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## **SADCMET ANNUAL REPORT FOR THE PERIOD MAY 2008 - APRIL 2009**

This report covers a summary of activities carried out and coordinated by the SADCMET Secretariat since our last SADC SQAM meetings held in Cape Town, South Africa and for the period under review.

### **1. AFRIMETS 2<sup>nd</sup> GENERAL ASSEMBLY, TUNISIA, 1-4 JULY 2008**

The Intra-Africa Metrology System (AFRIMETS) held its 2<sup>nd</sup> General Assembly hosted by the Ministry of Commerce and Industry of the Government of Tunisia in Tunis from 1-4 July 2008. The General Assembly was preceded by an AFRIMETS executive committee (EXCOM) meeting and a workshop on "Metrology Development in African Countries" held on the 1<sup>st</sup> and 2<sup>nd</sup> July respectively. The General Assembly was attended by more than 50 delegates from all of the five sub-Regional Metrology Organizations in Africa including Legal metrology and observers from PTB, BIPM, OIML, EURAMET, LNE, UNIDO, ECOWAS, UEMOA, the SADC secretariat, the African committee for metrology (CAFMET) and the Arab federation of metrology. SADCMET was represented by the SADCMET Chairperson and the Regional Coordinator.

The General Assembly was officially opened by the Permanent Secretary of the Ministry of Commerce and Industry Mr. Chokri Mamoughli, who welcomed all the delegates to Tunisia. In his speech the Permanent Secretary reiterated the importance of metrology to the national economy and acknowledged the role that AFRIMETS would play in ensuring that accurate measurement are harmonized in Africa, establish new measurement facilities and gain international acceptance for all measurements critical to export, environmental monitoring and sanitary and phyto-sanitary issues.

Dr Wynand Louw, Chair of AFRIMETS informed the delegates of the progress made since the establishment of AFRIMETS and presented the AFRIMETS Technical Committee and Working Group Structure which is based on the SADCMET TC and WG structure. The General Assembly also discussed the draft document for the AFRIMETS Quality System for compliance to the CIPM MRA and agreed that AFRIMETS can follow the two routes as described in the CIPM MRA for the submission of CMCs, but the preferred route will be the support of capabilities through official third party accreditation.

A number of organizations joined AFRIMETS as associate and observer members during the General Assembly and signed the MoU at a ceremony which was presided by the AFRIMETS Chair. The following members have now joined AFRIMETS:

- NIS, Egypt (as an Ordinary member)
- PTB (Associate member)
- LNE (Associate Member)
- EURAMET (Observer member)
- CAFMET (Observer member)
- Arab federation of metrology (Observer member).

The next General Assembly will be held in South Africa hosted by NMISA, and will run back to back with AFRIMETS TC meetings from 13-17 July 2009. SADCMET delegates will be funded through the EU project to participate in the AFRIMETS TCs meetings and the General Assembly.

### **1.1 AFRIMETS as RMO for Africa**

After consultation with SADCMET, AFRIMETS had made a presentation to the JCRB at its meeting in Wellington, New Zealand in April 2008 to take over the RMO role for Africa from SADCMET. The JCRB commented that since AFRIMETS is an expansion of SADCMET and will build on the already existing RMO structure and experience of SADCMET, AFRIMETS could directly apply to the CIPM for recognition as the official RMO representing Africa. The request from AFRIMETS as endorsed by SADCMET and the JCRB was subsequently considered and officially approved by the CIPM at its meeting held at the BIPM in October 2008. From October to current, AFRIMETS has focused on the consolidation of its technical working group structures.

AFRIMETS is taking on the responsibility to participate in the activities of the JCRB, CIPM, BIPM and RMO activities and will represent all sub RMOs in Africa including SADCMET.

## **2. 23<sup>rd</sup> JCRB Meeting, Paris, France, September 22-23 2008**

The AFRIMETS Chair, Dr Wynand Louw and the SADCMET RC Mr. Donald Masuku attended the 23<sup>rd</sup> JCRB meeting held at the BIPM in Paris, France from 22-23 September 2008 representing SADCMET for the last time as the RMO. The role of the RMO was from October 2008 transferred to AFRIMETS. During the JCRB meeting, Dr Andrew Wallard, the Director of

the BIPM thanked SADC MET for its contribution as the RMO for the past 7 years and welcomed AFRIMETS as the new RMO.

