



# THE STANDARD

ISSUE NO. 20

The MSB Newsletter

## MR KHEMRAJ RAMFUL, THE NEW DIRECTOR OF MSB



Mr Ramful joined MSB as the new Director on 15 January 2007. Mr Ramful, a Physics graduate from the University of Aix-Marseille III, has over 20 years work experience. He started his career as Scientific Officer (Metrology) at the Mauritius Standards Bureau in 1985. He has also worked as Lecturer in Physics at the University of Mauritius in the year 1987/88 and he joined the Ministry of Trade in 1988 to set up the Legal Metrology Services, of which he had been the Director since 1990. The new Director served as Member of the Standards Council from 1993 to 1996 and from 2002 to 2005.

Mr Ramful also worked as a regional consultant, in charge of the Standards and Quality component of the regional IOC/EU integration programme, PRIDE from 1996 to 2002. He played an important role in the setting up of the national standards bodies in Madagascar and Comoros. He has conducted several assignments in the African region at the request of COMESA, the Indian Ocean Commission (IOC) and other funding organisations.

## DO YOU KNOW WHAT INFLATES YOUR ELECTRICITY BILL ?

From a recent survey, 25% of power generated is wasted by putting electronic gadgets on standby mode. A television on standby mode consumes 22 watts, a microwave oven 6 watts, UPS or inverters 40 watts and even mobile chargers use 5 watts when plugged in but not being used.

### The following Mauritian Standards have been approved by Standards Council on 31 January 2007 as final Mauritian Standards:

No.	Mauritian Standard	Title
1	MS 63:2007 (BS 7671:2001 incorporating Amendments No. 1:2002 and No. 2:2004)	Requirements for electrical installations
2	MS 141:2007 (BS 6658:1985)	Specifications for protective helmets for vehicle users
3	MS 144:2007 (EN 659:2003)	Protective gloves for firefighters
4	MS ISO 20345:2004	Personal protective equipment- Safety footwear
5	MS ISO 20346:2004	Personal protective equipment - Protective footwear
6	MS ISO 20347:2004	Personal protective equipment - Occupational footwear

## INTEGRITY OF BOILERS AND PRESSURE VESSELS

Under the project MAR/8/06 "Strengthening National Non-destructive Testing (NDT) Capability", Mr Jacek Mielczarek, a specialist in Welding Engineering and a Boiler Inspector from Canada, conducted from 5 to 9 March 2007 an expert mission, under IAEA Technical Co-operation programme, at MSB. The main objective of his mission is to enhance the capability of the MSB NDT Centre offering a service for the testing of Boilers and Pressure vessels.

The Expert provided technical assistance in terms of international codes of practice, procedures of the verification of in-service boilers and pressure vessels; he made an assessment on the current facilities and NDT equipment available at MSB, identified any gaps and provided advice on future actions.

A half-day seminar was organized by MSB on 9 March 2007 during which presentations on the facilities at MSB and an interesting talk by the Expert on "Pressure Vessels Integrity" were delivered. An audience of around 50 people attended comprising of Professional Engineers, from the construction and heavy engineering sector, Engineering Consultants, Boilers and Machinery Inspectors, End-Users of NDT and Users of boilers and pressure vessels, Petroleum specialists, Factory Managers from the Sugar sector, amongst others.

## QUALITY ASSURANCE DIVISION

### ISO 9000 Certification

A certificate of Registration to MS ISO 9001:2000 has been awarded during the period of February and March 2007 to the following organizations:

#### Pay Research Bureau- Prime Minister's Office

(Period: 28 February 2007 to 27 February 2010)

NACE : 75.14

Scope : Review of pay and grading structures and conditions of service in the public sector (Civil Service, Parastatal and other Statutory Bodies, Local Authorities and Rodrigues Regional Assembly) and the Private secondary Schools

#### 2 Soap and Allied Industries Ltd

(Period: 28 March 2007 to 27 March 2010)

NACE : 24.51/1, 24.51/2 and 24.52

Scope : Manufacture of toilet soap, laundry soap and detergents  
Manufacture of cleaning and polishing preparations  
Manufacture of toilet preparations

#### 3 New Creative Design Ltd

(Period: 28 March 2007 to 27 March 2010)

NACE : 55.52

Scope : Events management for wedding, banquets, celebrations and other function.

