



AFRIMETS
Intra-Africa Metrology System
Système Intra-Africain de Métrologie



SADCMET REPORT TO AFRIMETS GA

Presented by:

Mr Donald Masuku

SADCMET Regional Coordinator

20th July 2022

Presentation Overview

- Background and Structure
- Activities undertaken during the reporting period
- Capacity building/Training
- Measurement Comparisons
- Future Plans

Background and Members

- SADC MET is one of the SADC TBT structures which comprises NMIs of the 16 SADC member states. Comoros joined SADC in 2020 as the 16th member state
- South Africa is a full member of the BIPM.
- Seven SADC- NMIs are Associates of the CGPM
 - Mauritius, Seychelles, Zambia and Zimbabwe joined in 2010-2011
 - Botswana and Namibia joined in 2012
 - Tanzania joined on 1 Jan 2018 and all countries have signed the CIPM MRA.
- One more country (DRC) is in the process to join.

SADCMET Structure

Position	Country	Name
Chair	Eswatini	Mr Mandla Ntshakala
Vice-Chair	Tanzania	Mr Joseph Mahilla
Past Chair	Zambia	Mr Fredrick Hamutunda
SADCMET Secretariat	South Africa	Mr Donald Masuku
TC 1 – AFRIMETS and BIPM Issues	Botswana	Mr Modiriemang Kame
TC 2 – Metrology Education & Training	Lesotho	Ms Qenehelo Lenka
TC 3 – Metrology Infrastructure Development	DR Congo	Mr Florian Ngindu
TC 4 – Metrology Legislation Harmonization	Namibia	Mr Simasiku Matali
TC 5– SME Development	Mozambique	Mr David Magaia

SRMO Activities undertaken during the reporting period

- SADC MET held its General Assembly meeting during the SADC TBT meetings held virtually on 12 May 2022.
 - Discussions focussed on implementation of the SADC MET 5 Year Strategic Plan and Five Year ILC Plan and all the activities planned under these Plans
- SADC MET participated in the 2021 APMP General Assembly (GA) and Related Activities which were held as a series of online meetings from 1 to 26 November 2021. This month-long meeting season comprised of a record-setting 44 video conference sessions, including annual meetings of the Executive Committee (EC), the Technical Committee Chairs Forum (TCCF), 12 Technical Committees (TCs), the Developing Economies' Committee (DEC), 6 Focus Groups (FGs) and one Working Group (WG), and has involved more than 230 participants from about 30 economies in total.
- SADC MET also participated in Africa Food Safety Workshop hosted by NMISA under the theme Joining Hands to ensure Food Safety in Africa, which brought together a gathering of world-leading African Scientists and a broader representation of experts aimed at promoting standards, reliable testing and international cooperation for better public health and trade in support of the African Continental Free Trade Area (AcFTA).

SRMO Activities undertaken during the reporting period

- Every year, SADC MET runs the SADC Water PT scheme for the chemistry and micro-biology analysis of water sponsored by PTB and after each PT round an evaluation workshop is organized to evaluate the results of all the participating laboratories in the Chemistry and Microbiology analysis of water in Africa. .
- More than 100 laboratories from most of the AFRIMETS countries participate in the Water PT scheme.
- Due to Covid-19 pandemic the 2021 evaluation workshop to evaluate the results of the 17th chemistry PT round and 12th microbiology PT round was held virtually on 30 July and 8 September 2021 respectively.
- The evaluation workshops included trainings in topical issues including uncertainty of measurement, quality control of culture media and a total of 130 participants (71 for Chemistry and 59 for Microbiology) were trained.

Capacity Building and Training activities

- Despite Covid-19 pandemic and travel restrictions, SADC MET managed to carry out capacity building and training activities which were planned for 2021. Most of the activities were held virtually and included the following:
 - Electrical metrology virtual training and attachment
 - Water PT Scheme and evaluation workshop
 - On-going intercomparisons in Mass, Volume, Dimension and Temperature
 - Chemical metrology and food safety training
 - Support for individual countries in certain metrological areas

Measurement Comparisons

- SADC MET NMIs especially the 7 Associates of the CGPM are continuing to participate in the AFRIMETS key and supplementary comparisons in the fields of mass and temperature in support of the project for submission of CMCs in the KCDB.
- In 2019 SADC MET compiled an ILC Plan and conducted ILCs in four metrology fields namely Volume, Dimension/Length, Mass and Temperature which was funded by PTB as part of the SADC MET Five-Year Strategic Plan
- The ILC Plan aims to assist member states which are pursuing accreditation and also support those developing NMIs to gain internationally recognized measurement system and to strengthen SADC Associates of the CGPM through participation in key comparisons in order for them to submit CMCs in the BIPM key comparison database

Progress of SADC MET ILC Project

Field	# of Participating countries	Artefacts	ILC Status
Volume	11	Pipettes & Glassware	BOBS,ZMA,MBS,SIRDC-NMI,NSI,TBS,INNOQ,MSB have measured. Outstanding SBS,OCC,NMISA. Closing workshop planned after completion of ILC
Mass	12	M1 & F1	M1 completed, F1 to be completed soon. Closing workshop planned after completion of F1
Temperature	13	Thermocouple, Installation	Installation Completed – DRC,TBS,ZMA,BOBS,SIRDC-NMI Thermocouple outstanding MBS,MOZA,NSI,SBS,MSB
Length	11	DTI, Tapes, Vernier and micrometer	Completed, Reports have been drawn and closing workshop planned for August 2022

Future Plans

Future Plans include:

- Capacity building in Pressure Metrology (Project proposal has been approved and funds already committed)
- Support for ILCs closing workshops in the four fields of Mass, Volume, Dimension and Temperature
- Support for Tanzania Bureau of Standards as an Associate of the CGPM to submit CMCs in KCDB
- Support for development of SADCMET Five Year Strat Plan 2023-2028
- Further assistance for Electrical metrology ILC
- Further assistance for Chemical metrology and food safety

Future Plans

- NMISA has established a Metrology Training Centre for Africa which will offer metrology training and attachments in a number of fields including:
 - Mass/Volume,
 - Dimensional
 - Temperature,
 - Electricity and Magnetism,
 - Pressure and
 - Chemistry etc

The MTC provides basic and advanced training, either on-site or online, given by experts in the field, in all aspects of metrology (science of measurement) and in separation science. The training is cost-effective, and student orientated. Students are typically young professionals working in the field of science in South Africa or on the African continent.



Thank you

Merci

