

International Organization of Legal Metrology

BIML 08 No. 493/JFM-CP 2008.11.05

Note to CIML Members

Subject: Joint report of the Directors of the BIPM and the BIML on the rapprochement between the two Organizations

Dear Colleagues,

This joint report, established at the request of the Presidents of the two Committees, is a working document which reflects the analysis made by the two Directors, but does not represent in any way an official position of either of the Organizations.

Following the adoption of Resolution 4a by the Thirteenth International Conference on Legal Metrology, CIML Members are kindly requested to send to the Bureau their comments about this joint report and about the rapprochement, no later than 31 December 2008, so that the Bureau may present a summary of these comments to the Presidential Council Members with a view to discussing them at the next Presidential Council Meeting.

Thank you for your continued cooperation; please do not hesitate to contact us should you require further information.

Jean-François Magaña

Director

RAPPROCHEMENT BETWEEN THE OIML AND THE BIPM

A report from the Director of the BIPM and the Director of the BIML to the meeting of the Presidents of the CIPM and the CIML on March 5th 2008

Executive Summary

The presidents of the CIML and the CIPM have requested the directors of the BIML and the BIPM to review "methods of developing and strengthening co-operation between the two organizations, including the possibility of a merger of the two organizations. The focus of this review is to be on meeting the requirements of metrology as an essential tool for economic, technical and societal progress in the 21st century, establishing an International Metrology System and providing an international focus on metrology" (see Annex 1).

It is sometimes argued that it would be better to have just one organization at international level dealing with issues of metrology and that, therefore, a merger of the two organizations is the preferred option.

It could, however, also be argued that the development of an effective and efficient World Metrology System is better served by the two organizations remaining separate organisationally, while intensifying their cooperation, as is now the case or through colocation, for the following reasons:

- A merger would be a lengthy process, requiring very significant resources in terms of money and staff time;
- There are a number of differences between the two organizations in terms of product (BIPM: international system of units, international measurement standards and traceability to the SI of national standards realized by NMIs OIML: metrological and technical requirements for measuring instruments and measurements in regulated applications);
- Representation, on an equal footing, of the different cultures and interests of the BIPM and the OIML in a merged body and the need to have a common decision-making processes could be difficult to achieve and may not meet the requirements of bodies such as the WTO. .

It is common ground that any further rapprochement between the OIML and the BIPM¹ must be based on real benefits to world metrology. Such benefits would actually stem from:

- an enhanced level of dialogue;
- the opportunity, through regular interactions, to create a common policy or firm and monitored plans of action in some areas;
- a greater representation at meetings; and

¹ This term designates the organization. It needs some explanation. The Metre Convention created an intergovernmental organization whose name is "the BIPM". The two organs of the BIPM are the CIPM and the CGPM, and its headquarters are on the Sèvres site. This was confirmed by the BIPM's legal adviser.

from actions on matters of common concern.

The benefits may also be intangible, notably the creation of a single focus for metrology and its interactions with Member States, other intergovernmental organizations or international bodies, regulators, user groups.

At the moment, whilst there is good will to cooperate, time or resource constraints, as well as a lack of frequent face to face interactions, have made it difficult to achieve such cooperation. However, whilst there is no evidence of great pressure for greater interaction, the topic was raised on a number of occasions by some Member States and tangible and intangible benefits were identified.

After an examination of the issues involved as listed in the terms of reference (see Annex 1), the two Directors believe that:

- 1. There are current and potential interests in further joint activity, including common promotion of metrology activities, and the means to do so (see section 3):
- 2. Merging the CIPM and the CIML ² and/or the BIML and the Direction and staff of the BIPM is not promising, as a separate option (see section 4);
- 3. A move of the BIML to the BIPM Headquarters (co-location) may entail very few financial and technical benefits, even though it might be a significant step to meet tangible and intangible benefits and could be a first step towards a single organization (see section 5). The move would, however, involve costs that would need to be covered by additional funding;
- 4. The transfer of the activities of the OIML to the BIPM a single Organization in charge of all metrology issues at the intergovernmental level, is more of a political than a technical, administrative or legal issue. If the two bureaux wished to pursue this option, it would need to be further discussed by the CIPM and the CIML .(see section 6).