Key discussion areas focused on the following issues:

- The process to be used to welcome new RMOs to the CIPM MRA process
- Updates from RMOs on QS reviews and lists of CMCs
- The overlaps between the RMO quality system review processes and the process used by accreditation bodies on NMIs, and opportunities for further collaboration
- The five-yearly review period for CMCs
- Proficiency tests as a means of disseminating traceability
- Report on the status of the KCDB
- RMO reports to the JCRB

The SADC MET RC Mr. Donald Masuku gave a presentation on the activities in SADC MET during 2008 and Dr Louw gave a presentation on AFRIMETS.

### **3. Metrology Training held in Lubumbashi, DRC 29 Sept. – 3 Oct 2008**

SADC MET presented a one week metrology training courses to the Office Congolais de Controle (OCC) in Lubumbashi, Democratic Republic of Congo as part of the capacity building support programme to SADC countries. The SADC MET Regional Coordinator Mr. D. Masuku and Dr Franz Hengstberger, SADC SQAM Consultant, presented the one week long courses attended by more than 80 participants from industry within Katanga Province in DRC, government officials and staff from OCC.

The OCC is in the process of commissioning metrology laboratories for mass, volume, pressure and temperature in Lubumbashi and requested for the metrology courses to help create awareness of the importance of a technical infrastructure to a national economy and metrology in particular to facilitate trade. The courses were well received and similar courses have been requested to be presented in Kinshasa in 2009.

### **4. SADC MET EU Project Training Courses**

SADC MET Secretariat in collaboration with the SADC/EU TA Team organized a number of training workshops under the SADC EU project PE1 which started on 1 October 2008. The courses were hosted by the NMISA and NLA respectively. The following courses have been carried out:

- Basic principles of metrology and introduction to measurement uncertainty - hosted by NLA, 13-17 October 2008
- Training on temperature – hosted by NMISA, 20-24 October 2008
- Training on mass - hosted by NMISA, 3-7 November 2008
- Training on volume – hosted by NMISA, 17-21 November 2008
- Training on length – hosted by NMISA, 1-5 December 2008

Since these courses already exist as standard courses offered by the National Laboratory Association (NLA) and NMISA respectively, and both have a long track record of unprecedented success amongst metrologists in the region, rather than re-invent the wheel, it was decided that these courses should be presented in answer to the EU project needs.

The training courses which were run over five days were presented by NMISA experts in each of these fields and attended by over 60 participants from most SADC countries. Angola and Madagascar did not nominate participants, whilst Seychelles was not invited at that stage.

The temperature course was in addition to the SADC participants also attended by participants from other AFRIMETS countries including Ethiopia, Corte d'Voire, Tunisia, Kenya and Egypt sponsored by PTB.

The participants wrote examinations after each training course and six best candidates from each course have been selected to undergo further practical training in the form of attachments and secondments to NMIs in the region. The following candidates have been selected:

**Activity 3.1.6: Attachment or on-site training for Mass and weighing instruments:**

**20 - 24 April 2009 - Zambia Bureau of Standards, Lusaka, Zambia**

**Trainer: Mrs Ireen Field (NMISA)**

**Participants List**

NAME	COUNTRY
Mr. Pryam Tomeswar	Mauritius
Mr. Modiriemang Kame	Botswana
Mr. Enos Chaazi	Zimbabwe
Mr. Nathan Tembo	Zambia
Mrs Vida Rusimbi	Tanzania
Mr. Bitimu Yenge	DRC

**Activity 3.1.7: Attachment or on-site training for Volume:**

**11-15 May 2009 – Office Congolais de Controle, Kinshasa, DRC**

**Trainer: Mr. Benjamin van der Merwe (NMISA)**

### **Participants List**

NAME	COUNTRY
Mr. Peter Molefe	Botswana
Mr. Alfred Moyo	Malawi
Mr. Bernado Mussagy	Mozambique
Mr. Joseph Mahilla	Tanzania
Mr. Daniel Mutale	Zambia
Mr. Munyaradzi Mubaiwa	Zimbabwe

