



DRAFT: MINUTES OF THE 19th SADCMET COMMITTEE MEETING HELD AT KINGSHASA DRC, 19 MARCH 2015

Opening:

The SADCMET Chairperson, Mr V Facknat opened the meeting by welcoming all the members and observers present. A special acknowledgement is given to the PTB, the Observers from Kenya and the SADC Secretariat. He also thanks the hosts, Mr Kanama and his team for the warm hospitality we have received thus far.

ITEM	Action by
1. Procedural Matters:	Chair
An attendance list was circulated to identify members and observers present. There were apologies noted from Angola and Seychelles, and	
no response was received from Madagascar.	
2. Finalization of the agenda	All
The agenda was discussed and there were no amendments made. The Agenda was adopted by Zambia, seconded by Namibia.	
3. Approval of the minutes of the meeting of the 18 th meeting of the SADCMET Committee held in Gaborone, Botswana, 20 March 2014	All
The minutes were discussed. These minutes were circulated well in advance and the comments/amendments were made before the	
meeting. The adoption of the minutes is proposed. South Africa adopted as the true reflection of the record and Namibia seconded.	
4. Matters arising from the Minutes and Resolutions:	RC
The RC reported on the matters arising and the actionable resolutions.	
Resolution 4 decision regarding PMC meeting twice a year:	
This resolution has been actioned as there was a second meeting held in conjunction with the annual NLA Conference (Test and	
Measurement Conference) in South Africa. The second PMC meeting will again take place this year in conjunction with the NLA conference scheduled for Cape Town during October.	

Resolution 5 KRISS Global Metrology Academy:

The KRISS training took place last year. It will continue this year but will focus on other fields of metrology. Four countries sent their staff for this training. There will be additional information provided during the TC feedback.

Action Item – The Custom Form booklets

Funding assistance was received from the DRC and the NMISA and the booklets were designed and printed. These books were created to assist with the ease of moving artefacts between SADC Countries.

The books were distributed to all SADC countries and Mr Masuku encourages all to start using the forms and to send feedback to the Secretariat on any challenges experienced. SADCMET would like to request the SADC Secretariat to notify the SADC Custom Officials to recognize these forms for use within the region.

The Chair stated that he believes this will go a long way towards improving the exchange of artefacts between the different countries and to enhance metrology.

5. Technical Reports Presentations:

5.1 SADCMET Annual Report – The RC, Mr. Donald Masuku reports

<u>AFRIMETS</u>

SADCMET participated in the AFRIMETS GA and Working Group meetings held in Addis Ababa, Ethiopia from 16-18 June. Five WGs held meetings and workshops and reports were received for TC-Mass & Related Quantities, TC-Temperature, TC-Length, TC-Electricity and Magnetism, TC-Ionising Radiation, TC-Quality Systems and TC-Legal Metrology. Approximately 15 technical benchmarking activities (comparisons and proficiency testing schemes) are under way with more than 25 countries participating in the technical activities. A CD with the reports and presentations from that meeting was distributed to all.

A workshop was held on Wednesday 18 June to train the TC-Chairs and technical experts in Africa to submit and review calibration and measurement capabilities.

The next AFRIMETS GA that was supposed to be held in Gabon/Cameroon was cancelled due to financial constraints. The venue was changed to South Africa and because of this there was a decision not to have a full General Assembly but to only have technical Working Groups (mass, quality and length) for this meeting as well as the EXCOM. Further details regarding this event will be communicated by the AFRIMETS Secretariat in due course.

Participation at the T & M Conference

SADCMET through the Regional Coordinator participated in the 2014 Test and Measurement (T&M) Conference and SADC Regional Laboratories Association (SRLA) meeting hosted by the National Laboratory Association (NLA) of South Africa held in Johannesburg, South Africa. SADCMET also held its PMC meeting during the NLA conference as per its resolution to hold the PMC meetings twice a year the first to be held in conjunction with the NLA T&M Conference.

The next NLA Test and Measurement Conference is planned to be held from 12-14 October 2015 in Somerset West, Cape Town, South Africa. The theme for 2015 is: "Quality of Life: What is the measure of it?" The call for papers is out and SADCMET would like to encourage its members to present papers and participate in the conference. For more information and to register for the conference visit the website on <u>www.nla.org.za</u>. SADCMET is again planning to hold its PMC meeting in conjunction with the NLA conference and is requesting all PMC members to attend.

Participation at APMP GA

SADCMET participated in the APMP General Assembly and related meetings held in Daejeon, Korea represented by the SADCMET Regional Coordinator and other delegates from NMISA who participated in the various TC meetings to present SADCMET and AFRIMETS activities. The Regional Coordinator participated in the NMI's Directors workshop, the Developing Economies Committee and the General Assembly.

The key issues from the Developing Economies Committee is the capacity building programmes which include the following:

- The instrument bank which SADCMET has adopted and is in the process to implement it in the SADC region
- The Global Metrology Academy (GMA) Project operated by the Korean Research Institute of Standards and Science (KRISS) which is
 training programme for metrologists from the developing countries. Twenty-five (25) participants from African NMIs participated in
 the 2014 GMA programme which covered Mass and Related Quantities, Length and Dimensional, Thermometry and Humidity. For
 the 2015 programme three (3) courses covering Metrology in General, Flow Measurements and Ionizing Radiation will be offered and
 SADCMET is encouraging its members to take advantage of this training programme and send their technical staff to attend.

JCRB Participation

Unfortunately due to budgetary constraints, SADCMET was not able to send a representative as part of the AFRIMETS delegation to participate in the JCRB meetings that took place during the period under review. However, Dr Wynand Louw from NMISA who is also the CIPM member attended the JCRB meeting held in Paris from 26-27 March 2014 and represented SADCMET.

CGPM Meeting

The CGPM meeting which is held every four years was held in Versailles, France from 18-20 November 2014. Key resolutions were:

- Resolution 1 On the future redefinition of the International System of Units, the SI.
- Resolution 4 Dotation of the BIPM for the years 2016 to 2019.

Resolution 5 - On the importance of the CIPM Mutual Recognition Arrangement where the CGPM has decided to review the
implementation and operation of the CIPM MRA, and therefore a workshop will be planned for 2015 to engage in a broad discussion
of the CIPM MRA, involving: Directors of National Metrology Institutes, Member States representatives, representatives of RMOs and
other relevant stakeholders concerning the benefits of the CIPM MRA, as well as establishing views on what works well, and what
needs to be improved regarding its implementation.

