

# Gulf Association for Metrology (*GULFMET*)

## *GULFMET* Presentation

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*52th Meeting of CIML*  
Cartagena, 09-13 October, 2017







## GCC Standardization Organization (GSO)

- Regional standardization organization.
- established under the umbrella of the Gulf Cooperation Council for the Arab States of the Gulf (Muscat, Dec. 01).
- Succeeding the GSMO (Est. 1984)
- Assumed its operation May 2004
- Headquarter: Riyadh, Kingdom of Saudi Arabia

*GSO is a not-for-profit organization serves as an “Umbrella Organization” for the GCC Standards, Conformity Assessment and Metrology systems*

## GSO Members:



- *United Arab Emirates*
- *Kingdom of Bahrain*
- *Kingdom of Saudi Arabia*
- *Sultanate of Oman*
- *State of Qatar*
- *State of Kuwait*
- *Republic of Yemen*



- Serving the needs of the member states in protecting the inhabitants and the environment
- Ensuring free GCC trade without barriers
- Serving the interests of the consumer getting the products he wants

## Elements of Economic Integration

- Free Trade Zone
- Custom Union
- Common Market
- Economic Union
- Complete Economic Integration



*What do we want to achieve ?*

## GCC Strategic Plan

## OIML Membership status



- *United Arab Emirates* (corresponding Member)
- *Kingdom of Bahrain* (corresponding Member)
- *Kingdom of Saudi Arabia* (Member)
- *Sultanate of Oman* (corresponding Member)
- *State of Qatar* (corresponding Member)
- *State of Kuwait* (corresponding Member)
- *Republic of Yemen* (corresponding Member)



## GSO Workshop in Metrology (2005)



Led by Dr. Eberhard Seiler,

GSO has organized a workshop on Sept. 2005 to evaluate Metrology Status in GCC Countries.

### *The outcome of the workshop:*

- ❖ *The legislations are too old and need update*
- ❖ *No GCC Metrology System.*
- ❖ *No enough competent people*
- ❖ *Exchange information is not up to ambition*
- ❖ *Traceability chain is not defined*
- ❖ *No active participation in international activities*



## Member States' legislation

- Thoroughly studied and reviewed
- OIML D1 has been used as reference for the study



## GCC Common Metrology Law

GCC Common Metrology Law  
has been drafted and  
approved by BoD on Aug. 2011



## GCC Common Metrology Law

### Main features



- ❖ **Covers the common metrological issues**
  - ✓ *Quality infrastructure*
  - ✓ *Legal units of measurement*
  - ✓ *Transparency of metrological information*
  - ✓ *Metrological traceability*
  - ✓ *Measurement standard*
  - ✓ *Legal metrology*
  - ✓ *Regulations on prepackages*
  - ✓ *Regulations on instruments and their use*
- Enforcement (left to each state member to decide )**
- ❖ **Consistent with international practice**  
( eg. based on OIML D1)
- ❖ **Cover all Metrological Aspects**  
( eg. Scientific , legal industrial metrology )
- ❖ **No contradiction with other existing laws**
- ❖ **Does not include any penal provisions**



## GCC Guidelines in Metrology



Based on GCC Common Metrology Law the following GSO Guidelines has been approved and issued:

1	Guideline on	Verification of measuring Instruments subject to metrological control.
2	Guideline on	Metrological Control of Prepackaged Products
3	Guideline on	Type Approval for Measuring Instruments Subject to Metrological Control .
4	Guideline on	Approval of National Measurement Standards.
5	Guideline on	Designation and license of Verification bodies
6	Guideline on	Metrological Control of certified Reference Materials (CRM)
7	Guideline on	Definition of the multiples and subdivisions of the SI units and their notation.