### **Activity 3.1.8: Attachment or on-site training for Length:**

**04-08 May 2009 - Tanzania Bureau of Standards, Dar es Salaam, Tanzania**

**Trainer: Mr. Oelof Kruger (NMISA)**

### **Participants List**

NAME	COUNTRY
Mr. Joseph kadenge	Tanzania
Mr. Burhard Gandah	Zimbabwe
Mr. Yaya Yves	DRC
Mr. Alfred Moyo	Malawi
Mr. Modiriemang Kame	Botswana
Mr. Nsama Shilenge	Zambia

### **Activity 3.1.9: Attachment or on-site training for Temperature:**

## 18-22 May 2009 - Botswana Bureau of Standards, Gaborone, Botswana

Trainer: Mr. Hans Liedberg

### Participants List

NAME	COUNTRY
Mr. Shadrack Kajane (to nominate someone)	Botswana
Mr. Adam Ziagi	Tanzania
Mr. Victor Mwazi	Zambia
Mr. James Madziwa	Zimbabwe
Mr. David Magaya	Tanzania
Mr. Ngidu Mayindu	DRC

### 5. Tripartite Workshop Nairobi, Kenya 27-31 October 2008

Tripartite Cooperation between the Common Market for Eastern and Southern Africa (COMESA), East African Community (EAC) and the Southern African Development Community (SADC) is an initiative meant to minimize and eventually eliminate the contradictions and duplications brought about by overlapping membership. Additionally, this cooperation is expected foster more trade between the three Regional Economic Communities (RECs) and facilitate greater investment flows into the three sub-regions. An important component of trade, investment and industrial development is the area of Standardization, Accreditation, Metrology and Conformity Assessment or Quality assurance (SQAM/SQMT/SQA). In response to the call by the Chief Executives of the three Secretariats for departments to start exploring ways to facilitate greater cooperation between the RECs, SQAM experts from the three RECs have been working within the Trade and Customs Sub-Committee of the Tripartite Task Force to create a base for inter-regional cooperation in SQAM/SQMT/SQA within COMESA, the EAC and SADC.

With funding provided by the Regional Trade Facilitation Programme, RTFP, a workshop was organized with participation of technical SQAM experts from COMESA, EAC and SADC member states to review the level and effectiveness of inter-regional cooperation in SQAM between the three sub-regions and recommend ways of further harmonization and cooperation. The

meeting was hosted by the Kenya Bureau of Standards (KEBS) and attended by **39** delegates from all three RECs.

Mr D. Masuku, SADC MET Regional Coordinator and Mr. Shadrack Kajane SADC MET TC 1 Chair attended the workshop representing SADC MET while Dr Wynand Louw presented a paper on the Intra-Africa Metrology System – AFRIMETS. The workshop deliberations were divided into four different SQAM areas with each working group focusing on their individual areas of Standards, Accreditation and Metrology.

The ***Metrology Expert Working Group (MEWG)*** of the Tripartite Framework took due recognition of the achievements made to date towards collaborative work and harmonization of policies and activities in metrology amongst the three RECs. The ***MEWG*** further made several recommendations for strengthening and enhancing metrology harmonization within the three RECs.

Collaborative efforts by the Members within the three RECs had already led in 2007 to the establishment of AFRIMETS – the Intra Africa Metrology System – which is now recognized internationally by the BIPM as the integrated Metrology Structure for the continent. The Metrology Technical Team of the three RECs made the following recommendations:

- That members in the RECs adopt a harmonized metrology structure, which is in alignment with the AFRIMETS model
- That harmonization of metrology training courses be carried out in order to enhance mutual recognition of the same
- That RECs enhance and extend inter-comparisons and PT schemes amongst each other
- That channels for information sharing and dissemination be set-up
- That each member state implements a law on metrology based on the OIML D1 document.
- The NMI should ensure traceability in the RECs

The ***MEWG*** drafted a detailed work programme for the 3 RECs which, encompasses a series of activities and sub-activities, with respective responsibilities, time-frames and budget estimates.

## **6. APMP General Assembly, Jakarta, Indonesia 13-17 December 2008**

A number of NMISA staff participated in the Asia Pacific Metrology Programme (APMP) General Assembly (GA), Developing Economies Committee (DEC) meeting and the Technical Committee meetings representing AFRIMETS and NMISA which is an Associate member of APMP.