More information about the 2015 meeting of the CGPM is available on the BIPM website on www.bipm.org

SADCMET Water PT scheme

The RC reported on the SADC Water PT scheme supported by PTB and the 2014 evaluation workshop which was hosted by the Zambia Bureau of Standards in Lusaka, Zambia from 24-26 November 2014 to evaluate the results of the 10th PT round for the chemistry and 6th PT round for microbiology analysis of water. The workshop was attended by over 60 delegates from several African countries and facilitating experts from Germany and Kenya.

Some of the highlights of the workshop were as follows:

- Funding and sustainability
- The Chemistry PT is now self-sustaining and participants to the evaluation workshops pay for their own costs, PTB is only supporting the PT Provider.
- The Microbiology PT was still in its early stages and PTB will continue to fully support the Microbiology PT evaluation workshops for the time being.
- Elections for the Project Management Committee (PMC)

Elections were held and two members Mr David Koech from Kenya and Mrs Antoinette Nsanga Beya from DRC were elected to the PMC. It was also decided that the election of the Chair will take place next year and the current Chair Mrs Rashida Nanhuck from Mauritius will hold office for one more year.

The next evaluation workshop which is planned to cover both Chemistry and Microbiology PTs will be hosted by Botswana Bureau of Standards in Gaborone, Botswana in November 2015 (exact dates will be confirmed). Full reports of the evaluation workshop are on the SADCMET website on <u>www.sadcmet.org</u>

There was a question from Namibia. Mr Mundembe asked regarding the AFRIMETS GA and why there are no Working Groups for Thermometry. The TC 1 Chair, Mr Kajane answered that during the discussions with the PTB it was expressed that they can only sponsor the two Working Groups that covers the most countries. Length will be sponsored by the NMISA and was included since it is a follow up after the Line Scale System training that took place in South Africa. Tanzania asked whether there is a chance for additional training on CMCs as an Associate to the CGPM. The Chair responded that there was a program that started in 2013 for the Associate members. He clarified that you can only submit CMCs if you are an associate or member and for that you have to be registered through the BIPM. Tanzania was requested to liaise with the SADCMET Secretariat if they want to apply to become an Associate of the CGPM.

5.2 <u>Report from the PMC Meeting - Mr. V Facknath reports</u>

SADCMET held 2 PMC meetings as per resolution 5: First meeting was held in conjunction with the NLA T&M conference in South Africa and the second one during the SADC TBT meetings here in DRC. Key issues discussed include:

- SADCMET feedback report 2014 delivered by RC
- Review of SADCMET GA 2014 resolutions
- Review of SADCMET Codes of procedure
- Noted the receipts of reports from the Chairs of TC1, TC 2, TC 3, TC 4 and TC 5
- Draft work programme 2015-16
- Discussed issues related to measuring instrument bank project
- Discussed the SADCMET PTB project for the six Associates to the CGPM intending to submit CMCs in the KCDB of the BIPM
- Reviewed the 2 projects under TC 2 (Proposal for metrology training) and TC 5 (Proposal for metrology awareness)

Regarding the review of SADCMET codes of procedures

This process was long overdue and at the PMC meeting held in SA in 2014 there were five codes of procedures that were reviewed to align them with the new SADC codes of procedure and with AFRIMETS.

- SADCMET COP0001 Compilation and adoption of codes of procedure. This one remains the same.
- SADCMET COP0002 Rules of procedure for SADCMET Committee.
- SADCMET COP0003 SADCMET rules of procedure for TCs and Working Groups. SADCMET COP0004 Rules of procedures for PMC.
- SADCMET COP0005 NMI CMCs and JCRB representations.

The Chair asks for the support for adoption of the documents. Lesotho adopts and Namibia and South Africa supports. The updated rules of procedures will be circulated to all members.

Review of TC 2 and TC 5 projects proposals:

There were two project proposals submitted to the PTB. The first was related to TC 2 - for metrology training and the second for TC 5 – metrology awareness and support to SME's. Both were however not approved.

The committee decided to review these project proposals and make them more streamline so that they can be resubmitted to donors. The

committee feels that awareness creating is extremely important as SMEs are the pillars that economies are built on and they are not aware of the importance of metrology.

5.3 Report by the Chairman of SADCMET TC 1 (S.Kajane/Kame)

Mr Kajane presented the report on behalf of Mr Kame who is the TC 1 Chair. TC1 deals with BIPM Issues which also feeds into the AFRIMETS issues.

Operational matters

- TC 1 Chairperson attended AFRIMETS and the SADCMET PMC meeting. He also reports that there has been an improvement in the attendance of SADC representatives in AFRIMETS meetings which is encouraging.
- TC1 was tasked with reviewing the project proposal for the PTB Support for the Associates of CGPM to align it with the anticipated submission of CMCs and develop terms of reference for the consultant this was done: target changed from 3 of the 6 states to have submitted CMCs to BIPM database to be ready for AFRIMETS assessments.
- The TC1 Chairperson participated in the SADCMET PMC meeting in October 2014 held in South Africa. The purpose of the meeting was to review progress made on the resolutions from the last SADCMET meetings, Project Proposal for Associates to CGPM, the working program and financial support needs, review of codes of procedures for various committees and also to prepare for the 19th SADCMET General Assembly.

Work Progress – Associate Members to CGPM CMC Project

The objective of this project is to assist at least three members to submit CMC's to the BIPM KCDB by 2016. This was started by identifying the bottlenecks that affect the submission of CMCs. It was found that most of the bottlenecks are related to capacity.

There will be two working programs arranged. For Mass, Mr Benjamin van der Merwe from NMISA will facilitate. For Temperature – Mr Hans Liedberg who used to work for the NMISA but now works as a Consultant, will facilitate. The program will start in May and will run until September 2016.

Mr Benjamin van der Merwe who was present at the meeting gave a quick presentation on the Mass Work Program. This was originally scheduled for Agenda item 8 but was reported on now to save time. He explained that the Mass program is very similar to the Temperature program. The first part (Day 1) will be joint training for both groups, and they will split into the two fields for day 2 and 3. Up to now the NMIs are being consulted to understand where they are currently so that we can ensure that their needs are thoroughly identified. There are a few challenges so far, in particular regarding the accreditation done previously, but there are discussions with the PTB to see how we can address this issue and it will be made part of the project.

The Chair remarked that these projects are extremely important to us all for building capacity in the region.