### MAURICERT : The MSB Quality Mark

A Mauricert licence has been awarded during the period of February 2007 to PPP Piping Systems Ltd as per MS ISO 3633:2002 for its products:

Non-pressure (PVC-U) fittings for soil and waste discharge (low and high temperature) inside buildings for solvent cement type only.

(Period: 28 February 2007 to 27 February 2009)

## NEW TEST FACILITIES AT MSB

To ensure full compliance regarding the chemical properties of steel iron bars with the Mauritian Standard MS 10 the Bureau acquired recently a set of three equipment namely:

- a) Inductively Coupled Plasma-Optical Emission Spectrometer
- b) Carbon-Sulphur Analyzer
- c) Nitrogen-Oxygen-Hydrogen Analyzer

Other typical applications of ICP-OES technique are:

- 1) Analysis of soils for toxic metal contaminations
- 2) Analysis of trace elements in oyster, plankton and fish tissues
- 3) Analysis of several elements in water and sea water
- 4) Determination of trace metal concentrations in used lubricating oils

## THIRD WORKSHOP ON WATER PROFICIENCY-TESTING EVALUATION AND TRAINING COURSE

The SADC MET secretariat in collaboration with PTB organized the third workshop on water proficiency testing and training course in Gaborone, Botswana from 20 to 24 November 2006. The participating members were from the following countries, Botswana, Namibia, Tanzania, Lesoto, Mauritius, Malawi, Mozambique, Madagascar, Zambia, Ethiopia, Uganda, Kenya, Zimbabwe and South Africa. Mr C. Baichoo, the Assistant Technical Manager of the Food Microbiology Section, attended the workshop.

The workshop programme consisted among others of the following:

- Evaluation of results and reports of the second round of proficiency testing for chemical analysis of water.
- Training on use of control charts.
- Method validation, and
- Discussion on the possibility and trial of a first round of Microbiological Proficiency Testing for SADC countries.

It was decided that Uganda would be responsible for preparation and distribution of the proficiency test samples under the supervision of Dr. K. Luden (PTB). The first round of microbiology proficiency test samples is expected to be distributed around mid of July 2007.

## WORKSHOP IN BOTSWANA FOR OPERATORS OF NATIONAL ENQUIRY POINTS FOR TBT MATTERS

During the third week of November 2006, Mrs K Rajcoomar and Mr K Ramsarrun of the Documentation and Information Centre attended a workshop for the operators of National Enquiry Points for WTO/TBT matters in Gaborone, Botswana. The workshop was organised by SADCSTAN in collaboration with the Government of the Federal Republic of Germany, through PTB (Physikalisch-Technische Bundesanstalt). It was hosted by the Botswana Bureau of Standards and was attended by representatives from the SADC member states.

A country paper was prepared and presented by each representative. The workshop was served as a platform by representatives, whereby all problems encountered, related to their job, were exposed, discussed and suggestions on improvement were brought forward. It was a commendable initiative of the SADC to organize such workshop as it gives opportunity to its members to meet their peers and discuss TBT matters and other related issues.

## METROLOGY



The Metrology Division is the custodian of all the National Standards of Measurement in the areas of Mass, Pressure, Force, Length, Temperature, D.C. Voltage and Resistance. The main role of the Division is to provide traceability of measurement to the International Standards of Measurements through calibration of measurement standards and measuring equipment from all the sectors of the economy, thus ensuring the dissemination of the International System of Units (SI).

Our stakeholders include among others, of the following:

- MSB's laboratories
- Government laboratories
- Industrial and Textile manufacturing plants
- Marine sector
- Aviation sector
- Educational organizations
- Medical laboratories and others

The Division presently has the capability to entertain about 95% of all calibration demands received within the available areas of measurement.

The Division has prepared a master plan for the re-structure of existing laboratories which includes provision of standard environmental conditions in line with the requirements of ISO 17025 - (General requirements for the competence of testing and calibration laboratories) so as to enhance measurement competence within laboratories for the purpose of Accreditation. The traceability model has also been reviewed to increase confidence in measurement practice and results. These re-structure programmes are capital intensive but good measurement practice and assurance cannot be jeopardized in this modern world for the purpose of achieving quality in measurement. In this context of competence in measurement, the Mass and Temperature measurement laboratories have been pre-assessed by SANAS - The South African National Accreditation Service in Collaboration with MAURITAS - The Mauritius Accreditation Service.