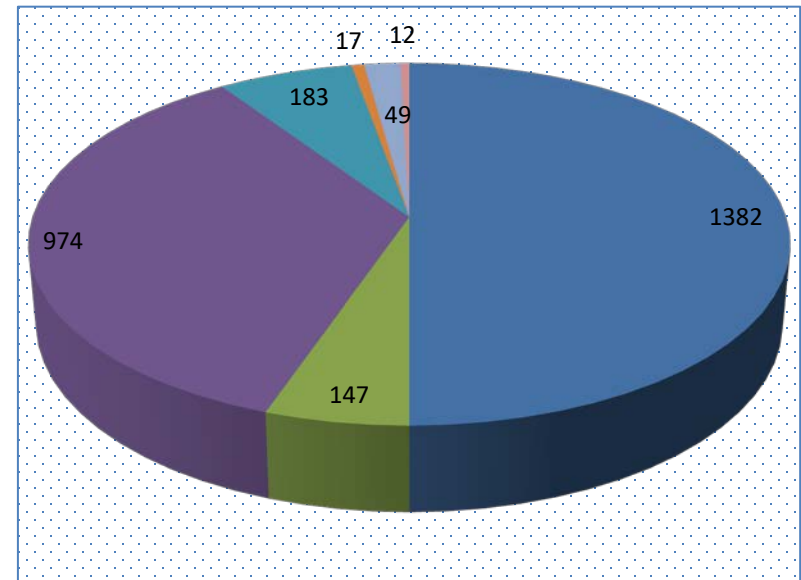
***All GSO Guidelines are consistent with OIML recommendation and guidelines***

## GSO Technical Committee for Metrology (GSO TC 04)

Total number of GSO Standards and Regulations	Metrology		OIML adopted Recommendations/ Guidelines	
21210	1382		147	
	standards	Technical Regulation	Recommendations	Documents/Guidelines
	1305	77	124	23

### Metrology Standards and Regulations based on international Standards

- Metrology
- OIML
- ISO
- IEC
- ASTM
- GSO developed standard
- Other



## Creation of **GULFMET**



**GULFMET** was established pursuant to GSO Board of Directors' decision in its meeting No.12 (Kuwait, 2 June 2010)

**GULFMET** aims to enhance the metrological infrastructure and activities within the member states,

**GULFMET** aims to ensure the technical capabilities of national metrology institutes and designated institutes participating in the GULFMET as an RMO.

**GULFMET** aims to enhance cooperation with the International Organization BIPM, OIML, and relevant international and regional organizations



GSO symposium on the importance of metrology in support of the national economy in Dubai, (May 3 -4, 2009 )



Dr. Andrew Wallard



Dr Pedro Espina

.Mr. Jean-Francois Magana



a Round Table Discussion of the Directors of standardization bodies in the GCC

## **GULFMET full Members:**



- *United Arab Emirates*
- *Kingdom of Bahrain*
- *Kingdom of Saudi Arabia*
- *Sultanate of Oman*
- *State of Qatar*
- *State of Kuwait*
- *Republic of Yemen*