Mr Kajane also reported on the number of comparisons that are currently taking place as well as the comparisons that are due to start soon. He concluded by saying that the period under review was progressive with some challenges encountered. The challenges relating to slow progress on running inter-comparisons, customs related issues such as hand carrying of artefacts across borders is being recommended. ILCs are being organized with intention of giving preference to NMI's that need to submit their CMCs to the KCDB and thereafter other laboratories. Inter-comparisons at SRMO level should be enhanced and participation in AFRIMETS activities particularly WG meetings attendance should be encouraged. He emphasizes that engagements in advance with Custom Officials at individual member state level are also crucial in addressing the aforesaid Customs' challenge.

The Chair opened the floor for questions and Zambia remarks that they are hopeful that the Customs form for the movement of artefacts will ensure the quicker movement of artefacts within AFRIMETS as it is currently taking too long to do a comparison.

DRC inquired regarding inter-laboratory comparisons. There is a problem regarding timelines. When there are assessments by accreditation bodies plans are submitted, but when they come for the assessment it is found that the original program is not followed because the time lines for comparisons are not respected. He is particularly referring to the problem with the mass artefacts.

Mr van der Merwe responded that any key comparison takes long due to the registration process. For the mass comparison specifically the delay was with Customs and he hopes that the new forms will speed up the process going forward. The mass artefact is now at the next country since 3 weeks ago. This is not a unique problem for SADC it happens in the International circles as well, and is a big problem for all RMO's. He believes that for the CMC submission that gets registered with AFRIMETS takes very long to get approved through AFRIMETS (registration takes about 7 months). ILCs are good enough to support accreditations. It does not take as long and can start much quicker to ensure that the process can finish quicker. We should all sit together and look at the ILCs within the SADC region.

The Chair agreed that there should be a meeting, where common needs are listed and registered for the ILCs.

5.4 Report by the Chairperson of SADCMET TC 2 (Q. Lenka)

Miss Lenka reports on the two courses that took place during the year. The first was the Line Scale Training and the second was the Global Metrology Academy.

Line Scale Training

During the period April 2014 – March 2015, SADCMET arranged a training course for the new Rule Calibration System (RCS) developed by the NMISA Length Laboratory for use by African NMIs in the calibration of line scales, tapes and rules. The in-house developed and assembled systems were presented to the countries during a training course held on the 10th and 11th of November 2014.

The system was developed from two needs assessments gathered from AFRIMETS and SADCMET meetings, the need for higher accuracy line scale, tape or rule calibrations in developing economies and the requirement to develop a new skill-set in the Length Laboratory for very high accuracy line scale calibrations

Based on these two inputs, two outputs were achieved;

- Shelf Components. A complete, innovative and robust measurement instrument designed and custom made by the NMISA Length Laboratory. This system uses open source software development tools and off-the-shelf components. The system will improve the current calibration capabilities in AFRIMETS NMIs by an order of magnitude (± 0,5 mm to ± 0,05 mm). The system is also more than just a measurement instrument, as it can generate calibration certificates and perform a Monte-Carlo simulation for uncertainty estimation purposes.
- The training was attended by 14 participants from 9 countries including Mauritius, Tanzania, Mozambique, Zambia and Zimbabwe Each country received the new system after the training. The project was supported through financial assistance from PTB, Germany.

Global Metrology Academy

A number of SADC countries attended metrology training courses offered by the Korean Research Institute of Standards and Science (KRISS) through its Global Metrology Academy Project which is aimed at capacity building and training of metrologists from developing economies in the various metrology parameters. For the 2014 program, three metrology courses were offered in Mass and Related Quantities, Length and Dimensional, Thermometry and Humidity.

Upcoming programs for 2015:

- Metrology in General 23-27 March 2015
- Flow Measurement and calibrations 1-12 June 2015
- Ionizing Radiation 31 August 11 September 2015

The Chair thanked Ms Lenka and added that the Line Scale System Training was very successful and thanks the PTB again for sponsoring this venture. The Chair opens the floor for questions. Swaziland enquired about the courses presented at KRISS in 2015, and wants to know if there is funding available. Mr Masuku responds that members have to fund themselves. KRISS only sponsors the tuition and the food, the flights, accommodation etc. is for your own accounts.

Malawi and Botswana thanked the PTB and NMISA for the Line Scale System training. They took part and they found it extremely beneficial.

5.5 Report by the Chairperson of SADCMET TC 3 (V Kanama)

Mr Ngindu Mayindu MAYINDU presented the report on behalf of Mr Kanama.

The role of SADCMET TC-3 is promoting the establishment and strengthening of National Metrology Institutes (NMI's) and producing project proposals for submission to SADC Governments and potential funding agencies on the establishment and strengthening of National Measurement Standards in those SADC member states, which currently have no such facilities or have inadequate metrology facilities.

Metrology Development

Only two countries gave feedback. Mr Mayindu urges all other countries to please send their feedback.

- DRC
- Calibration Laboratory in Lubumbashi / Katanga is now operational the field of mass/ weighing instruments.
- Pressure calibration in Kinshasa will start in April 2015 after training of Staff.
- MAURITIUS

Procedures have been completed to purchase a new mass comparator in the range of 200 g so as to ascertain that all CMCs claimed are within the required limits.

A new EPA/EU funded project to upgrade the pressure, force and length metrology laboratories and to establishment of a new torque laboratory have been approved by EU office for implementation in 2015.

A project to replace SPRTs and other equipment in the temperature measurement laboratory has also been budgeted for implementation in 2015.

The new Line scale calibrator donated by PTB in 2014 will soon be operational and is expected to be accredited in 2015 for a better and higher CMC value.

SADCMET Instrument Bank

Mr Mayindu reported that after sending the template to all the SADCMET Members only Angola responded. He added that it seems that there are some problems with this project in particular with regards to the regulation for disposal of assets, custom issues and cost of transport of instruments. He urges everybody to send their responses and also list their problems so that the terms of reference (TORs) can be updated.

The Chair added that at the last PMC meeting this was discussed and there are certainly issues that make this difficult. Therefore the TOR will be reviewed to find solutions. The Chair urges all the member states to reply to TC 3 so that they can make progress. The SADCMET Secretariat was tasked to finalize the TOR and also to start lobbying donors and instrument manufactures to donate to the Instrument Bank.

Infrastructure and accreditation status

According to information received from the three SADCMET members, accreditation status is the following:

• OCC/DRC was accredited for Mass, Volume and Temperature by COFRAC

- MBS/Mauritius was accredited for Mass, Length, dimensional and temperature by MAURITAS
- SIRDC/Zimbabwe was accredited for Mass, Volume, Dimensional and Temperature by SADCAS/SANAS

Other members we encouraged to send their accreditation status to TC 3 Chair.