The Metrology Division represents Mauritius and participates as an expert member in SADC MET - Technical Committees and SADC MET/JCRB, that is, the Joint Committee of the Regional Metrology Organisations within South African Development Community for Cooperation in Measurement Traceability and BIPM (Bureau International des Poids et Mesures) of France. The objective of the project is the recognition of calibration certificates issued by the National Metrology Organisations with the view of reducing technical barriers to trade in the region.

## Capacity Development of African Standardization, 27 November - 01 December 2006, Stockholm, Sweden

African Organisation for Standardization (ARSO) arranged in collaboration with Swedish Standards Institute (SIS), a workshop on "needs assessment and planning session" in Stockholm, Sweden and was attended by Mrs R Nanhuck, Divisional Manager of the Chemical Division. An open Forum on Challenges for African Standardization was held. Representatives from Ghana, Nigeria, COMESA and the Ministry of Trade of Sweden elaborated on this theme.

The African presenters explained that generally the term "Standards" in Africa is often used either for:

- Documents with which compliance is mandatory, which according to WTO TBT terminology are "technical regulations", or
- Documents with which compliance is voluntary.

Discussions were organized among groups highlighting the theme from

different perspectives. A Planning Task-Force Group (PTG) selected among the ARSO members, finalized a Logical Framework Approach (LFA) Analysis.

A phase structured approach was proposed by the cooperative partners for the LFA which are as follows:

### a) Preparation Phase

- Establishment of a needs analysis based on ISO Action Plan for developing countries 2005-2010.

### b) Implementation Phase

Implementation of the project in accordance with established plans, including formal agreements with development partners.

### c) Project phase evaluation

Project indicators will be identified and make it possible to measure the progress of the phases and completion of project

## TRAINING

The Bureau is organizing several courses related to Quality Management Systems. Among others, MSB is offering courses on ISO 9001:2000 Auditor/Lead Auditor Training Course and an Internal Audit Course. These courses provide hands-on-training to ensure that your auditors thoroughly understand the role and acquire the expertise needed to perform effectively. Below is a Training Calendar for the period April - December 07.

### MSB Training Institution (Registered with MQA)

The following Draft Mauritian Standards/Draft Amendments to Mauritian Standard have been approved by Standards Council on 31 January 2007 for public comment:

No. Draft Documents	Title
1	DMS 30:2007 <i>Labelling of prepackaged foods</i>
2	Draft Amendment No. 1 to MS 37 <i>Specification for White and wholemeal wheat bread</i>
3	DMS 56:2007 <i>Specification for tungsten filament lamps for general service</i>
4	DMS 65:2007 <i>Specification for processed chicken</i>
5	Draft Amendment No. 1 to MS 84:1999 <i>Specification for bottled drinking water</i>
6	DMS 101:2007 (BS 6346:1997, incorporating Amendments Nos. 1 and 2) <i>Electric cables - PVC insulated, armoured cables for voltages of 600/1 000 V and 1 900/3 300 V</i>
7	DMS 145-1:2007 <i>School clothing - Part 1 - General requirements for school clothing</i>
8	DMS 145-2:2007 <i>School clothing - Part 2: Trousers and shorts</i>
9	DMS 145-3:2007 <i>School clothing - Part 3: Shirts and blouses</i>
10	DMS 145-4:2007 <i>School clothing - Part 4: Dresses and tunics</i>
11	DMS 145-5:2007 <i>School clothing - Part 5: Girls' skirts</i>
12	DMS 147:2007 <i>Low pressure non adjustable regulators for use with butane and liquefied petroleum gas (LPG) - Specifications</i>
13	DMS ISO 139:2005 <i>Standard atmospheres for conditioning and testing</i>
14	DMS ISO 3575:2005 <i>Continuous hot-dip zinc-coated carbon steel sheet of commercial and drawing qualities</i>
15	DMS ISO 3758:2005 <i>Textiles - Care labelling code using symbols</i>
16	DMS ISO 3864-2:2004 <i>Graphical symbols - Safety colours and safety signs - Part 2: Design principles for product safety labels</i>
17	DMS ISO 8096:2005 <i>Rubber or plastics - coated fabrics for water-resistant clothing - Specification</i>
18	DMS ISO 10002:2004 <i>Quality management systems - Guidelines for complaints handling in organizations</i>
19	DMS ISO 10005:2005 <i>Quality management systems - Guidelines for quality plans</i>
20	DMS ISO 10006:2003 <i>Quality management systems - Guidelines for quality management in projects</i>
21	DMS ISO 10014:2006 <i>Quality management - Guidelines for realizing financial and economic benefits</i>
22	DMS ISO 10015:1999 <i>Quality management - Guidelines for training</i>
23	DMS ISO 10019:2005 <i>Guidelines for the selection of quality management system consultants and use of their services</i>
24	DMS ISO/IEC 17021:2006 <i>Conformity assessment - Requirements for bodies providing audit and certification of management systems</i>
25	DMS/ISO/TS 22004:2005 <i>Food safety management systems - Guidance on the application of ISO 22000:2005</i>

