



## Form for Regular Reporting of Regional Instrument Centres

(please expand the cells as required to properly reflect your activities)

Terms of Reference for Regional Instrument Centres (RICs) are available under:  
<https://www.wmo.int/pages/prog/www/IMOP/instrument-reg-centres.html>

Regional instrument Centre - General Information	
Name of RIC	NAIROBI
RIC's website	<a href="http://www.meteo.go.ke">www.meteo.go.ke</a>
Institute hosting RIC	KENYA METEOROLOGICAL DEPARTMENT
City	NAIROBI
Country	KENYA
Regional Association	RA1

Contact Person for the Regional Instrument Centre	
Courtesy Title	MR
First name	RICHARD
Family name	MUCHIRA
Street and number	P.O. BOX 30259 ,NGONG ROAD
Postal code	00100
City	NAIROBI
State/Province	NAIROBI
Country	KENYA
Tel. number(s)	+254 20 3867880, +254 722 722285405
Fax number(s)	+254 20 3876955
Email(s)	<a href="mailto:director@meteo.go.ke">director@meteo.go.ke</a> & <a href="mailto:er_gitari@yahoo.com">er_gitari@yahoo.com</a>
Has contact person changed since 2013?	<input checked="" type="checkbox"/> No
If yes, provide the previous contact person?	N/A

### RIC's staff

(Please specify the number of your managerial and technical staff)

- Managerial: TWO (2)
- Technical: FOUR (4)

### Interlaboratory Comparisons

**Have you organized any interlaboratory comparison?** (If yes, please specify the event(s) and final reports, including their web links, if available): **NO**

**Have you participated in any interlaboratory comparison?** (If yes, please specify the event(s) and the report(s), including their web links, if available): **YES**

**We carried out an interlaboratory comparison of the following with Casablanca RIC in Morocco in November 2013**

- Pyranometer (s/no. 6013.1000.BG)
- Resistance thermometer (S/no. 015799/11)

### Applied International Standards/Norms

**Is your RIC accredited according to ISO/IEC 17025?**

**Yes** (please, specify the following):

**Accreditation/certification body:**

**Date of the last audit:**

**Link to the Certificate of Accreditation:**

**No** (please, indicate if you have already applied any quality management system, and provide a reason for a lack of accreditation, if possible)

**We have already initiated the process of accreditation with the national laboratories accreditation body. We expect to be accredited in the course of 2017/2018 Financial year**

### Assessment by a recognized authority other than accreditation body

**Was your RIC assessed by a recognized authority other than an accreditation body?** (e.g. certification body, NMI, another RIC)

**Yes** (please, specify the following):

**Name of a recognized authority:** BUREAU VERITAS

**Date of the last assessment:** 25/2/2015

**Standard against which the assessment was carried out:** ISO 9001:2008

**No** (please, explain why, if possible) -

**WMO/CIMO [Evaluation Scheme \(excel file\)](#)**

**Have you filled out the WMO/CIMO Evaluation Scheme (excel) and submitted it to the WMO Secretariat?**

**Yes** (11/5/2017):

**No** (please, explain why, if possible)

**Calibrations of the Members' Instruments**

**Which calibration services, were provided by your RIC for other Members/countries since 2013?** (Please specify)

Year	Type of instruments	Number of calibrated instruments	WMO Member/Country
2014	Ordinary Thermometer	1	Malawi
2014	Aneroid Barometer	2	Seychelles
2013	Aneroid Barometer	1	Djibouti
2015	Aneroid Barometer	1	Ghana

**Capacity Development and Training Activities**

**Which capacity development/training activities have been carried out by your RIC since 2013 within the Region?** (please specify events, WMO Members that participated and the number of participants)

- 2015-Instrument Maintenance and Calibration Course (IMCC), 24 Participants from Sudan, Seychelles, Zambia, Malawi, Tanzania, Ethiopia, Sierra Leone, Mauritius, Ghana, Rwanda, Gambia, South Sudan, Zimbabwe, Liberia, Swaziland, Burudi, Namibia, Mozambique, Somalia & Kenya,
- 2014-Instrument Maintenance and Calibration Course (IMCC), 24 Participants from Sudan, Seychelles, Sierra Leone, Mauritius, Ghana, Rwanda, Gambia, South Sudan, Zimbabwe, Swaziland, Burundi, Namibia, Mozambique, Kenya, Congo Brazzaville, Burkina Faso, Djibouti, Guinea, Mali, Senegal & Cote-devoir
- 2013-Instrument Maintenance and Calibration Course (IMCC), 30 Participants from Sudan, Seychelles, Zambia, Malawi, Tanzania, Ethiopia, Mauritius, Ghana, Gambia, South Sudan, Zimbabwe, Burundi, Namibia, Mozambique, Kenya,

