved results and preventing negative effects. The laboratory is responsible for deciding which risks and opportunities need to be addressed.

The use of this document will facilitate cooperation between laboratories and other bodies, and assist in the exchange of information and experience, and in the harmonization of standards and procedures. The acceptance of results between countries is facilitated if laboratories conform to this document.

& PUBLIC In this document, the following verbal forms are used:

- "shall" indicates a requirement;
- "should" indicates a recommendation;
- "may" indicates a permission;
- "can" indicates a possibility or a capability.

Further details can be found in the ISO/IEC Directives, Part 2.

For the purposes of research, users are encouraged to share their views on this document and their priorities for changes to future editions. Click on the link below to take part in the online survey:

17025 ed3 usersurvey

# General requirements for the competence of **testing and calibration laboratories**

# 1 Scope

This document specifies the general requirements for the competence, impartiality and consistent operation of laboratories.

This document is applicable to all organizations performing laboratory activities, regardless of the number of personnel.

Laboratory customers, regulatory authorities, organizations and schemes using peer-assessment, accreditation bodies, and others use this document in confirming or recognizing the competence of laboratories.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC Guide 99, International vocabulary of metrology — Basic and general concepts and associated terms  $(VIM)^1$ 

ISO/IEC 17000, Conformity assessment — Vocabulary and general principles

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC Guide 99 and ISO/IEC 17000 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <a href="https://www.iso.org/obp">https://www.iso.org/obp</a>
- IEC Electropedia: available at <a href="http://www.electropedia.org/">http://www.electropedia.org/</a>

#### 3.1

### impartiality

presence of objectivity

Note 1 to entry: Objectivity means that conflicts of interest do not exist, or are resolved so as not to adversely influence subsequent activities of the *laboratory* (3.6).

Note 2 to entry: Other terms that are useful in conveying the element of impartiality include "freedom from conflict of interests", "freedom from bias", "lack of prejudice", "neutrality", "fairness", "open-mindedness", "even-handedness", "detachment", "balance".

[SOURCE: ISO/IEC 17021-1:2015, 3.2, modified — The words "the certification body" have been replaced by "the laboratory" in Note 1 to entry, and the word "independence" has been deleted from the list in Note 2 to entry.]

1

 $<sup>^{\</sup>rm 1}$  Also known as JCGM 200.