That being said, administrative, legal or human constraints should not be ignored and should be fully considered before going through any process. Whilst the Directors believe that these constraints could be overcome, at this stage and given that additional surveys are needed, we did not feel able to give a strong recommendation for any actual option. The next steps therefore depend on the instructions from the CIML and the CIPM.

² We have interpreted "bureaux" in the terms of reference to mean the CIPM and the CIML.

1. Background

The issue of further rapprochement between the two intergovernmental organizations, the BIPM (created in 1875) and the OIML (created in 1955), has been on the table for many years. Indeed, whilst there is no evidence of great pressure for greater interaction, the topic has been raised on a number of occasions by some Member States and tangible and intangible benefits were identified. The reason why the topic was raised is certainly that, at the national level, the missions and activities at stake are combined in a single national body in, perhaps, 50% of the current Member States of the two organizations.

With the aim of drawing the attention of the CIPM and the CIML to the topic and in order to assess whether there are grounds for further steps at the intergovernmental level, the two Directors were asked to report to a meeting of the two Presidents of the CIPM and the CIML in March 2008. The terms of reference for this study are attached (Annex 1).

The two Directors discussed the issue during the last year and two substantive meetings were held on January 23rd and February 8th 2008, stimulated by a paper from the Director of the BIML, and a subsequent revision by the Director of the BIPM. Both Directors have also kept the bureau of the CIPM and the CIML Presidential Council in touch with progress. This report is a result of the discussions in January and February 2008.

There is little doubt that there are benefits to be derived from greater interaction (Section 2). The key question is how these are generated in practical terms as far as the two organizations are concerned. The two Directors have looked at the pros and cons which are relevant to the three options identified in the terms of reference:

- Merging the CIPM and the CIML 3 and/or the BIML and the Direction and staff of the BIPM (Section 4);
- A move of the BIML to the BIPM Headquarters co-location (Section 5);
- The transfer of the activities of the OIML to the BIPM a single Organization (Section 6).

2. The political issue: The World Metrology System

Both OIML and BIPM are intergovernmental organizations, active at the international level aiming to advance metrology in the interest of mankind.

The BIPM (metrology), the OIML (legal metrology) together with two international organizations (ILAC and IAF) facilitating the accreditation of measurement and test laboratories constitute what is named the "World Metrology System".

It is sometimes argued that it would be better to have just one organization at intergovernmental level dealing with issues of metrology and that, therefore, a merger of the two organizations is the preferred option.

However.

- A merger would be a lengthy process, requiring very significant resources in terms of money and staff time;
- There are a number of differences between the two organizations in terms of product (BIPM: international system of units, international measurement standards and traceability to the SI of national standards realized by NMIs

³ We have interpreted "bureaux" in the terms of reference to mean the CIPM and the CIML.

- OIML: metrological and technical requirements for measuring instruments and measurements in regulated applications);
- Representation, on an equal footing, of the different cultures and interests of the BIPM and the OIML in a merged body and the need to have a common decision-making processes could be difficult to achieve and may not meet the requirements of bodies such as the WTO. .

3. Current and potential interests for joint activity

From the current and potential joint activities listed in sections 3.1 and 3.2, we can draw two main conclusions. The world metrology would benefit from:

a) a greater interaction of the OIML and the BIPM on a regular basis;

This should not be overstated but, generally speaking, there are no actions because the point is rarely discussed. Similarly, the two organizations do not have regular meetings on specific issues. Time, resources, and the lack of regular contact, which would act as a reminder, are all contributory factors. In addition, any "better measurement" needs identified or required by OIML working groups so as to improve Recommendations have no natural conduit to a CIPM Consultative Committee. In consequence, a Consultative Committee is not committed to resolve or address the issues and there is no natural point of contact between the two organizations at a technical level. Therefore, more regular contact would almost certainly mean that we would identify more common interests and would more easily develop the means to carry them forward. A regular meeting of the two Directors and management staff of the two organizations would need to be convened in order to follow up the progress made towards this greater interaction.

b) a (real and perceived) common focus and voice of the BIPM and the OIML on metrological issues in relation to regulation and other policy issues.