5.6 Report by the Chairperson of SADCMET TC 4 (V Mundembe)

Mr Mundembe reported that feedback was only received from Namibia, and Lesotho and Zimbabwe responded to say that there were no developments in their Country. The other countries did not respond to his request for feedback.

Namibia

The current metrology legislation in Namibia is the Trade Metrology Act (Act 77 of 1973) as amended. A new Metrology Bill (based on SADC Model) was drafted and submitted to the Minister of Trade and Industry in February 2013.

In 2014

- The promulgation of the Standards Act enabled the adoption and publication of OIML R76-1 as a Namibian standard (NAMS/OIML R-76:2014 Non Automatic weighing instruments; Part 1 Metrological and Technical Requirements -Tests). With the exception of Annex H: Requirements on road vehicle scales for use by road traffic authorities, this Namibian Standard is identical to OIML R-76-1 and was approved by NSI TC 9 in accordance with the procedures of the NSI and in compliance with Annex 3 of the WTO/TBT Agreement.. (Government notice 5425 of 14 March 2014).
- The Minister of Trade and Industry has requested the NSI to facilitate the drafting of new regulations for the Trade Metrology Act.
- A submission has been made to the Minister of Trade and Industry to replace the current regulations in Part I to III issued in terms of Section 42 of the Trade Metrology Act, 1973 (Act No. 77 of 1973), as amended, with SADCMEL documents numbers 1, 4 and 5 and Namibian Standard NAMS OIML R76-1. The Minister is yet to set the date these regulations come into force.
- The following documents were discussed by the NSI technical Committee on Metrology (TC 9), to be adopted as Namibian standards:
 - OIML R 117-1: 2007(Liquids other than water)
 - OIML R 126 (evidential breath analysers).

The Chair opened the floor for questions and comments. Mr Albasini remarked that we should look at creating a database on the metrology legislations on the SADCMET website. Namibia supported this idea to develop on the SADCMET website a platform that enables Member States to upload their respective legislation for sharing purposes.

5.7 Report by the Chairperson of SADCMET TC 5 (G Albasini)

SADCMET TC 5's purpose is to assist Small and Medium Enterprises (SMEs) in the SADC member countries, in order to assess and improve their measurement system. This committee is aimed to develop and implement a working program for improvement of measurement practices in SMEs. Nothing received from Angola because of the changes in management at IANORQ but feedback was received from all the other countries. They reported on the WMD 2014 celebrations and a full list of the activities that took place can be found on the country presentations and on written reports.

Mr Albasini remarked that this TC does not only deal with WMD but it includes all the activities that promote metrology to SMEs.

In Conclusion Mr Albasini remarked that with regards to WMD 2014 it is very positive from metrology perspective, however more activities should be followed after the event in order to allow companies to understand how metrology can contribute in reducing production costs by using calibrated equipment.

6. Country Reports: Highlights

The Chair cautioned that due to time constraints all reports should be kept to 5 minutes. The full reports (written reports) are on the memory sticks received and the presentations will be loaded on the SADCMET website after the meeting.



Angola sent an apology and is not participating in this year's meetings. They have also not send a report for discussion.

6.1 Angola

Mr Kajane gave feedback on total calibration certificates issued. There was a 9% increase when compared to the same period for 2013/14.

Staff development is discussed. One staff member was trained in temperature and humidity course in South Korea, KRISS in June, 2014, and one was trained as a lead assessor (calibration) under SADC-EU REIS project.

6.2 Botswana Presented by Mr Tebogo Kajane

Mr Kajane also gave an overview of the future plans in Botswana, and concluded by saying that it was a good year apart from some challenges like:

- Need for upgrading membership to CGPM by 2016 (Fees)
- Unavailability of measurement comparison schemes

• Lack technical competence to participate in the implementation of CIPM MRA- Submission of CMCs They are however addressing these challenges by evaluating funding options and engaging in multilateral/bilateral comparisons.



equipment received from PTB. She adds that this is the second phase as other equipment was received earlier. She concludes by thanking the PTB for these contributions. Mr Kajane from Botswana remarks that it is encouraging to see that things are happening in Lesotho with the PTB support.



6.5 Malawi Presented by Mr Sengani Malunje Malawi is in the process of implementing Quality Management System for its mass, volume and length laboratories. At the moment plans are at an advanced stage to procure additional needed equipment for the laboratory to fully comply with the general requirements for the competence of a calibration laboratory.

Mr Sengani Malunje reported that not a lot of calibration is taking place since their labs are not accredited and a lot of industries have to get their instruments calibrated by an accredited laboratory meaning that they take their business outside of the country. Within legal metrology they calibrated Mass pieces; Beam scales; Capacity measures; and Length measures for verification officers. The issue of Legislation remains a problem, and this issue is currently being addressed and should be finalized by next year.

The Malawi Government, with financial assistance from the EU/UNDP and technical assistance from UNIDO, is undertaking a four year project (2012-2016) to improve the metrology and quality infrastructure in Malawi.

During the period under review Malawi has procured a proving tank and a master meter for calibration of master meters and bulk meters for the petroleum industry. Malawi also celebrated World Metrology Day 2014 by distributing the WMD posters at Malawi's 26th International Trade Fair which was held from 20th-29th June 2014.

Due to high staff turnover and inadequate training, there are significant challenges in technical competence of Staff. There is also a lack of proper infrastructure. Despite plans to extend the scope of calibration activities, the MBS lacks proper accommodation facilities for the Volume, Dimension, Temperature and Pressure Laboratories. However MBS is optimistic that the EU/UNDP/UNIDO and the NORAD Project will address major challenges in infrastructure

The Chair thanks Malawi and remarks that it is nice to see that they are coming up in the establishment of services. Mr Kanaje asks how Malawi will address the technical competency of staff. Mr Sengani Malunje answers that they are going to start with the basics. First training in introduction to metrology and take it from there. Once they have the basics they will diversify to other areas. Malawi has good support from Donors, and thanks them for this.

MSB has six separate laboratories, one each for mass, pressure, force, length, temperature and electrical resistance. Calibration services are offered both "In House" and "In Situ" against a nominal fee and are on a voluntary basis . Services are available in mass, pressure, force, length, temperature and electrical measurement areas but only Mass, Length and Temperature calibration services are accredited since 2010 and they represent more than 70 % of the annual activities .