### TRAINING CALENDAR 2007

APRIL	Quality Management System	Preparing for MS ISO 9001:2000 Assessment (2 days duration)
		Internal Auditing Techniques in MS ISO 9001:2000 (2 days duration)
MAY	Quality Management System	Preparing for MS ISO 9001:2000 Assessment (2 days duration)
		Internal Auditing Techniques in MS ISO 9001:2000 (2 days duration)

### TRAINING CALENDAR 2007 -2ND SEMESTER

JULY	Quality Management System	Lead Auditor Course in ISO 9001:2000 (5 days duration)
		Auditing with ISO 9004:2000 for Performance Improvement (2 days duration)
AUGUST	Information Security Management System	Lead Auditor Course in ISO 27001:2005 (5 days duration)
		Internal Audit Course in ISO 27001:2005 (2 days duration)
	Food Safety Management System	Lead Assessor Course in ISO 22000:2005 (5 days)
		Interpretation of ISO 22000:2005 requirements (2 days duration)
SEPT.	Environmental Management System	Lead Auditor Course in ISO 14001:2004 (5 days duration)
OCT.	Quality Management System	Preparing for MS ISO 9001:2000 Assessment (2 days duration)
		Internal Auditing Techniques in MS ISO 9001:2000 (2 days duration)
NOV.	Quality Management System	Auditing with ISO 9004:2000 for Performance Improvement (2 days duration)

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## NATIONAL ENQUIRY POINT FOR WTO/TBT MATTERS

How does the NEP disseminate information? The DIC at MSB, downloads every month, all foreign notifications on TBT from the WTO website and circulate them to ministries concerned and all local manufacturers of the product that the notification covers. As there is a time frame for voting or submitting any comment on the draft, these are circulated by emails from a database of exporters directory compiled and maintained by Enterprise Mauritius.

## SERVICES OFFERED BY DOCUMENTATION AND INFORMATION CENTRE OF MSB

The Documentation and Information Centre (DIC) of MSB is open to the public for reference purposes on weekdays during office hours. The DIC is specialised in the field of standardization, that is, whoever needs to make reference to any standards or standards related documents could come to us. The Bureau has privileged access to websites of major National Standards Bodies and the stock of standards is kept updated. A few of the services we offer are listed below.

**Standards Reference:** Updated version of standards are available from major Standards Bodies such as International Standards, British Standards, South African Standards, French Standards, Australian Standards and American Standards, among others to which our users can make reference.

**Books:** The collection of books available is mainly relevant to the field of Standards and Quality. These books are ordered directly from publishers such as American Society for Quality, Wiley and so on.

**Periodicals:** The Bureau subscribes to renowned publishers as well as to other National Standards Bodies of the world and around 50 titles of periodicals are received.

**Membership Scheme:** Anybody can become a member with the DIC by paying a deposit of Rs 1000, and the annual subscription fee is Rs 500. Members are allowed to borrow one book and one periodical for a fortnight and also take advantages such as thirty days credit facility on purchase of Mauritian Standards, 10% discount on Mauritian Standards and obtain free copies of all publications made by MSB, among others.

**Photocopies:** A reader can make photocopies from either books or periodicals as per set rules and

regulations, on a cost recovery basis. A coloured photocopying service is also available.