The SADC MET Regional Coordinator could not attend because of the SADC MET Water PT commitments and therefore requested Ms Zakithi Msimang, Manager: Ionizing Radiation, NMISA, to present a paper on behalf of SADC MET and AFRIMETS respectively. Several NMIs in the APMP have expressed their interest in working with SADC MET and AFRIMETS. Also the APMP secretariat expressed an interest in attending the AFRIMETS GA. Discussions in the DEC meeting revolved around helping the countries from the DEC with comparisons and also PT schemes. As it is the case in the SADC region, it is becoming very clear in all the metrology communities that our relevance must be to the removal of technical barriers to trade. APMP is planning some PT schemes focusing on participation from DEC countries on rice, fish etc things that are relevant to those communities for their trade.

## **7. Regional Metrology Conference, Mombasa, Kenya 1-3 Dec 2008**

Kenya Bureau of Standards and EAMET hosted the Regional Metrology Conference which was held in Mombasa, Kenya from 1-3 December 2008. The conference was attended by representatives from all AFRIMETS sub-regional metrology organizations, BIPM representative, PTB and metrology staff from Kenya Bureau of Standards. SADC MET was represented by a number of delegates including the SADC MET Regional Coordinator.

The conference was divided into general presentations on the metre convention, the MRA requirements, CMC reviews etc and breakaway sessions for the different metrology streams i.e. Mechanical metrology stream, Metrology in Chemistry etc. The AFRIMETS Chairman Dr Wynand Louw made a presentation on the Intra-Africa Metrology System.

The first official AFRIMETS working group meetings were held in conjunction with the Regional Metrology Conference. The AFRIMETS TC WG for mass, electromagnetic (voltage) and metrology in chemistry, met.

The TC QM attracted a lot of attention and representatives from 8 NMIs and approximately 20 observers (from accredited calibration and testing laboratories in East and Southern Africa) attended the first day. On the second day, a closed meeting was held attended by the NMIs and invited accredited and industrial testing laboratories.

The TC Mass meeting were also well attended and was followed by a training session on the estimation of UOM. The TC EM meeting focused on the 10V comparison organised by the National Metrology Institute of South Africa (NMISA).

AFRIMETS is taking on the responsibility to participate in the activities of the JCRB, CIPM, BIPM and RMO activities and presentations were given at the regional conference on the advantages of membership to the Metre convention, associate membership of the BIPM and the importance of the CIPM MRA. The CMC preparation and submission process was discussed in detail and issues such as traceability and UOM were debated

## **7. SADC MET Water Proficiency Testing Scheme, Uganda 8-12 Dec 2008**



## **7.1 Chemical PT workshop**

The workshop covered the evaluation of the 5th SADC MET Water PT round and all aspects that could be derived from the results. The results showed that there is – generally seen - no improvement over the 5 PT rounds. Most probably this is due to the absence of adequate corrective actions after failures in the PT. Therefore one of the most important topic in the discussions was, how to motivate the participating labs that failed in one or more parameters to perform the necessary corrective actions.

Most of the participants are still very enthusiastic. It is highly recommended to continue the PT system. The structure of local coordinators turned out to be very useful and should be further strengthened to minimize logistical problems and to increase the number of participants. As one of the main obstacles to further expand the system and to improve the quality of the labs the lack of awareness on the importance of PT or – even more basic – the importance on quality assurance in the chemical lab was identified. To overcome this, workshops on national level are recommended. Since most of the local organizations are not able to do that, training for trainers is proposed. In such training, material for a basic course on quality assurance in the analytical laboratory should be provided and the participants trained to present this in a workshop.

To support the participants in performing the corrective actions, a short guideline how to do that has been developed and sent to the participants together with a list of e-mail addresses that should be used to seek help from other laboratories if the problem cannot be solved in the laboratory itself. The assessment procedure of the PT using limited standard deviations has again proven to be very effective, the statistical methods are in accordance with the internationally recommended procedures.

The chemistry evaluation workshop took place on 8th and 9th of December and was followed by training and the SADWATERLAB General Assembly on 10th of December when also the participants from microbiology workshop (11th and 12th of December) were present. On 10th of December, a-half-day training on the management requirements of ISO/IEC 17025 was provided by John Peart from SANAS.