It would also help deal with the "Frequently Asked Question" of why there are two metrology intergovernmental organizations with, apparently, similar functions. *One specific new action* identified as a result of the meetings and discussions in relation to this report is the need for a **common document**, to be promoted to IGOs, regulators and Governments on the combination of good measurement and regulatory practice. As we do not see each other regularly, the BIPM and the OIML have not developed a common policy in relation to, for example, ISO, WTO (where the BIPM application for observer status is blocked), regulators, or the formal requirement for traceability to the SI in regulation.

A second specified new action would be the promotion by the two organizations of accession to the OIML or the BIPM. This promotion would be enhanced in direction of Member States which are not already Members of the two organizations.

The list below provides the basis for further consideration of likely benefits or of any next steps.

3.1 Current joint activities

- Joint metrology web portal (<u>www.metrologyinfo.com</u>);
- Short descriptive leaflet on the roles of the two organizations;
- Regular Meetings at working and at "bureau" level;
- Joint Action Plan;
- Common statement on the value of Mutual Recognition Arrangements (with the ILAC);
- Reference to each other in a range of promotional or other publications;

- Collaboration in the drafting of the OIML Recommendation on metrology structures and a metrology law for developing countries;
- Limited amount of common technical work, noticeably in the preparation of documentation in relation to mass measurement;
- Common work in a number of joint committees. These include the JCGM and JCDCMAS;
- Liaison activities in relation to several ISO committees would benefit from a common line or policy in relation to a number of committees, e.g. ISO CASCO.

3.2 Other potential activities (planned, identified or potential)

- Planned collaboration from the BIML in 2008 on preparation of the "World Metrology Day" event;
- Addressing a realisation that there is a cautious interest from Member States in more work in relation to the metrology infrastructures in developing countries;
- Identifying actions in relation to the citation of reference materials in a number of OIML Recommendations, and which would benefit from a closer liaison with the CCQM;
- Addressing issues raised by OIML working groups in relation to issues such as alcohometric measurements in tables published by the OIML and which would require work in NMIs or Designated Institutes⁴;
- Strengthening of requirements for traceability to the SI in OIML Recommendations:
- Addressing a common concern on the need for reliable accreditation of laboratories to ISO/IEC 17025 or similar standards which relate to technical competence at a working level. This translates to the need for "top to bottom" confidence in measurement in a number of areas;
- Identifying common actions to regulators or Governments on problems related to the measurement of flow identified through comparisons organised in the BIPM structure and which have implications for OIML Recommendations. There are likely to be other similar examples which could lead to a common approach to regulators;
- Strengthening the presence at ISO technical committee by metrologists the ISO committees on medical instrumentation claim, for example, never to have heard of OIML recommendations not are they particularly concerned by traceability and error assessment;
- Collaborating on potential future work by the OIML in the environmental, food, or other chemical metrology areas in which the CCQM and other BIPM committees are already active and where regulation is common. No requirements exist, for example, for traceability of temperature measurement in regulations for food production. A joint BIPM OIML involvement, even if technical work is done elsewhere, may add pressure on regulators to pay greater attention to measurement in their legislation.

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⁴ A more regular examination of similar measurement issues by OIML working groups could result in a range of user needs being addressed to the CIPM Consultative Committees. This is particularly the case in those areas of some Consultative Committee work where the NMIs are interested in Calibration and Measurement Capabilities, which are close to the market.

4. Merging the CIPM and CIML and/or the BIML and the Direction and staff of the BIPM

- 4.1 The *CIPM and the CIML* are the supervisory organs of the two organizations. Therefore, merging these two organs would be very difficult to achieve without merging the two organizations themselves (see section 6, paragraph 1 below). In any event, an amendment of the constituent instruments of the two organizations would be needed and would also be very difficult to achieve. We therefore consider that this step would not be worthwhile and we are inclined to dismiss it.
- 4.2 It is, in our view, doubtful whether simply merging the **BIML** and the **Direction** and staff of the **BIPM** would achieve tangible benefits. In addition, it would not address the issues in paragraph 3 a) above. Indeed, such a move would be a mere step towards the two other main options (co-location and a single organization), and this additional step would not be worthwhile. Moreover, an amendment of the constituent instrument of the OIML would be needed. We are therefore inclined to dismiss it.