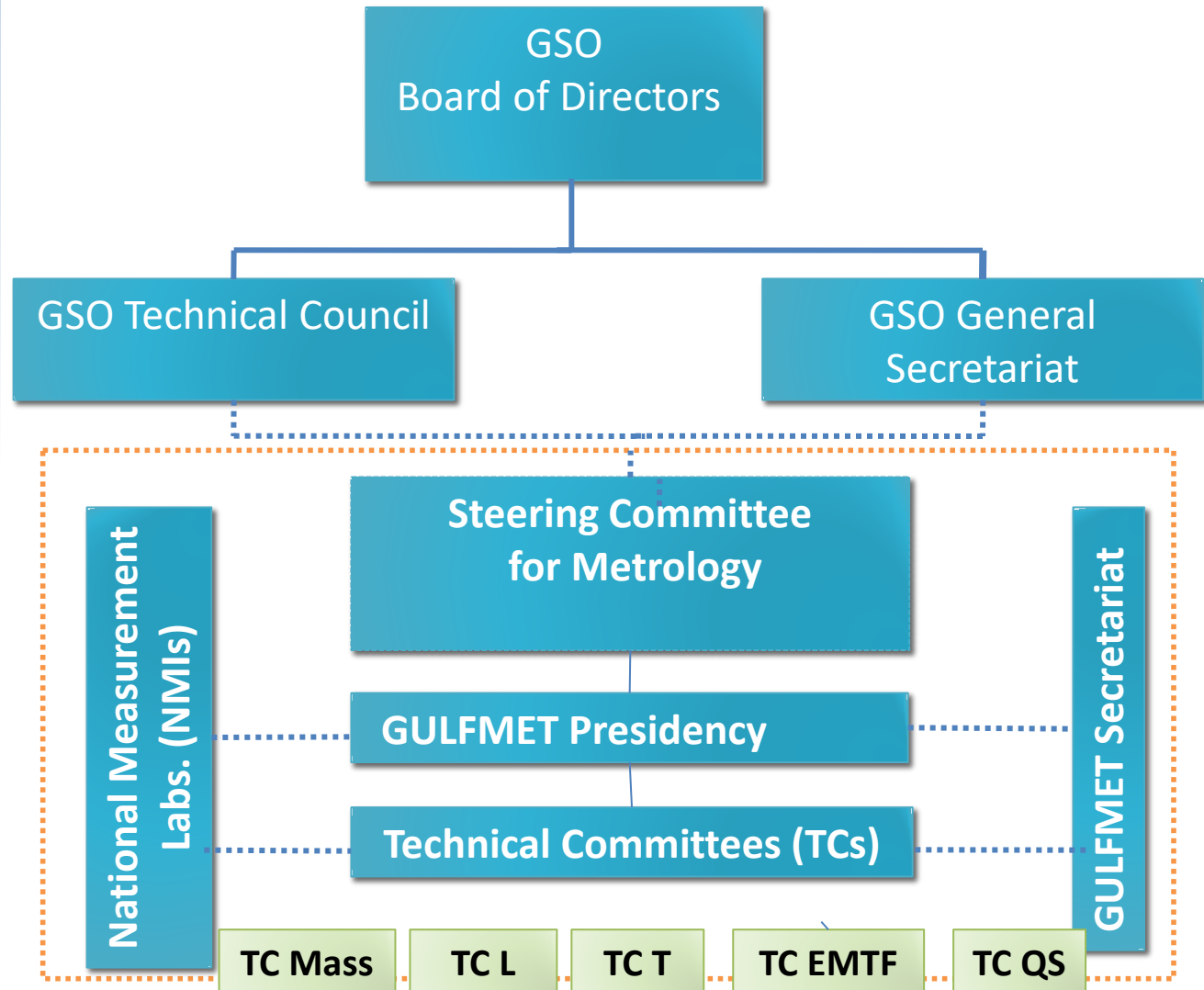
## **Full Membership is restricted to GSO members**

## **GULFMET Associate Members:**

- *UME :- Turkey*
- *KRISS :- Korea*
- *NIS :- Egypt*
- *SCL :- Hong Kong*
- *IMBiH :- Bosnia and Herzegovina*



## GULFMET Structure :





## **VISION**

*Establish **a self-sufficient and sustainable** internationally recognized RMO*

## **MISSION**

### **Meet**

the requirements for international recognition.

### **Develop**

sustenance through exchange of knowledge and cooperation

### **Maintain**

GULFMET performance by availability of necessary resources.

### **Enhance**

technical capability of NMI member states.

## **GOALS**







## Documentation ( Guidelines & Procedures)





## Development of Organization Structure

- **GULFMET** Organization Structure has been prepared and approved, it specifies responsibilities , authorities , organization chart , procedure s and processes, and Technical committees

## Technical Committees

- Mass & Related Quantities TC
- Thermometry TC
- Length TC
- Quality TC
- Electricity & Magnetism TC
- Photometry and Radiometry