## **7.2 Microbiology PT workshop**

The workshop held in Kampala was the first one in the SADC MET region covering a microbiology proficiency testing scheme provided in the region. In previous workshops dealing with the chemical PT scheme the need for a microbiological one was stressed. Therefore in 2006 three people were sent to the Niedersächsisches Landesgesundheitsamt in Aurich, Germany which is the German PT provider for microbiological parameters in drinking water. At the workshop in Garborone in December of the same year it was decided that an attempt should be made to establish a regional PT system with UNBS as provider using the German system of liquid samples. The PT schemes should be offered to laboratories within the SADC and the EAC region and the trained colleagues from Tanzania and Zimbabwe should act as backup in case UNBS cannot longer provide the PT.

The workshop dealt with the evaluation of the first SADC MET microbiology PT for water testing laboratories. Samples for the parameters E. Coli/Coliform bacteria and Total Plate Counts were prepared and shipped by UNBS in October 2008. Due to the wide range (several log-scales) of the results this first PT could not be evaluated by statistical means. This could either be due to insufficient stability of the sample taking into account the long transportation times or due to bad performance of the participating laboratories.

A closer look at the results and information on methods used in the analysis of the PT samples revealed that there might be a need for improvement in quite a number of laboratories. Therefore the individual results have been discussed extensively and an additional training on Total Plate Count methods and E. Coli/ Coliform methods has been conducted. These parameters have been identified by the participants as the most important parameters in the workshop of 2006 in Garborone and confirmed in the recent workshop by the microbiologists.

The participants were very interested in the experience and use of the PT and expressed the need to go on with the PT. A lot of information has been gathered from the workshops working group discussions to help UNBS as a PT provider to improve the quality of their performance as a provider. Problems with sample transport and packaging have been discussed. Stability of the samples under optimized conditions at UNBS seemed to be satisfactory. Nevertheless some improvements in the preparation process and its documentation must be attempted and have been discussed at the laboratory.

The outcome of this first microbiology PT stresses the need for further microbiology PT schemes on the side of the participants. The first important step toward an independent microbiological PT scheme within the region has been taken but it will be crucial for this type of liquid samples to get the transport conditions and times under control to make it work.

The reports are available from the SADC MET website on [www.sadcmnet.org](http://www.sadcmnet.org)

### **7.3 SADC WATERLAB General Assembly**

The SADC ASSOCIATION OF WATER TESTING LABORATORIES (SADC WATERLAB) had its general assembly meeting during the workshops. This association is the responsible body for the PT system and an opportunity for collaboration and information exchange between its members. The role of SADC WATERLAB was strengthened by an official memorandum of understanding (MoU), which was concluded during the General Assembly. During the GA the members of the Project Management Committee (PMC), the Chair and the vice Chair were elected. The GA also finalized its work programme for 2008-2009.

The two workshops and the GA were attended by 63 participants.

The next workshop for the PT evaluation which will include both chemical and microbiology analyses will be hosted by Seychelles Bureau of Standards.

## 8. SADC MET EU Project

After long delays due to procedural problems between the EU and SADC, the SADC EU Project was finally approved to start from 25 August 2008. The Project is now divided into Programme Estimate (PE) 1 and 2. The implementation of activities under PE1 started in September 2008 and will run until end May 2009. PE2 starts to run seamlessly at the end of PE1 on June 1 2009 and finishes on 30 Nov. 2010.

SADCMET EU project component had a number of activities planned under PE1. Of the eleven activities that were planned six of them have already been carried out and another four will be conducted by the end of PE1 in May 2009. Only one activity will be carried over to PE2 (see list of activities below).

### SADCMET EU Activities for PE1

Performed activities (no shading)  
 Planned activities (with blue shading),  
 Canceled activities (with red shading)

No:	Activity	Title	Performed by from – until/in
01	3.1.1	Training course on Basic Principles of Metrology	13.-17.10.2008 Pretoria performed by <b>NLA</b>
02	3.1.2	Training course on Mass and Weighing Instruments	03.-07.11.2008 Pretoria Performed by <b>NMISA</b>
03	3.1.3	Training course on Volume	17.-21.11.2008 Pretoria performed by <b>NMISA</b>
04	3.1.4	Training course on Length	01.-05.12.2008 Pretoria performed by <b>NMISA</b>
05	3.1.5	Training course on Temperature	20.-24.10.2008 Pretoria performed by <b>NMISA</b>
06	3.1.6	Attachment Mass & Weighing	20.-24.04.2009 To be hosted by ZABS, Zambia performed by NMISA
07	3.1.7	Attachment Volume	11.-15.05.2009 To be hosted by OCC, DRC performed by NMISA
08	3.1.8	Attachment Dimensional	04.-08.05.2009 To be hosted by TBS, Tanzania performed by NMISA
09	3.1.9	Attachment Temperature	18.-22.05.2009 To be hosted by