6.6 Mauritius Presented by Mr Veersingh Facknat

MSB's new strategic plan (2015-20) for MSTQ activities calls for achievement of status of by "Self-Sufficiency" by 2020 but recognises that scientific metrology also has a social role to play due to the maintenance of national standards of measurement and provision of measurement traceability to the trade sector.

Annual established training needs and training plans were not implemented due to budgetary constraints. MSB depends mostly on the funded Technical Assistance Schemes made available under SADCMET, PTB, EU, IAEA, AFD projects. In 2014 one metrologist was trained at NMISA in length line-scale calibration on the new digital calibrator donated by PTB.

The 2014 highlight are discussed. These include

- A tender for the purchase of a new mass comparator.
- Development of a strategic plan (2015 2020) for the upgrading of measurement laboratories and capabilities (training)
- Promotional campaigns carried out in various sectors of the economy.
- Project for creation of NMI inclusive of scientific and industrial metrology which was kept on hold in 2014 will be reviewed for presentation in 2015.
- Received a new line scale calibrator in the range of 1000 mm from PTB, and training one length metrologists at NMISA on line scale calibration.
- Regular update of all national and reference measurement standards for assurance of measurement traceability to the SI units
- New procurement plans to upgrade measurement capabilities in temperature metrology available for submission in 2015

World Metrology Day 2014 was celebrated with great success in Mauritius. A half day seminar was held on 20 May 2014. Presentations included topics like Measurement challenges in energy, Measurements of energy efficiency and sustainability by Energy efficiency management office, status of the National Metrological infrastructure.

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6.7 Mozambique Presented by Mr Geraldo Albasini The Metrology system in Mozambique covers three main legs, namely Scientific Metrology; Industry Metrology (offering calibration services in mass, temperature, volume, electrical, pressure and length fields) and Legal Metrology.

INNOQ celebrated World Metrology Day with a one-day workshop held in Maputo. Attendees included local SMEs and other guests from different fields. The opening ceremony was conducted by The Minister of Industry and Commerce, Mr. Armando Inroga. The sponsorship of the event was carried out by EU/UNIDO project. The posters of World Metrology Day were distributed to the SMEs, Government institutions and explanation on it was given.

Mr Albasini gave feedback on the new premises. Metrology Laboratory is being equipped with support of EU/UNIDO project called "Competir com Qualidade". The mass and temperature lab for calibration of balances on site and temperature lab for calibration of digital and analytical thermometers, are accredited to ISO 17025. For 2015 extension of the scope of this accreditation as well as the volume field, was asked and the first assessment took place on November 2014.

From January to December 2014, 67 companies were visited and from them, 1034 instruments were calibrated and issued the same number of calibration certificates in all 6 fields: mass, temperature, volume, electrical, pressure and length.

Mozambique has participated in Temperature inter-comparison organized by AFRIMETS in 2013, waiting for the results, and also participated in a bilateral comparison under mass, volume and temperature fields with NMISA.

INNOQ is planning the following for 2015:

- To look for sponsorship to buy the laboratory equipment for the new premises;
- To seek for accreditation on the fields other than mass and temperature;
- To continue sensitising and creating awareness for industry, laboratories and other interested parts;

Mr Albasini concluded by saying that metrology activities in Mozambique are still running at low speed; however from 2013 to 2014 the number of companies seeking calibrations services has increased. This growth is happening due the continuous awareness activities which INNOQ conducts through seminaries, workshops and other kind of awareness campaign.

The Chair opens the floor for questions. Mr Kajane enquires regarding the 1034 certificates and wanted to know if it includes Legal Metrology. Mr Albasini remarks that this is industrial metrology only. Legal Metrology is reported under SADCMEL.



6.8 Namibia Presented by Mr Simasiku Matali

Mr Matali reported on the developments in Namibia for the period under review as follows:

- Accreditation of the Volume metrology laboratory by SADCAS with scope covering micropipettes syringes ,Glassware and metal strike measures
- Extension of Mass metrology range, Weights from 1mg- 20kg and Electronic Balances from 0 to 1500 Kg
- A successful joint commemoration of World metrology day with Namibian standards institution , Ministry of mines and energy the National Commission On Research Science And Technology and other stakeholders in the energy sector
- A successful Metrology awareness parade with various stakeholders and supported with awareness Posters and T-shirts.

During the reporting period, the NSI provided calibration services to industry in the fields of Mass, Temperature and Volume. Approximately 800 Calibration Certificates were issued between January 2014 and January 2015. However the reported number for 2014-2015 indicated a slight decrease in figures reported in the SADCMET country report of 2014. The scope of calibration services currently provided by the NSI Metrology includes mass, volume and temperature. NSI Metrology has also seen growing number of clients requesting calibrations. Mr Matali reported that operations of the laboratory will be extended to include pressure and dimension thus measures and efforts to mitigate these needs have been put in place.

The Metrology laboratory participated in the following inter-laboratory comparisons:

- Multilateral inter-laboratory comparison on calibration of micropipette and glassware,
- AFRIMETS M M-S6, OIML F1 stainless steel standards,
- SADCMET Supplementary comparison of Base Metal Thermocouple from -30°C to 280°C, supplementary Comparison of secondary platinum resistance thermometer calibrations over the range -30 °C to 280 °C and calibration of temperature measuring instrument by electrical simulation (in progress)

For future developments the plan is focused on the preparation of the temperature laboratory for assessment and extension of the laboratory. Furthermore the laboratory seeks to narrow its calibration and measurement capabilities in its Mass and Volume laboratory. The Laboratory also plans to make significant progress in the implementation of the CIPM-MRA by submission of its mass lab CMCs for publication, with the support of results from AFRIMETS.M.M-S6 ILC. Support in this regard is also anticipated though the PTB funded project for Associate members of the CGPM. This activity will hopefully see the review and approval by AFRIMETS TC for Mass and related quantities and the AFRIMETS TC QM.



Seychelles sent an apology and is not participating in this year's meetings. However the report was submitted and is included in the meeting documents.

6.9 Seychelles



6.10 South Africa Presented by Mr. Benjamin van der Merwe

The NMISA is currently working on two big thematic cross cutter projects. The first is Africa Food and Feed Reference Materials Programme - To enable food trade in support of food safety and in support of trade agreements AGOA, TDCA, TIDCA by providing African food samples with known quantities of contaminants to calibrate measuring instruments) and the second is Green Economy Measurement Tools (Develop accurate measurement for green energy and environmental compliance with a specific focus on renewable energy, energy efficiency, responsible natural resource exploitation, environmental protection and IPAP priority sectors).

