

A large, abstract graphic on the left side of the slide, composed of several overlapping, curved blue shapes in various shades of blue, creating a sense of motion and depth.

**G13.07.04**

**Overview on  
horizontal activities of  
EURAMET TCs**

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13<sup>th</sup> EURAMET GA, Plenary Session  
Borås, Sweden, 22 May 2019

# TC-Chairs Business: Important issues on agenda 2018/19



- **EURAMET Comparisons**

- Strategic planning of comparisons
- Hybrid comparisons
- Silent comparisons
- Comparison Toolbox

- **CMC related matters:**

- Validity and vitality of published CMCs
- Broad-Scope CMCs (“representative CMCs”)

- **Support of (new) DIs**

- to come to CMCs published in KCDB

- **Calibration and Technical Guides**

- **TC-project database**

- general review of rules and database
- getting status of all projects updated

- **Relation EMNs and TCs**

- discussion at 17<sup>th</sup> TCC-workshop in Feb. 2019
- workshop TC Chairs & EMN Chairs on Th 23 May
- see also [G13.10](#)

- **Capacity Building**

- see [G13.04.05](#)
- workshop for new TCCs in Aug.

- **Input to JCRB**

- consultation of TCCs on all relevant CIPM MRA matters

- **and other matters ...**

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# Interlaboratory Comparisons

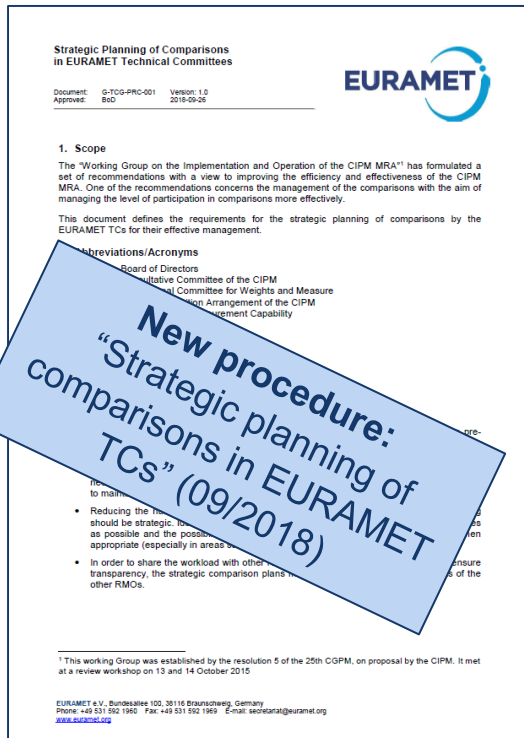
(only EURAMET)



<b>TC:</b>	<b>Initiated</b> (since GA 2018)	<b>Ongoing</b>	<b>Completed</b>
AUV	1	1	1
EM	3	6	4
F	5	14	2
IR	2	8	5
L	0	4	2
M	3	23	1
MC	4	10	1
PR	2	7	2
T	3	19	2
TF	1	2	0

## Recommendations from the Working Group on the Implementation and Operation of the CIPM MRA (23 Aug 2016):

*Rec. 1a: The strategy documents of the CCs must clearly define the long-term timetable for KCs (including the repeat cycle). The RMO TCs should also plan regional KCs and SCs strategically, to reflect the needs of the RMO.”*



**Strategic Planning of Comparisons in EURAMET Technical Committees**

Document: 0-TIG-PRC-001 Version: 1.0  
Approved: BGD 2018-09-26

**EURAMET**

**1. Scope**

The 'Working Group on the Implementation and Operation of the CIPM MRA' has formulated a set of recommendations with a view to improving the efficiency and effectiveness of the CIPM MRA. One of the recommendations concerns the management of the comparisons with the aim of managing the level of participation in comparisons more effectively.

This document defines the requirements for the strategic planning of comparisons by the EURAMET TCs for their effective management.