**Status of Standards:** Useful information can also be provided by personnel of the DIC on the status on Standards, which are being revised, withdrawn or replaced, free of cost.

**Search on line:** Internet facilities are available at DIC for fast online searching.

**Circulation of notifications:** On a monthly basis, DIC circulates notifications downloaded from WTO website to local manufacturers and stakeholders, informing them of any regulations put in place by another signatory of the WTO agreement, thus giving them the opportunity of expressing their views on the regulation at its draft stage.

**Selective Dissemination of Information:** Knowing the profile of our members and users, articles, extracts from articles and magazines or complimentary copies of some bulletins are sent to them on a regular basis. They are also informed of new standards that have recently been published.

**National Enquiry Point:** The DIC is the National Enquiry Point for WTO/TBT matters. Its role is to disseminate information on standards, technical regulations or conformity assessment to users and signatories of the WTO Agreement and also reply to any reasonable query from other enquiry points.

**Referral:** In case document/ information is not available at MSB, the user is referred to the Centre or Organization where the document/information could be available for either reference or purchase.

K Rajcoomar, Ag Librarian

## NON-DESTRUCTIVE TESTING OF CONCRETE (NDT CONCRETE)

### Current and Future Activities

The Civil Engineering section has been offering a few tests on NDT of Concrete for the past 10 years. The section is presently being equipped with additional NDT facilities and will, during the course of the year, hold an awareness session.

### a) Existing Facilities

#### Test/ Relevant Standard Brief purpose

i) Determination of Ultrasonic Pulse Velocity <b>BS EN 12504-4</b>	Determination of uniformity, presence of cracks, voids. Technical literatures give correlation of pulse velocity and concrete strength.
ii) Determination of Rebound Number <b>BS EN 12504-2</b>	Assess uniformity of concrete in situ, to delineate zones of poor quality or deteriorated concrete in structures. Technical literatures provide an estimate of in situ strength from rebound values.
iii) Electromagnetic Cover Measurement <b>BS 1881-204</b>	Used for estimating the position, depth and size of reinforcement buried in concrete. Can be used as a quality control after placement of concrete or in investigation of concrete members where records are not available.
iv) Depth of Carbonation <b>BS 1881-201</b>	The method, combined with the age of the concrete under test, is used to assess potential durability and likelihood of corrosion of reinforcement.

### b) Additional facilities available this year

Test/ Relevant Standard	Brief purpose
v) Crack measurement	Determination of progress of cracks over time
vi) Half-Cell Potential Measurements ASTM C 876	Determination of the risk of corrosion of the reinforcement in the immediate region of the test location.
vii Pull out test	Determination of compressive strength of concrete. Depth of test limited to 25 mm only.

L Chummun Bhujohory, Assistant Technical Manager.



## NATIONAL ENQUIRY POINT FOR WTO/TBT MATTERS

Mauritius is a signatory of the WTO Agreement. The Documentation and Information Centre (DIC) of MSB is the National Enquiry Point (NEP) for TBT matters and the Ministry of Agro Industry and Fisheries, through its Trade Policy Unit operates the National Enquiry Point for SPS matters and is also the National Notification Authority thereto. The International Trade Division of the Ministry of Foreign Affairs, International Trade and Cooperation is the Focal Point and Notification Authority for TBT Matters and is in direct contact with our mission in Geneva.

The National Enquiry Points have the prime objective of disseminating information among other signatories of the WTO agreement, on any regulation, domestic and/or foreign, which could have an effect on trade. Failing to do so may lead to consignments of products getting blocked at customs in the importing countries, or disputes between signatories, unaware of such regulations.

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## OBITUARY

It was with great pain that the staff of MSB learnt of the untimely demise of Mrs Aisha Oozeer on 9 February 2007.

Mrs A. Oozeer was the representative of the Mauritius Employer's Federation on the Standards Council since 1999. During the tenure of office, Mrs Oozeer participated actively in various committees set up by the Standards Council.

Her long experience as Training Manager at the MEF Management Centre enabled her to provide new insight into issues raised at the Standards Council.

Mrs A. Oozeer would be greatly missed by one and all. We extend our deep and sincere condolences to all those deeply afflicted.