NMISA participates and pilot various inter-comparisons, both in SADCMET/AFRIMETS and at CC level where NMISA form the link between the CCs and AFRIMETS. In the process of assisting AFRIMETS NMIs to become CC members.

NMISA is developing standards, methods and measuring systems for both South African industry and the region. For example; the Length laboratory designed the Rule Calibration System (RCS) and supplied it to nine (9) African NMI's. A SADC PTB project has been launched to assist SADC NMIs which are Associates of the CGPM to build capacity to prepare and submit CMCs in the international key comparison database and NMISA is facilitating the project.

NMISA has hosted and trained a number of metrologists from several NMIs:

- Kenya Bureau of Standards 1 metrologist in Chemistry Metrology
- METEC Quality Management Centre of Ethiopia 5 metrologists in Temperature, Electrical and Mechanical
- Zambia Bureau of Standards 4 metrologists in Mass, Volume and Length
- Standards Organization of Nigeria (SON) 1 metrologist in Ionizing Radiation
- Tanzania Bureau of Standards (TBS) 1 metrologist in Electrical

• Namibia Standards Institute – 2 metrologists in Temperature

NMISA has embarked on a feasibility study for a new building and laboratories. Budget allocation of R150m has also been made for 2014/15 financial year to purchase new equipment as part of the recapitalization programme. The process is expected to be finalised in 2015/16 (final decision will then be taken on the model for a new NMISA).

NMISA produced a 3D video to promote the importance of measurements to the Small to Medium Enterprises (SME). The aim of this project is to create a 4 to 5 minute video that uses animated 3D segments, along with voice-overs to tell a story, to explain the importance of accurate measurement in the domains of length, mass, volume and temperature to SMEs covering how it affects their business (positive and negative) on a day-to-day basis.

The Chair thanked Mr van der Merwe for the presentation and opened the floor for questions. Mozambique would like to know if there is a database in South Africa for Labs who are not yet accredited. Mr van der Merwe answers that labs only gets listed once they are accredited so there is not a database for labs that are not accredited.

Mr Masuku added that the SME dvd that was reported on is loaded on the memory sticks for all countries to view.



6.11 Swaziland Presented by Mr. Wilfred Mdluli

The Activities during the period under review include:

- Changes in the Legislative Framework Review: The Metrology Act, 1994 is currently undergoing review. Three pieces of legislation covering certain aspects of metrology have been proposed: Standards and Quality Bill, Measurement Units and Measurement Standards Bill and Legal Metrology Bill.
- Laboratory Buildings/ Infrastructure: The Government of Swaziland approved and commissioned the construction of the MCIT National Metrology laboratories at the MCIT Weights & Measures regional office in Matsapha. The building of the laboratories is already at an advanced stage. For the interim, MCIT Weights and Measures and SWASA will share the laboratories.
- Staff Capacity Building: The Southern African Development Community Accreditation Service (SADCAS) was engaged by UNIDO to deliver two five-day training courses in Swaziland, namely:
 - ISO/IEC 17025 Requirements, Implementation and Auditing Course held from 07 11 April 2014.
 - Validation/ Verification of Methods and Measurement Uncertainty Course held from 07 -11 July

2014.

 Benchmarking visit to the National Metrology Institute of South Africa (NMISA) – 09th October 2014: Three staff members visited the National Metrology Institute of South Africa (NMISA) observe their operations.

Laboratory Infrastructure remains a challenge. For the interim period, MCIT Weights and Measures and SWASA will share the laboratories. SWASA is also in discussions with the University of Swaziland with the view to conclude a Memorandum of Understanding. Training and Capacity Building is also still a challenge. Currently one officer at SWASA that has been trained in some metrology fields, there is therefore need to have an extensive intervention by SADCMET and SADCMET members in terms of training as well as attachment opportunities for SWASA metrologists.

Future plans include:

- An MoU with the University of Swaziland (UNISWA) covering provision of Laboratory Space amongst others.
- Procurement of Mass calibrations equipment within OIML Class F2 (range 1 mg to 20 kg)
- Recruitment and training of Mass Metrologists

There is a question from the DRC around the reported acquirement of the F2 mass pieces, and why this was procured. Mr Mdluli answered that this is for industrial metrology.



During the period under review the laboratory sent its National Measurement standards to NMISA and Technical research Institute of Sweden (SP) for measurement traceability. National Measurement Standards for mass and pressure were sent for re-calibration to NMISA-South Africa. Re-calibration of National Measurement Standards is done every 3 and 5 years depending on the field of measurement and quality control.

6.12 Tanzania Presented by Mrs Edna Ndumbaro Mrs Ndumbaro reported that there was a big increase in calibration services. A total number of 3286 items have been calibrated both in house and onsite, against 2897 items for the previous financial year.

During the period under review Metrology Laboratory participated in

- Mass comparison under AFRIMETS of which NMISA was a pilot Laboratory and
- Inter-laboratory comparison with Zambia Bureau of Standards (ZABS) for mass, small volume, temperature and dimension.

TBS Metrology laboratory is continuing to maintain its accreditation status in Mass and related quantities,

Temperature, Small volume and Time Interval. The next surveillance assessment by SANAS is scheduled to be in March, 2015. Under SANAS/SADCAS Twinning Partnership Arrangement the lab was accredited in November, 2010 in the area of dimensions.

The following training opportunities were attended by Metrology laboratory staff for the period under review;

- Electrical Measurement course 03th-07th ,November,2014-NMISA-South Africa
- Dimensional training on LINE SCALE Calibration 10th-11th ,November 2014 at NMISA in South Africa
- Attended training ISO/IEC 17025,15th -19th , December,2014 TBS-DSM,

The TBS Metrology laboratory future plan by end of 2015/2016 focuses towards:

- To be upgraded to the metrology department and have four laboratories mass and related quantities, temperature and electrical measurements lab, pressure Lab and Dimension laboratory
- Calibrating 6,000 items(in total) by 2015/2016;
- Maintain and expand scope of accreditation
- Expand participation in inter- laboratory comparisons regionally and International;

Mrs Ndumbaro concluded by saying that the calibration of equipment in the country are in great demand. Both, local business community and foreign investors operating in the country seem to have understood the importance of calibration in their activities. This is seen in the increasing requests for calibration work and that the overall performance during the period was satisfactory and close to the set targets.