			BOBS, Botswana performed by NMISA
10	3.1.10	Presentation techniques for trainers in all 4 fields	Not performed to be carried over to PE2
11	3.3.1	TC & WG Chairs Workshop: (Calculating CMCs)	02.-03.03.2009 Pretoria performed by NMISA

The one important issue to note is that member states will not receive the planned equipment under this project as most of the money for equipment (about 2 million Euros) had been de-committed as it had been observed that the contractual commitments would not be made before the "D+3" date. Only 300 000 euro is now available and would be used in two tranches of 150 000 euro. However, a new contribution agreement has been signed between SADC and the EC which would allow more activities to be done and some equipment to be purchased under EDF 10, a successor fund to EDF 9.

## 9. Metrology Support for SMEs Project

Since 2004, SADC MET, with the support of PTB, embarked on a project to assist Small and Medium Enterprises (SMEs) to become globally competitive through improvement and development of their measurement capabilities and services. A measurement improvement guide (toolkit) was developed and rolled out to all SADC and other African countries. The final phase of the project entailed establishment of a bench-marking study in order to come up with best-practices across member countries and a regional model.

In May 2008, a detailed report encompassing an impact assessment study to measure the level of measurement support and implementation in SMEs in the SADC region, was submitted to the PTB by the Project Consultant, Dr Mukayi Musarurwa. The report concluded with the main recommendation that:

***"..... further assistance be provided for an in-depth study, analysis and detailed profiling of measurement support to SMEs in Botswana, Mauritius and Kenya, with the ultimate objective of establishing a balanced and dynamic regional model for later adoption even at the continental level"***

Within this context, a Work Programme for follow-up activities in the three identified countries was drafted and discussed with the three respective project partners (Botswana Bureau of Standards; Kenya Bureau of Standards; and Mauritius Bureau of Standards). The following schedule was carried out by the SADC MET Regional Coordinator Mr. D. Masuku and the PTB Project Consultant Dr Musarurwa:

- On-site visits to SMEs in Botswana 11-12 September 2008
- Toolkit roll-out and on-site visits to SMEs in Kenya 15-19 September 2008
- Toolkit roll-out and on-site visits to SMEs in Mauritius 10-12 November 2008

## **Botswana**

In Botswana, Project activities focused on a series of on-site visits and production process analyses of selected SMEs which had participated in national dissemination toolkit workshops held in previous years.

On-site visits and analyses were undertaken in a total of 7 SME companies, mostly from the food industry sector. Three of the companies are based in Gaborone, while the other four are located in Francistown.

## **Kenya**

Project work in Kenya was divided into several separate activities:

- Toolkit Workshop presentation and discussions at Sunset Bird Hotel in Kisumu
- On site visits and tours to SMEs in the Kenya Industrial Estates in Kisumu
- On site visits and tours to the Kisumu Centre Jua-Kali Artisan Association/SACCO
- Toolkit presentation and discussions at Nyali Beach Hotel, Mombasa
- On site visits and tours to three sites of the Mombasa Jua Kali Association
- On site visit and tour to one SME in Nairobi

## **Mauritius**

Project activities in Mauritius were divided into two main areas spread over two days:

- toolkit workshop involving SMEs
- on-site visits to selected SMEs

The Workshop which was attended by about 25 participants from the SME sector was opened by the Director of Mauritius Standards Bureau (MSB), Mr Ramful, who gave an overview of the importance that government attaches to the technical infrastructure, quality and competitiveness of the SME sector. Toolkit presentations were made and were well received and appreciated by a highly active and interactive group.

On site visits were carried out to four SME companies.

## **Conclusion**

On-site visits to and analyses of selected SMEs in the three countries have provided some insights into their structure, current status, operations and requirements. Despite their differences in terms of size, ownership, industry sector, management structure, and level of sophistication, there are certain commonalities especially in terms of their **"SWOT"** (strengths, weaknesses, opportunities, and threats). Of major interest to the Project are the weaknesses, especially from a competitiveness perspective, that pervade the SME sector in these countries and in SADC in general.