**Abbreviations/Acronyms**

- Board of Directors
- Executive Committee of the CIPM
- Technical Committee for Weights and Measure
- Working Arrangement of the CIPM
- Management Capability

**New procedure: "Strategic planning of comparisons in EURAMET TCs" (09/2018)**

- Reducing the workload of the TCs should be strategic, as far as possible and the position appropriate (especially in areas where the workload is high).
- In order to share the workload with other RMOs, the strategic comparison plans should be transparent, to ensure transparency, the strategic comparison plans should be shared with other RMOs.

<sup>1</sup> This working Group was established by the resolution 5 of the 25th CGPM, on proposal by the CIPM. It met at a review workshop on 13 and 14 October 2015.

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## EURAMET KCs:

- Follow the planning of the corresponding CC KCs

## EURAMET SCs:

- **Gap Analysis:**  
which services are not covered by KCs?
- **Risk assessment:**  
could evidence other than SC be used?
- **Prioritisation:**  
How many CMCs are covered by the planned SC?



- The recommendation to reduce the number of participants in CC-KCs will naturally increase the workload for RMO TCs for comparisons
- Strategic planning to focus on really needed EURAMET KCs/SCs is important
- All TCs are in an intensive internal discussion process
- Written strategic plans are in preparation in some TCs
- 10-year plans are in preparation or existing in most TCs
- In some TCs, the extra burden for additional EURAMET KCs/SCs is not considered as very high
- TC-IR concluded that a 10-years plan is not needed

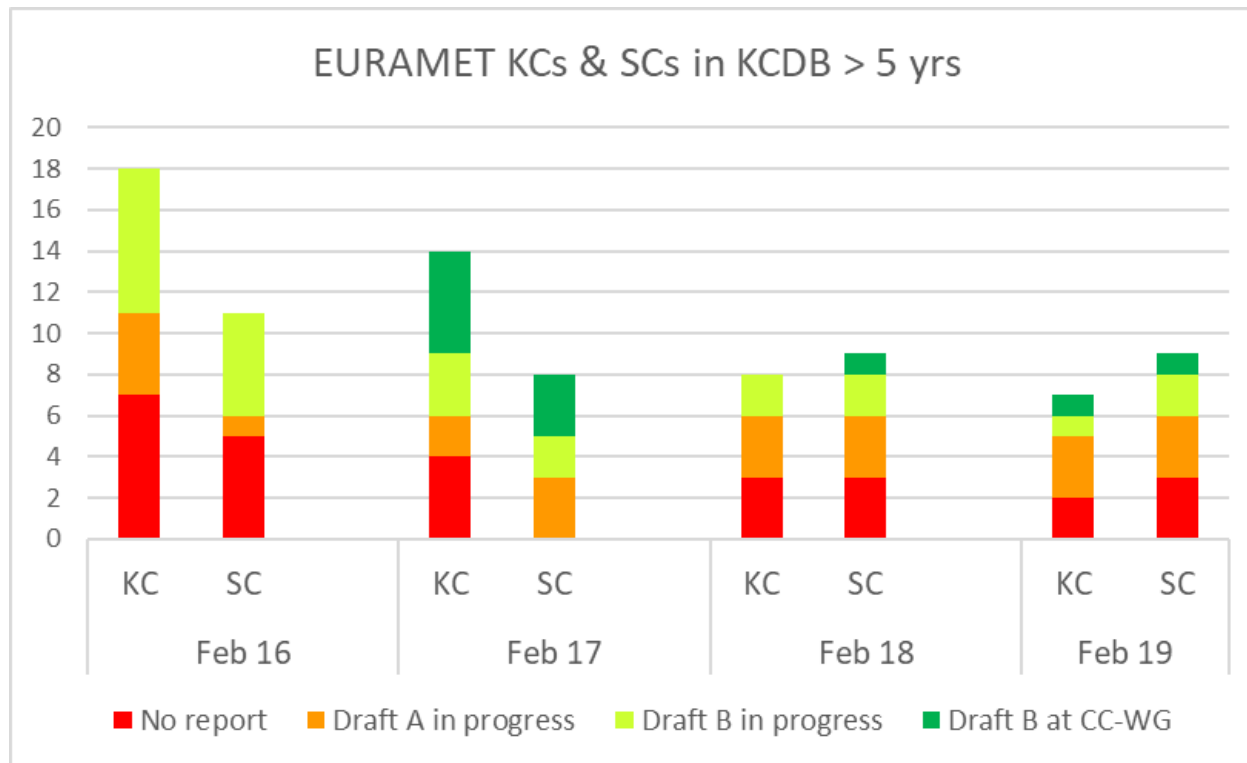
*CCRI-comparisons are covering most needs of EURAMET NMIs/DIs;  
workload for extra EURAMET KCs & SCs is small, they are decided ad-hoc*