6.13 Zambia Presented by Mr. Frederick Hamutunda ZABS has continued to receive tremendous support from Donors in metrology related areas such as training and inter-comparisons. The assistance has been coming from the United Nations Industrial Development (UNIDO). The NORAD funded project through the Ministry of Commerce, Trade and Industry (MCTI) is assisting the Government of Zambia to re-engineer the National Quality Infrastructure (NQI). The re-engineering of the NQI will see the creation of the National Metrology Institute which will combine the Scientific, Industrial and Legal Metrology. The Government approved the National Quality Policy in 2010.

ZABS metrology laboratories also receive support from ZABS through funds generated from other activities such as Inspections. This support has created a learning culture that has permeated in all fields and has resulted in the Volume and Mass Laboratories maintaining the SADCAS/SANAS accreditation status. The Metrology laboratories also have continued to expand by purchasing of additional equipment in Mass, Dimensional, Pressure Force, Volume, Temperature and Electrical fields from the ZABS budget. The overall expenditure in such areas stands at about USD 400,000. The metrology department has a staff establishment of 18 which include three that were hired in 2014.

ZABS has also benefited in knowledge sharing by attending the Test and Measurement Conference in South Africa and active participation in AFRIMETS and SADCMET. Other external training in metrology was made possible by KRISS. And NMISA which has been complimented by in house training which is an going activity.

The calibration activities and volumes of work at ZABS have been increasing at an average rate of 15 % and this has also resulted in increased revenue from the calibration service. In total Zambia conducted 1810 Calibrations for the period under review. The customers are from a wide range of industries such as mining, research institution, construction firms, manufacturers, testing laboratories, regulators and energy.

The Mass and Volume laboratories have maintained the accreditation gained in June 2013. Assessment for additional Technical Signatories in Mass and Volume and addition of scope to include Dimensional and Temperature which was scheduled to take place in February, 2015 was postponed to a later date in May, 2015.

Future developments for Zambia include:

- Currently implementing the National Quality Policy (NQP) which will result in the formation of the National Metrology Institute that will be formed by merging the ZABS Metrology department and Zambia Weights and Measures Agency. The draft metrology bill was awaiting Government approval. This development will result in upgraded metrology infrastructure and metrology expertise.
- Overall restructuring of the metrology infrastructure.

Mr Hamutunda also reported that the Mass and Temperature labs were the most active in 2014 and this led to hiring three members of staff. The department is forecasting an increase in volumes of work by 15 % due to expected industrial activities in the construction and mining industry. Support from SMEs is also an area that they wish to focus on and Mr Hamutunda thanks the NMISA for the SME dvd and promises to put it to good use.

The Chair opens the floor for questions.

DRC would like to know if the growth at country level is linked to the growth in calibrations and Mr Hamutunda answered that the calibrations increase was 15% but the country growth was 6% so not specifically related.

6.14 Zimbabwe Presented by Mr Christopher Ngwenya o.b.o Mr M. Ranganai Mr Christopher Ngwenya from Legal Metrology read the report on behalf of Mr M. Ranganai. He provided some background on SIRDC and reported that the construction of new NMI Dimensional laboratories is almost complete with just a little plumbing work remaining. Securing of NMI laboratories is also underway as well as acquiring more equipment and standards.

Mr Ngwenya provided details on some of the SIRDC-NMI standards and equipment calibrated during the period under review. SIRDC – NMI calibrated a sum total of 3,223 industrial and laboratory equipment mainly in the fields of Mass, Temperature, Electrical, Dimensional, Pressure, Volume, Chemical and other Metrology disciplines. Clients seeking calibration services and other industrial support services covered a broad spectrum of activities in health, environment, agriculture, mining, manufacturing, regulatory authorities and national standards bodies.

In order to develop and maintain the technical competence required for its laboratories and establishing measurement equivalence with peer laboratories, SIRDC-NMI took part in the following inter-laboratory comparisons:

- AFRIMETS mass Inter-laboratory comparison in May 2014
- SADCMET Supplementary comparison by electrical simulation of temperature readout at Type K -190°C to 1340°C; Type S 0°C to 1600°C; RTD-PT100(385) 200°C to 800°C
- SADCMET Comparison of Base Metal Thermocouple Thermometer at -30°C; 0°C; 80°C; 240°C and 280°C
- Volume Inter-laboratory Comparison at 100ml Volumetric Flask and Measuring Cylinder.

Surveillance assessments for the Mass, Temperature, Volume and Dimensional Metrology Laboratories were conducted by SANAS and SADCAS respectively in June 2014, December 2014 and February 2015 and all the Laboratories were recommended to retain accreditation.

Staff were also trained in various fields including the recent Line Scale Training that took place at the NMISA, the GMA group course on metrology in mass and related courses and others.

Future developments at SIRDC include work on the accreditation of other parameters such as pressure, force, time and frequency and electrical metrology are at advanced stages of development. SIRDC-NMI is also working on procurement of a mobile laboratory as well as setting up satellite laboratories in Zimbabwe's major cities. The laboratory is also hoping to register at least one CMC in the BIPM KCDB in the next few years.

7. Statements by Associate members present:	KEBS – Steven
7.1 Statement by Kenya Bureau of Standards	Mboloi
Introduction	
The Kenya Bureau of Standards (KEBS) was established in 1974 by an Act of Parliament. KEBS' mandate was based on an integrated approach	
to a quality infrastructure, namely: Standardization, Metrology and Conformity assessment.	
The functions of KEBS may be summarized as follows:	
• to promote standardization in industry and commerce;	
• to realize, maintain and disseminate units of measurement that are traceable to the International System of Units (SI);	
 to provide conformity assessment services: testing, certification and inspection; 	
to develop standards;	
 to encourage or undertake educational work in relation to metrology, standardization and conformity assessment. 	
In implementing these functions, KEBS operates, among others, a Standards Information Centre and hosts the WTO National Enquiry Point	
on standards, conformity assessment and technical regulations.	
The Chair thanks KEBS for their presentation and invites the floor to question/comment on what was presented.	
Namibia inquires about using DAKS (Germany) for accreditation purposes and KEBS answers that they have started using them long before the other accreditation bodies were established.	
8. Project Work:	
8.1 SADC EU REIS Project	
This item was deferred to be discussed at the SQAMEG the next day since there was not much pertaining to metrology.	SADC
	Secretariat
8.2 PTB projects Report	
Ms Wunderlich reported on some activities that had been carried out during the year under review. PTB continued to support the SADCMET	Ms Kathrin
activities:	Wunderlich
• Follow up of the Training of Trainers (ToT) on "Quality Assurance in Laboratories" course held in Livingstone, Zambia in August 2010:	
Quality Assurance Training: Malawi April 2014, Botswana July 2014, Zimbabwe August 2014	