5. Co-location

It is our view that co-location would be essential if there was to be, at any time, a single organization. Without co-location, the full benefits of a merger would not be achieved.

The practical issues involved with this option and which would need to be fully considered in achieving co-location (with or without a merger) would, in our view, be the following:

Accommodation for the BIML at the BIPM premises in Sèvres

- In order to accommodate a dozen or so BIML staff at the BIPM premises, new building works would be required. Raising the initial finance for new offices would almost certainly require the OIML to ask its members for additional funding. The OIML currently relies on its offices as providing an asset in the event of winding up of the OIML and the consequent need for a suitable fund to pay pensions or other liabilities. Therefore a move away from its current headquarters, Rue Turgot, has a range of significant implications which require further examination. These arrangements would need anyway the agreement of Member States and the relevant management or supervisory Boards.
- Legal, administrative and planning issues would need to be considered by the BIPM and the French Government, and in particular with regard to the BIPM premises, which are listed as historical monuments. Moreover, the Headquarters Agreement of the OIML would need to be amended, which would be a tedious but largely legal and administrative issue that could be resolved.
- The BIPM's services for IT, meeting rooms, etc., would be suitable for use by the BIML, but additional developments may be needed.

Contributions, Support functions and financial savings

- Arrangements for Member States' contributions to the two organisations would clearly be easier to handle as there were not to be a single organization, as the Membership of the two organizations would not be modified and as there would not be any common funding.
- Support functions such as IT, secretariat, library and accountancy functions could be merged or harmonised, even if this would require additional funding.

 In short, it seems that cross-charging or common provision of services in some agreed proportion and co-location would be unlikely to result in significant financial savings.

Staff

- Apart from any first negative reactions linked to uncertainty, staff could see any further rapprochement as beneficial to their careers. The two organizations may be able to develop their staffing more effectively through recruitment from the other. This is however an open question. Initially a move by the BIML to Sèvres may create some personal difficulties for some of BIML staff but this is not seen as a long term difficulty.
- At the moment, the two organisations have different Staff Rules. Whilst we may require more consideration of this, we consider that it is not in itself an impediment.

6. Merger into a single organization

The transfer of the activities of the OIML to the BIPM, a single Organization in charge of all metrology issues at the intergovernmental level is more of a political rather than a technical, administrative or legal issue. If the CIPM and CIML wished to move further in the direction of a single organization, all Member States would need to be informed and discussions on the implications take place. Moreover, administrative, legal or human constraints should not be ignored and should be fully considered before going through this process.

Whilst the Directors believe that these constraints could be overcome, at this stage and given that additional surveys are needed, we did not feel able to give a strong recommendation for this political option.

6.1 The BIPM as a single organization

The creation of a single intergovernmental organization to meet the needs of international metrology is only likely to happen if the existing Member States of the OIML accede to the BIPM. This is the only practical route as creating a brand new organization would mean that the BIPM and the OIML would need to be first dissolved and a new organization would then need immediately to be created, which would be difficult to achieve.

6.2 Accession of OIML Member States and enhancement of the BIPM work programme

The Legal Adviser of the BIPM considers that the structure and constituent instrument of the BIPM would not be an obstacle to the accession of all Member States of the OIML to the BIPM and to the inclusion of legal metrology in the work of the intergovernmental organization, the "BIPM". At the moment there are 18 Member States of the OIML which are not Members of the BIPM (see annex 2). However, an analysis of the two sets of States concerned reveals that the BIPM is in discussion with all but a few of these 18 States or they are already Associates of the CGPM. They should be encouraged to become Member States of the BIPM, as BIPM Member States should be encouraged to become Member States of the OIML, if they are not already.

Financial Contributions

More work is required to address this issue and, if the CIPM and CIML wished to move further in the direction of a single organization, all Member States would need to be

informed and discussions on the implications take place. Indeed, the former Member States of the OIML would need to make their contributions to the whole programme of work, and not only the programme of work of the former OIML. Moreover, the acceding Member States (former OIML members) could not decide to make a contribution covering only the "legal metrology program".