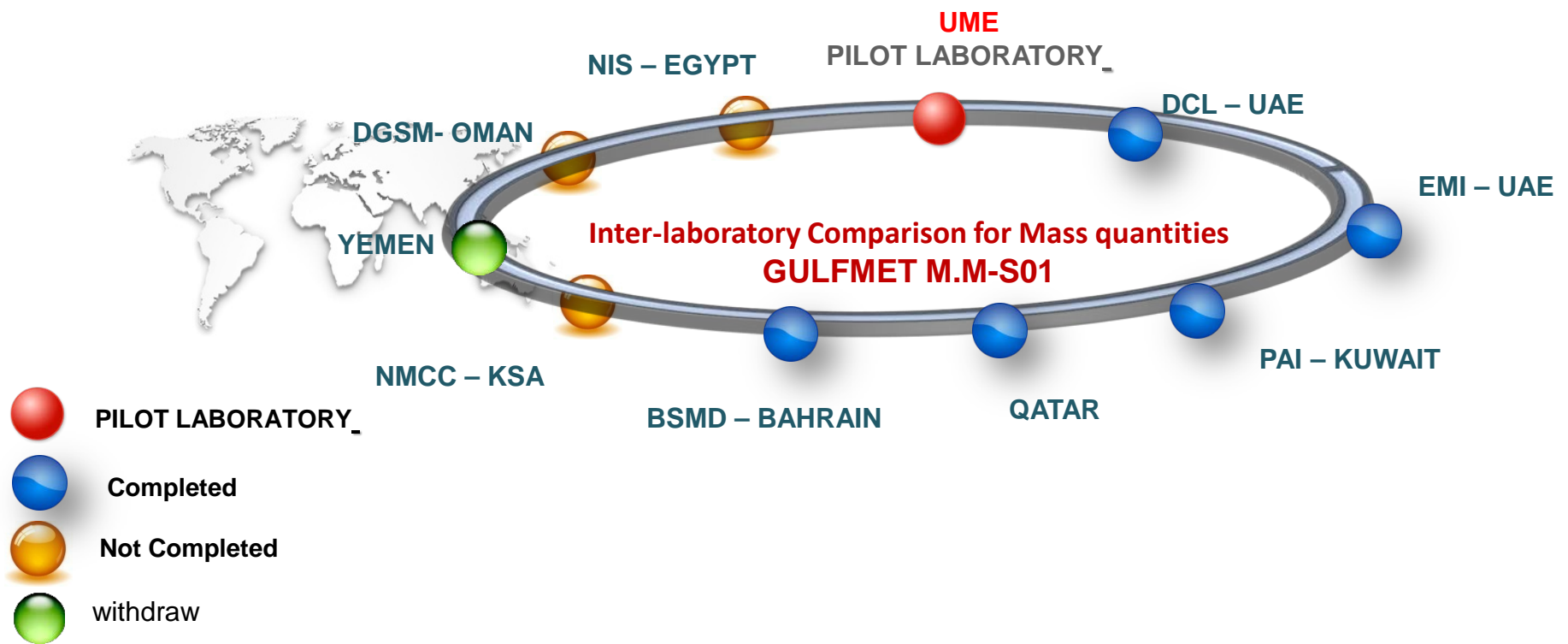


## GULFMET's Website

<http://www.gulfmnet.org/>

## 1 - Ongoing Inter-Laboratory Comparisons

### 1.1- GULFMET M.S01 Inter-Laboratory Comparisons started on 15 Dec. 2014



## 1.2. EURAMET Inter-Laboratory Comparisons started on 20 Jan. 2014



**Inter-laboratory Comparison  
in the Range of 10 MPa to 100  
MPa of Liquid Pressure  
EURAMET 1252**

## 2- Planned Inter-Laboratory Comparisons



### **GULFMET TC Mass**

ILC Field	Pilot Lab	Scheduled on
Gas pressure up to 7 MPa	UME ( Turkey)	2016
1 kg stainless steel	UMI (Turkey)	2016
Force	UME ( Turkey)	June 2016



### **GULFMET TC EMTF**

ILC Field	Pilot Lab	Scheduled on
Resistance (100 ohm)	UME (Turkey)	Q3 2016
Inductance (10 mH and/or 100 mH)	UME (Turkey)	Q3 2016
Capacitance (10 pF and/or 100 pF)	UME (Turkey)	Q3 2016
Voltage (10 V and 1.018 V)	KRISS (Korea)	TBA