# “Silent comparisons”

= KCs/SCs in KCDB for > 5 years without conclusion



- At JCRB meetings a list of KCs/SCs lasting for more than 5 years is provided
- RMOs are requested to give follow-up to those “silent comparisons”
- EURAMET Secretariat and TCCs are pushing pilots since many years, more or less successfully



Support from Delegates & NMI directors is needed, providing required staff resources to conclude KCs/SCs in reasonable time

## Validity and vitality of published CMCs

- CIPM MRA-G-02: “... *in addition to the 5-year review of the supporting QMS, CMCs published in the KCDB undergo continual monitoring to ensure their validity ...*”
- TC-Q Guideline for annual reporting of the QMS of NMIs/DIs was reviewed to emphasize on responsibility of NMIs/DIs to report issues with published CMCs
- Practice of TC for regular re-evaluation of published CMCs was discussed:
  - including consideration of unsatisfactory results in KCs/SCs
  - different approaches, but happening in all TCs
  - discussions to be continued to conclude on general concepts

## Broad-Scope CMCs (“representative CMCs”)

- Amendment in CIPM MRA-D-02 (Sept. 2018) is supporting representative CMCs
- TC-IR is proposing a far-reaching approach describing CMCs as “capability” (rather than services), which reduces number of CMCs dramatically: [see G13.08.03](#)
- TC-MC bottom-up approach addressing service categories



# CMC Statistics



<b>TC:</b>	<b>reviewed</b> (intra-RMO)	<b>new published</b>	<b>Withdrawn</b> (deleted or greyed-out)
AUV	4	2	---
EM	---	276	27
F	8	11	6
IR	83	---	68 + 110 <sup>(1)</sup> + 98 <sup>(2)</sup>
L	16	16	---
M	3	3	---
MC	154	---	29 + 82 <sup>(1)</sup>
PR	45	45	4
T	54	18	7
TF	0	0 / 27 <sup>(2)</sup>	0 / 9 <sup>(3)</sup>

- Notes:
- (1) 110 (IR) + 82 (MC) CMCs from JRC-Geel are currently greyed out
  - (2) ENEA, greyed-out on 20 May
  - (3) still in inter-RMO review, but expected to be finished soon

# Calibration & Technical Guides



## Calibration and Technical Guides

- are currently reviewed and brought to new design
- LaTeX template has been developed

<https://www.euramet.org/publications-media-centre/>

# Calibration & Technical Guides



## Published since GA 2018: revised or new

- No. 12 Evaluation of Vector Network Analysers, *Version 3.0, 03/2018 (EM)*
- No. 19 Determination of Uncertainty in Gravimetric Volume Calibration, *Version 3.0, 09/2018 (F)*
- No. 22 Calibration of Autocollimators, *Version 1.0, 07/2017 (L)*
- No. 23 Calibration of Angular Encoders, *Version 1.0, 02/2018 (L)*
- No. 24 Calibration of Solid Anemometers, *Version 1.0, 02/2019 (F)*



# Concluding remarks



- TCs are the backbone for the cooperation between NMIs/DIs
  - CIPM MRA
  - Knowledge transfer between NMIs/DIs
  - EMPIR: strategic input, PRTs, JRPs, ...
  - Discussions on EMNs among others
- TC-work is not the attractive and fancy “M€-business” ...
- ... but just hard work, often almost invisible
- It requires enthusiastic and engaged people to do this job
- The engaged work of our TC-Chairs cannot be valued enough

**A big thank to all TC Chairs  
for the very productive and most pleasant  
cooperation**