SADCMET Water PT:	
- Provision of the 11th round of the SADCMET Water PT scheme for chemical parameters; evaluation workshop and training	
course held in November 2014 in Zambia, support of trainer.	
- Provision of the 6th round of the SADCMET Water PT scheme for microbiological parameters including an evaluation workshop	
and training course held in November 2014 in Zambia	
 Training for the provider for microbiological parameters 	
 Participation of two PT providers from the Region in EURACHEM 2014 	
 Printing of 2014 World Metrology Day poster for dissemination for SADCMET/SADCMEL 	
Comparison AFRIMETS M.M-S.6 (10 SADC countries, 2 outside SADC)	
Ms Wunderlich added that there is synergy between AFRIMETS and SADCMET so the support to AFRIMETS also directly supports SADCMET for example the Line Scale training.	
The Chair thanked Ms Wunderlich for the presentation and thanked PTB for their continued support.	
8.3 SADC NMI's Associates to the CGPM project	TC 1 Chair
Temperature work program	
Mass work program	
These items were reported on earlier on in the program under the TC1 feedback.	
9. 2014/15 Work Program and Monitoring & Evaluation of Ongoing Programs	RC
9.1 World Metrology Day Poster: "Measurement and light".	
The theme for the 2015 World Metrology Day is "Measurements and light" and the design of the poster was coordinated by the NMISA in	
consultation with the BIPM and OIML. The PTB generously again agreed to sponsor the printing of these posters for the SADC Countries and	
the NMISA will take care of the distribution. The posters will reach all SADC Countries by the first or second week in April. All countries were	
requested to share their activities on the World Metrology Day website as well as with the TC 5 Chair.	
The Chair thanked the PTB and the NMISA for the printing and distribution of the posters to SADC.	
9.2 Work program for 2015/2016	
The work program was presented and all the activities that will be carried out during 2015/16 (see Annex A attached) were reported on.	
Namibia asked about a follow up training workshop during the Length Technical Committee (TLC) meeting to take place before the AFRIMETS	

GA as mentioned by Mr Oelof Kruger from NMISA. The RC replied that there was mention of this training, but it is dependent on funding and the aim was to hold it in conjunction with the AFRIMETS GA meetings which will now take place in South Africa. The RC will go back to Mr. Kruger to find out if any other funding could be secured, and if this training goes ahead he will communicate.	
Lesotho asked if the NLA T & M conference was open to everybody and the RC confirmed that it is. He encouraged the members to attend and even present an abstract at this conference. The members have to pay for themselves for this. More information can be found on the NLA website which is http://www.home.nla.org.za/	
10. Elections: The RC reported that the SADCMET Chair and SADCMET Vice Chair positions are up for election. For this process the Code of Procedure (SADCMET-COP-0002 Rev.2: 1/10.2014) as adopted earlier will be followed. He proceeded to read the rules to all attendees and pointed out that in line with the Codes of Procedure the current SADCMET Vice Chair will become the new Chair. So Mr. Shadrack Kajane from Botswana will become the new SADCMET Chair. Mr. Masuku officially proposed this process and it was supported by all members.	RC
Vice Chair for SADCMET The RC provided a list of all the past Chairpersons since the inception of SADCMET and reiterated that according to our Codes of Procedure the Countries that have been listed are not eligible for nomination as Vice Chair. He then called for nominations for the new SADCMET Vice Chair from the Countries that are eligible, reminding that the countries have to be present at the elections to be eligible. The nominations can only come from the DRC, Lesotho, Swaziland, and Mozambique. Mozambique nominated Zambia who then decline the nomination because Zambia was the Chair in 2003 and are therefore not eligible.	
Malawi asked after all the Countries had a turn if the elections will then be rotated. Mr Kajane responded that the elections have been done like it is being done now. In terms of rotational basis and equitable basis it should not be done via alphabetical order since sometimes there are external factors causing a country not to take up the Vice Chairmanship.	
The RC then asked for another nomination since Zambia is no longer eligible. Botswana nominated Swaziland and the nomination was supported by Namibia, Lesotho and Zambia. Swaziland accepted the nomination and was elected the new Vice Chairperson of SADCMET.	
Mr Kajane as new Chairperson thanked Mr Facknat from Mauritius for his services during his term, and added that Botswana looks forward to working together with the members in the future.	
SADCMET representative as stakeholder member on SADCA. The current Chairperson remarks that normally the Chair will take up this responsibility and therefore SADCMET will be represented by the new Chair, Mr Kajane.	

The Chairperson remarked that for this the Regional Coordinator is nominated.	
All members present agree with the two nominations.	
10. Resolutions:	RC
The RC reads the Resolutions and all comments/amendments are made. The final Resolutions are provided in a separate pdf document (see Annex B) and will be available on the website.	
11. Any other business	
Mozambique – concern with the project on ILC that was awarded to TC1. Mr Kajane answers that it was noted as an action item for TC1 and it is also covered in Resolution 3.	
Combined bilateral comparisons	
Mr van der Merwe mentioned that it will assist greatly if bilateral comparisons are combined, and asked that anybody planning bilateral comparisons should please share the information about these.	
Custom form booklets	
The RC gave an explanation regarding the completing of the custom forms that was distributed. The form should be filled in triplicate, then	
the first two copies should be taken out and those are the pages that should accompany the artefacts to the next country. The custom	
officials will then stamp on the name of the country where it is leaving. The custom official at the receiving country will stamp the pages when they are coming in to the new country. When the artefact comes back it will come back with the original forms. At all times in your	
booklet you should have the pink copy as a record of having used the form. The feedback on challenges and problems should be sent to the	
Secretariat.	
Malawi remarked that the form is a good initiative but there needs to be clarity with how to use it. Especially on the SADC Secretariat	
number that is required. The RC responded that there will be no stamp from the SADC Secretariat. The Secretariat will arrange that with the	
Custom Officials to recognize this form. After further discussions it was resolved that the SADCMET Secretariat should draw up an instruction	
manual on how the forms should be used and circulate to all members. The RC added that there will be teething problems at the start but he	
foresees that in the long run the form will make a big difference in facilitating the smooth movement of artefacts and PT samples 12. Closing	
The Chair took the opportunity to thank all the participants for their contributions and the discussions that took place. He also thanked the	
SADC Secretariat and the PTB for the successful hosting of the SADC SQAM meetings. He also thanks the DRC for all the arrangements made and for their hospitality.	