## Planned Inter-Laboratory Comparisons



### **GULFMET TC T**

ILC Field	Pilot Lab	Scheduled on
Inter-comparison for Standard Platinum Resistance Thermometers ( SPRT)	UME (Turkey)	Q3 2016



### **GULFMET TC L**

ILC Field	Pilot Lab	Scheduled on
Inter-comparison for Gauge block by comparison	EMI (UAE)	Q3 2016

## GULFMET is involved in reviewing other RMO CMCs and already provide comments on EURAMET.M.46.2016, APMP.TF.16.2016 and SIM.L.14.2016

ureau International des Poids et Mesures

JCRB Website (Restricted access)

Summary GET PUBLISHED CMCs CMCs BY METROLOGY AREA KCDB MY CMCs

logged as GULFMET. You are here: HOME > RMO pending actions on CMC submissions

pending actions on CMC submissions

Sort by action required Sort by CMC file Sort by branch Sort by RMO involved

CMC file	Action required	Branch	RMO involved	Deadline	Send reminder	Relinquish rights
SIM.L.13.2016	Acknowledge receipt and/or indicate date for submitting comments	L	AFRIMETS	2016-05-24	2016-06-07	2016-06-14
EURAMET.M.46.2016	To forward review	M	AFRIMETS	2016-07-07	2016-06-16	2016-07-07
SIM.M.29.2016	To forward review	M	AFRIMETS	2016-06-06	2016-05-16	2016-06-06
SIM.M.30.2016	To forward review	M	AFRIMETS	2016-06-06	2016-05-16	2016-06-06
SIM.M.31.2016	To forward review	M	AFRIMETS	2016-08-10	2016-07-20	2016-08-10
SIM.M.32.2016	To forward review	M	AFRIMETS	2016-08-10	2016-07-20	2016-08-10
EURAMET.T.15.2016	Indicate approval or send comments	T	AFRIMETS	2016-05-20	2016-06-01	2016-06-10
SIM.L.12.2016	Acknowledge receipt and/or indicate date for submitting comments	M	APMP	2016-05-12	2016-05-26	2016-06-02
SIM.L.12.2016	To forward review	L	APMP	2016-06-24	2016-06-01	2016-06-24
SIM.L.12.2016	To forward review	M	APMP	2016-07-31	2016-07-10	2016-07-31
SIM.L.12.2016	Acknowledge receipt and/or indicate date for submitting comments	L	COOMET	2016-05-24	2016-06-07	2016-06-14
SIM.L.12.2016	Acknowledge receipt and/or indicate date for submitting comments	M	COOMET	2016-05-10	2016-05-24	2016-05-31
SIM.M.12.2016	Acknowledge receipt and/or indicate date for submitting comments	M	COOMET	2016-05-12	2016-05-26	2016-06-02
EURAMET.M.46.2016	To forward review	M	COOMET	2016-06-30	2016-06-09	2016-06-30
EURAMET.PF.12.2016	To forward review	PR	COOMET	2016-10-31	2016-10-10	2016-10-31
SIM.M.29.2016	To forward review	M	COOMET	2016-06-15	2016-05-21	2016-06-15
SIM.M.30.2016	To forward review	M	COOMET	2016-06-15	2016-05-21	2016-06-15
SIM.L.13.2016	To forward review	L	EURAMET	2016-06-23	2016-06-02	2016-06-23
SIM.M.31.2016	To forward review	M	EURAMET	2016-06-30	2016-06-09	2016-06-30
SIM.M.32.2016	To forward review	M	EURAMET	2016-06-30	2016-06-09	2016-06-30
SIM.L.13.2016	Acknowledge receipt and/or indicate date for submitting comments	L	GULFMET	2016-05-24	2016-06-07	2016-06-14
SIM.L.12.2016	Acknowledge receipt and/or indicate date for submitting comments	M	GULFMET	2016-05-10	2016-05-24	2016-05-31
SIM.M.12.2016	Acknowledge receipt and/or indicate date for submitting comments	M	GULFMET	2016-05-12	2016-05-26	2016-06-02
EURAMET.M.46.2016	To forward review	M	GULFMET	2016-06-30	2016-06-09	2016-06-30
EURAMET.PF.12.2016	To forward review	PR	SIM	2016-08-26	2016-08-05	2016-08-26
EURAMET.T.15.2016	Indicate approval or send comments	T	SIM	2016-05-20	2016-06-01	2016-06-10

