

A large, abstract blue graphic on the left side of the slide, composed of several overlapping curved shapes and a central circle, resembling a stylized 'E' or a series of concentric arcs.

Mission of NMIs/DIs, relation to Metre Convention

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Challenges for full integration of Designated
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Basic dilemmas for DIs, NMIs, Designating authorities, EURAMET/RMOs, BIPM ?

- Are DIs needed?
- Is there potential for DIs at national level?
- Is the concept of DIs sustainable /controllable?
- Is there interest for DIs?
- What is the benefit/motivation in being a DI?
- Is it worthwhile being a DI?
- Are potential DIs aware of responsibilities and duties/obligations?
- Are designating authorities aware of „designation consequences“ ?
- Are NMIs aware of all responsibilities with regard to DIs and related issues?
- Can RMOs, BIPM interfere/intervene at national level? **NO!** (with regret!)

Basic facts for DIs, NMIs, Designating authorities, EURAMET/RMOs, BIPM ?



- These are:
- Almost 2/3 of EURAMET members are DIs (with potential growth!)
- Not all NMIs can cope or wish to deal with all existing and emerging needs
- There is potential and need at national level
- There is considerable „pressure“ to become a DI
- There is lack of rigor in the (harmonized?) designation process (nationally and internationally)
- Designation is sole sovereignty of a country
- RMOs and BIPM have no influence on designation processes
- (RMOs and BIPM only have to cope with consequences?)
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Role of Designated Institutes within the CIPM MRA (EURAMET Guide No.2)



- The objective of the document **EURAMET Guide No.2** is to summarize the role of DIs within the CIPM MRA, their duties and responsibilities, as well as their interactions within national metrology systems and their NMIs.
- It emphasizes the importance and value of DIs, acting at the same metrological level and under the same strict requirements as NMIs.
- These activities are much broader in scope and conceptually different and more demanding than just calibration activities.
- The document aims to facilitate the operations of DIs, designation processes at a national level, managing processes at the RMO (EURAMET) level and interactions with BIPM (and CIPM). The document is based on existing EURAMET and BIPM documents, EURAMET questionnaires and is actually a compilation of current good practices and experiences of operation.

Role of Designated Institutes within the CIPM MRA



Introduction

Situation of DIs in the CIPM MRA and in EURAMET

DIs within the CIPM MRA

Situation in EURAMET

Some observed issues

Metrological activities done by an NMI or DI

Services that are typically delivered by NMIs and DIs for disseminating the SI

Criteria for a CMC

Realizing metrological traceability in the frame of CIPM MRA

Recommendations

Recommendations to National Authorities Recommendations to Designated Institutes

Recommendations to National Metrology Institutes

Recommendations to EURAMET

Annex A: EURAMET Acceptance criteria for Dis

Annex B: JCRB resolutions 28/1 and 28/2

Annex C: Glossary

Annex C: References

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The document gives guidance and recommendations to



- National authorities on the decision process for the designation of a DI and its sustainable operation.
- DIs on their role in the CIPM MRA and EURAMET's expectations to them.
- NMIs for an effective cooperation with DIs within the national metrology system.
- EURAMET TC's and authorities for the effective integration of DIs to the activities of EURAMET.

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Annex B: JCRB resolutions 28/1 and 28/2

28/1: The JCRB resolves that laboratories should only be designated under the CIPM MRA when they have responsibility for national measurement standards and the dissemination of the units (i.e. providing traceability), as demonstrated by provision of appropriate and relevant services to customers.

28/2: The JCRB resolves that the QMS that must be in place prior to the acceptance of CMCs must be according to ISO/IEC 17025 (and ISO Guide 34 for CRMs) in line with requirements for calibration laboratories.

Annex A: EURAMET Acceptance criteria for DIs

Policy
Acceptance Criteria for Associates

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Approved: BoD 2008-12-19

According to the EURAMET Byelaws § 4 (3), "Only one institute per state can obtain EURAMET membership. For those states which have more than one institute responsible for maintaining national measurement standards, these institutes have to decide which of them will be the EURAMET member. Further institutes ... of this state ... can become Associates of EURAMET."


Although not stated as such in the byelaws, a principal reason for these Designated Institutes (DI) to become Associate of EURAMET is their participation in the CIPM-MRA in addition to other important EURAMET activities. Being Associate of EURAMET is a precondition to get their QMS and their CMC entries reviewed by the corresponding EURAMET Technical Committees.

The General Assembly (GA) agrees on the following criteria for an institute to become Associate of EURAMET:

1. It is a legal entity, or forms part of a legal entity.
2. It forms part of the national metrology system and is responsible for the maintenance of national standards and offers associated services which can be included as CMCs in the KCDB.
3. It intends to participate actively in EURAMET activities.
4. It is prepared to pay its dues and accept liabilities associated with participation in EURAMET activities, as stated in the EURAMET Byelaws and Rules of Procedure.
5. It is designated by the responsible national authority for metrology to the BIPM and is listed in the Appendix A of the KCDB.
6. It sends a written application to become Associate to the EURAMET Chairperson via the Delegate of the national EURAMET Member. The application has to be accompanied by the following information:
 - a. Copy of the formal designation by the national authority to the BIPM.
 - b. Short description of its legal status.
 - c. Description how the institute is embedded in the national metrology system.
 - d. Description of the national standards for which the institute is responsible (metrological field, quantity, scope) and the associated services.
 - e. Status of its QMS (in place, in preparation, not existing).

The decision on the application is taken by the EURAMET General Assembly (GA) according to the Byelaws §4 (5).

The Delegates ask the BoD to review the structure of the annual contributions to EURAMET (membership fees per country), considering the possibility to include a contribution from DIs which are Associates of EURAMET, in order to cover the administrative costs generated by their participation in the CMC and QMS review process and other EURAMET activities. The decision on the annual contributions has to be taken by the General Assembly according to the RoP Part A, 6(1).



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Conclusions:



- DIs offer an excellent and economic possibility to extend national measurement capabilities beyond NMIs, when needed and justified
- DIs integrate closely with broader society
- DIs act horizontally and vertically due to their institutional positions
- DIs can offer high expertise, flexibility and adaptability
- DIs also require high level of coordination and mutual understanding
- DIs will be active partners in future „**European integrated metrology landscape**“ therefore they require considerable attention

DIs represent for designating authorities, NMIs, RMOs and BIPM a big challenge but also great opportunity if properly managed, coordinated and stimulated.

THANK YOU!