The challenges particularly in the area of metrology, relate to calibration of equipment; where most SMEs are still not aware of the significance of calibrating their equipment, and this impacts negatively on the quality of their products.

Hence, quality problems are mainly a result of the following:

- Unavailability of appropriate equipment for production or testing of products (either in-house or NMIs or standards bodies)
- Untrained Personnel. Most SMEs cannot afford qualified personnel and therefore employ people who are not skilled.
- Lack of appropriate documentation. Inconsistencies are caused by lack of documented procedures, instructions and failure to use standards as a guide to required specifications. A lot of SMEs are owner owned and managed and they have a tendency of not documenting production procedures for fear that workers might leave with these and set-up competition.

## **10. Workshop of SADC MET TC and Working Group Chairpersons**

The SADC MET Secretariat in collaboration with the SADC Secretariat and through funding from the EU project organized a joint SADC MET and AFRIMETS TC & Working Group Chairpersons workshop which was held in Pretoria, South Africa on 2-3 Feb 2009. AFRIMETS members were sponsored by PTB. Part of the workshop agenda was technical presentations, which were meant to provide an overall background to AFRIMETS structures, activities and programmes, in order to ensure that all Chairs had a clear, uniform and standard understanding of these issues. The presentations focused on the following themes:

- ✚ AFRIMETS as the new RMO for Africa
- ✚ AFRIMETS TCs and WGs versus SADC MET TCs and WGs
- ✚ Proposed AFRIMETS Quality System
- ✚ The CMC review process both in SADC MET and now AFRIMETS

Following presentations by each TC and Working group Chair in which they gave highlights of the activities and projects within their respective areas, a discussion session entailed which was meant to provide direction and ideas for comprehensive work programmes for each respective Technical Committee and Working Group. Identified discussion points encompassed the following:

- Roles/responsibilities of TC and Working Group Chairs
- Practical interaction between SADC MET TCs and WGs and AFRIMETS TCs and WGs. What is going to be organized by SADC MET, what by AFRIMETS and how are we going to link the two
- TC & WG Chairs future meetings

Full report of the proceedings is attached in the meeting documents.

## **11. Mass Laboratories Accreditation Project**

SADC MET, with the active support and assistance from PTB, is running a project to enable member laboratories to achieve accreditation of their mass labs. The participating countries (on basis of those who submitted their documents by the deadline) are: Botswana, DRC, Egypt, Ethiopia, Kenya, Mozambique, Tanzania, Zambia and Zimbabwe.

The progress to date will be reported in the individual participating country's reports.

## **12. SADC MET Inter-comparisons**

SADC MET has initiated a number of supplementary inter-comparisons are being piloted by NMISA. The following comparisons have been initiated:

- Two length intercomparisons: one for 1000 mm line standards and another for end standards up to 100 mm. Seven SADC MET members are participating in both comparisons which started in June 2008.
- A dc Voltage Reference 10V intercomparison with 7 SADC MET members participating (South Africa, Botswana, Kenya, Uganda, Ethiopia, Egypt and Tanzania). Technical workshop and training already held in September 2007 and comparison started in August 2008 and is co-sponsored by PTB and NMISA.
- Thermometry intercomparison which started after the technical workshop and training in October 2008 and is sponsored by the EU project. The comparison is evaluating equivalence of the thermometry measurement standards of SADC MET NMIs at the 0.02 °C level over the range -50 °C to 450 °C. The participants are: NMISA (South Africa), BOBS (Botswana), MBS (Malawi), MSB (Mauritius), INNOQ (Mozambique), TBS (Tanzania), SIRDC-NMI (Zimbabwe), [UNBS \(Uganda\)](#), [KEBS \(Kenya\)](#), [QSAE \(Ethiopia\)](#) and [NIS \(Egypt\)](#). (The latter four are associate members of SADC MET.)

The challenge faced has been the movement and transportation of the artefacts.

## **13. SADC MET Website and Promotional Materials**

The SADC MET website has been re-designed with a new "look and feel" incorporating the new SADC MET logo. Most of the information has been updated. The promotional materials i.e. SADC MET Water PT brochure, Conference Pull-up screen etc, have been re-designed and there is an on-going review of all our promotional materials.

You can visit the SADC MET website on [www.sadmet.org](http://www.sadmet.org)