For any bug or remarks, please contact the JCRB EXECUTIVE SECRETARY  
on: 23 May 2016, 11:41 AM

### Notification of comments on EURAMET.M.46.2016

crb\_es@bipm.org

You forwarded this message on 7/1/2016 7:07 PM.

ent: Wed 6/29/2016 6:06 PM

o: jrb\_es@bipm.org

cc: APMPSecretariat@measurement.gov.au; BvdMerwe@nmisa.org;  
c.mitsas@qcc.abudhabi.ae; coomet@vniims.ru; CSANTO@latu.org.uy; ebatista@ipq.pt;  
eltaweel38@yahoo.com; ferk@inti.gob.ar; iren\_kolozinsky@ukr.net; ispohr@ipq.pt;  
lee\_shih\_mean@nmc.a-star.edu.sg; Omar.kanakrieh; petra.milota@bev.gv.at;

Message | GULFMET\_Report\_on\_EURAMET.M.46.2016.doc (216 KB)

### Notification of comments on a CMC file

Comments sent by GULFMET on EURAMET.M.46.2016 are attached to this mail. They may also be downloaded from the JCRB website

### Notification of comments on SIM.L.14.2016

jrb\_es@bipm.org

Sent: Sun 6/19/2016 9:05 AM

To: jrb\_es@bipm.org

Cc: a.dahlan@qcc.abudhabi.ae; antti.lassila@mikes.fi;  
APMPSecretariat@measurement.gov.au; bastida@inti.gob.ar; coomet@vniims.ru;  
CSANTO@latu.org.uy; cskang@kriss.re.kr; dmmutale@zabs.org.zm;  
harald.bosse@ptb.de; jcoliveira@metrology.gov.br; kupko@metrology.kharkov.ua;

Message | Review\_Report\_from\_GULFMET\_on\_SIM.L.14.2016-INACAL.doc (213 KB)

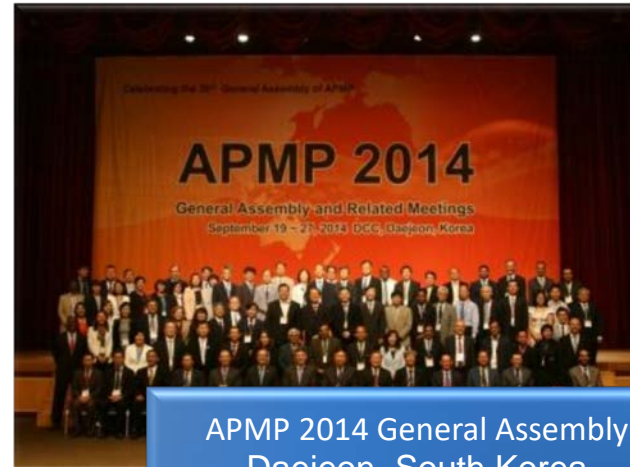
### Notification of comments on a CMC file

Comments sent by GULFMET on SIM.L.14.2016 are attached to this mail. They may also be downloaded from the JCRB website

## Participation in EURAMET & APMP General Assembly



EURAMET 7th General Assembly  
Reykjavik, Iceland  
27 - 31 May 2013  
**2** Delegates



APMP 2014 General Assembly  
Daejeon, South Korea  
24 – 27 Sep 2014  
**5** Delegates



## MEMORANDUM OF UNDERSTANDING Between GSO/GULFMET and

- ❖ National Metrology Institute of Turkey (**UME**)
- ❖ Korea Research Institute of Standards and Science (**KRISS**)
- ❖ The National Metrology Center of Mexico, (**CENAM**)
- ❖ National Metrology Institute of Malaysia (**NMIM**)