**Has your RIC provided services on capacity development and training outside the Region?** (If yes, please specify to whom and when)

- NO

**Which guidance documents, standard procedures or other publications were developed and published by your RIC since 2013?** (Please, include full reference and web-link if available)

- Instruments Calibration Procedure-AMSK/PR-RIC 751-07

### Utilization of Resources and Capabilities of the Region

(Have you collaborated with other RICs, RRCs, RTCs, NMHSs or NMIs on standardization of meteorological and other related environmental measurements? If yes, please specify when and how): **NO**

### Recent Changes in Circumstance

**Have there been any changes in your RIC's capabilities since 2013?** (If so, please specify) **YES**

- NEW OFFICER IN CHARGE FOLLOWING RETIREMENT OF THE FORMER ASSISTANT DIRECTOR
- POSTING OF SOME NEWLY RECUITED TECHNICIANS TO THE CENTRE

**Have there been any significant changes in your RIC's infrastructure since 2013?** (If so, please specify): **NO**

**Have there been any changes in your staffing since 2013?** (If so, please specify)

- **Yes .We have two newly employed technicians who have diplomas in Electronics**

### Future Plans and any other relevant information

(Please provide plans/projects of your RIC for 2017, and add any other information you find relevant about your RIC)

- Acquisition and Installation of wind tunnel
- Accreditation of the RIC
- Capacity Building to enhance skills

**Are you in agreement with publishing this reporting form on WMO/CIMO website?**

Yes

11/5/2017

Date

Eng. Henry N. Karanja

Name and Signature of Person in Charge of RIC

## ANNEX

(Following information will be a part of your RIC's website as published on the [WMO/CIMO website](#))

<b>Specific information on Instrument Calibration Capabilities</b>					
<b><u>Temperature:</u></b>					
Instrument Undergoing Calibration	Calibration Range	Reference standard, Equipment	Calibration and Measurement Capability (CMC)*	Traceability of Reference equipment	
				Last standard calibration date	Calibration body
Thermohygrograph	-40 °C to 100 °C	Climate Test Chamber Type 3523/17			
Liquid in glass Thermometers	-38 °C to 10 °C -1 °C to 51 °C	Stirred Liquid oil bath			
PT100	-201 °C to 962 °C	F252/F252 Precision Thermometer			
Status of accreditation (date of the latest accreditation): Link to the accreditation certificate: Accreditation body:					
<b><u>Relative Humidity:</u></b>					
Instrument Undergoing Calibration	Calibration Range	Reference standard, Equipment	Calibration and Measurement Capability (CMC)*	Traceability of Reference equipment	
				Last standard calibration date	Calibration body
Thermohygrograph	10% to 95% RH	Climate Test Chamber Type 3523/17			
PT100	5% to 95% RH	Hydrogen			
Status of accreditation (date of the latest accreditation): Link to the accreditation certificate: Accreditation body:					

**Atmospheric pressure:**

Instrument Undergoing Calibration	Calibration Range	Reference standard, Equipment	Calibration and Measurement Capability (CMC)*	Traceability of Reference equipment	
				Last standard calibration date	Calibration body
Kew, Aneroid Barometer	40-1100hpa	Primary/Secondary Pressure Chamber			

Status of accreditation (date of the latest accreditation):  
 Link to the accreditation certificate:  
 Accreditation body:

**Wind:**

Instrument Undergoing Calibration	Calibration Range	Reference standard, Equipment	Calibration and Measurement Capability (CMC)*	Traceability of Reference equipment	
				Last standard calibration date	Calibration body

Status of accreditation (date of the latest accreditation):  
 Link to the accreditation certificate:  
 Accreditation body:

**Precipitation:**

Instrument Undergoing Calibration	Calibration Range	Reference standard, Equipment	Calibration and Measurement Capability (CMC)*	Traceability of Reference equipment	
				Last standard calibration date	Calibration body
Tipping Bucket	Precipitation Sensor Calibrator				

Status of accreditation (date of the latest accreditation):  
 Link to the accreditation certificate:  
 Accreditation body:

**Other** (please specify if applicable- Solar radiation):

Instrument Undergoing Calibration	Calibration Range	Reference standard, Equipment	Calibration and Measurement Capability (CMC)*	Traceability of Reference equipment	
				Last standard calibration date	Calibration body
Pyranometer	Spectral Range -310 to 2800nM	Two reference pyranometer for calibration of global radiation			

Status of accreditation (date of the latest accreditation):  
 Link to the accreditation certificate:  
 Accreditation body:

\* A **CMC (calibration and measurement capability)** is the smallest uncertainty (k=2) of measurement that can be expected to be achieved by the RIC during a calibration under normal conditions. This CMC is evaluated by the RIC itself and described in the scope of accreditation of the RIC, if available.