## e-GULFMET

**Issue : 2**  
**Date : 15 June 2016,**

**Cover all GULFMET Activities since March 2016**



**GULFMET website Under construction**

**Estimated completion date : October 2016**

## **e GULFMET**

Quarterly e news flyer by the Gulf Association for Metrology



Welcome to our 2nd - issue of e GULFMET

By GULFMET President

As a president of the GULFMET perhaps this is the last time that I will be talking to you via this issue of e GULFMET. We've been together for almost 6 years now, and soon it is time for me to leave. But before I do, I would like to share with you some thoughts, it has been an honor for me to be part of the team and I am grateful for the opportunity that was given to me to serve the metrology community in GCC.

We, as a metrology community in GCC, are witnessing the progress made in the field of metrology in the last few years. It is important to highlight that, the main Strategic objective of GULFMET is to focus on helping GULFMET member states to meet international requirements for global recognition of their Calibration and Measurement Capabilities (CMCs), strengthening their position and GULFMET status within JCRB.

Having the full cooperation and involvement of GULFMET's Member States and the support of world metrology community, I am confident that we will keep the momentum to achieve our goals, overpassing all the challenges.

I would like to extend my deep appreciation to our associate members UME, KRIS, NIS, SCL and IMBIL for their continuous support and help and also extend my sincere thanks to EURAMET and APMP for the valuable opportunity that was given to GULFMET to participate in their General assembly and TCs meetings. I extend my hearty congratulations to my colleague and friend Mr. Salah Al-Rumaih for being selected as the President of GULFMET and wish him all the best.

I also owe special thanks to H.E Nabil Molla Secretary General of GSO and Excellencies the leaders of GSO member states for their continuous supports during my service at GULFMET.

### NMCC/SASO celebrated World Metrology Day (WMD)

Under the patronage of His Excellency the Governor of Saudi Standards, Metrology and Quality Organization (SASO), the National Measurement and Calibration Center (NMCC) celebrated the World Metrology day in Riyadh on the 18th of May, 2016.

NMCC invited Dr. Martin Milton, the Director of the BIPM and Mr. Andy Henson Director of International Liaison & Communication Department in BIPM, to celebrate together with the metrology community in SAUDI ARABIA this occasion. His Excellency, Dr. Saad Al Qasabi the Governor of SASO, shed light in his opening speech on the Kingdom's efforts to improve the country's metrology infrastructures. He pointed out that all employees in NMCC are competent Saudis and he is proud of them.

Dr. Martin Milton delivered a speech in line with the WMD theme... On 18th May, 2016, Dr. Martin Milton and Mr. Andy Henson shared with the Saudi Quality Council (SQC) the celebration of this occasion in Jeddah, as well.

### The State of Qatar became an Associate of the CGPM on 10 March 2016



On behalf of the Qatar General Organization for Standards and Metrology (QGOSM), Mr. Salah Salem Al-Rumaih, Director of the Central Laboratories (QGOSM) and President Elect of GULFMET, signed the CGPM MRA on 10 March 2016. Qatar is the fifth member of the Gulf Association for Metrology (GULFMET) to participate in the work of the BIPM, strengthening the links between the two bodies.



## WEBSITE UNDER CONSTRUCTION

We are currently building a new website which will be ready soon.

37

DAYS

0

HOURS

2

MINUTES

8

SECONDS

## Areas of interest



### 1 Pilot

study on Measurement  
comparisons (bilateral  
comparisons ( e.g. with  
Saudi Arabia (NMCC) ,  
UAE (EMI) )

### 2 Conduct

joint research projects  
on measurements

### 3 Provide

Technical assistance and  
consultation as it  
needed (in new areas of  
measurement e.g.  
( Ionizing Radiation ,  
Photometry, Radiometry ,  
Acoustics, Ultrasound

### 4 Invite GULFMET

to participate in seminars,  
workshops and training  
courses organized by NIST  
and provide trainers to  
GULFMET training courses

Thank you!