OIML Recommendations

At present, these recommendations are published and approved by the CIML (where all Member States are represented) and are then endorsed by the Member States of the OIML every four years. As constituted, this function could only be performed by the CGPM of the BIPM. The fact that the CGPM meets every four years would be a major disadvantage unless other means of approval could be arranged. Another, rather unlikely, option would be that the acceding Member States to the BIPM (former Members of the OIML) should agree that such a function could be performed by the CIPM.

Approval of OIML Recommendations by the CIPM may, however, , according to the BIML, jeopardize, the recognition of these publications as the product of an international standards setting organization within the terms of the WTO/TBT agreement. In particular, the BIML points out that decisions on OIML Recommendations made by the CIPM may not conform with some of the principles for the development of international standards, guides and recommendations adopted in the second triennial review of the TBT agreement in 2000.

Review of agreements, commitments and debts

There would also be a need to review the various Conventions, agreements and contracts under public and private law that would need to be transferred by the OIML to the BIPM, as well as the assets of the OIML (including debts) and the arrears of its Member States.

7. Next Steps

The key issue is, perhaps, whether the benefits set out in this report would exceed the undoubtedly significant effort to bring about any new arrangements.

Before making the matter further, the two Directors look to the CIML and the CIPM for guidance.

A. J. Wallard and J. -F. Magana

February 22nd 2008

ANNEX 1

1 TERMS OF REFERENCE

The Presidents of the International Committee for Weights and Measures (CIPM) and the International Committee of Legal Metrology (CIML) request the Directors of the International Bureau of Weights and Measures (BIPM) and the International Bureau of Legal Metrology (BIML) to:

- undertake a review outlining methods of developing and strengthening cooperation between the two organizations, including the possibility of a merger of the two organizations. The focus of this review is to be on meeting the requirements of metrology as an essential tool for economic, technical and societal progress in the 21st century, establishing an International Metrology System and providing an international focus on metrology;
- 2. prepare a joint report on the advantages and disadvantages of different options, such as:
 - a. strengthening cooperation and joint actions between the two organizations;
 - b. the possibility of moving the BIML to the BIPM location in Sèvres;
 - c. the possibility of merging the Bureaux, with or without merging the two organizations;
 - d. the possibility of a complete merger of the two organizations and Directions and staff;
 - e. any other possible options that may emerge as a result of discussions between the two Directors.

The completed report outlining the advantages and disadvantages of each option is to be presented to the Presidents of both organizations no later than February 1, 2008 so that the proposals can be reviewed at the annual BIPM/OIML meeting in March 2008.

ANNEX 2

BIPM Member States (51) and Associates of the CGPM (26)
OIML Member States (59) and Corresponding Members (57)

January 2008

DIDM	OIML	Member States of OIML :	Mamban Ctata - Cit - Bibi
BIPM Members and Associates	Members and Corresponding	Member States of OIML not MS of the BIPM	Member States of the BIP not MS of the OIML
	Members		
Albania	ALBANIA	Albania	
	Algeria	Algeria	
Argentina	Argentina		Argentina
Australia	Australia		
Austria	Austria		
	BAHRAIN		
	BANGLADESH		
D	BARBADOS	D	
Belarus	BELARUS	Belarus	
Belgium	BELGIUM		
	BENIN		
	Bosnia and Herzegovina		
	Botswana		
	BURKINA FASO		
Brazil	BRAZIL		
BULGARIA	BULGARIA		
BULGARIA			
	CAMBODIA		
CAMEROON	CAMEROON		
Canada	Canada		
CARICOM			
CHILE			CHILE
CHINA	CHINA		OTHEE
CHINESE TAIPEI			
CHINESE TAIPEI	CHINESE TAIPEI		
_	Comoros		
Costa Rica	Costa Rica		
CROATIA	Croatia	Croatia	
Сива	CUBA	Сива	
	Cyprus	Cyprus	
CZECH REPUBLIC	Czech Republic		
DENMARK	DENMARK		
	DENIVIARK		Double on Depublic
DOMINICAN REPUBLIC			DOMINICAN REPUBLIC
Ecuador	_		
EGYPT	EGYPT		
ESTONIA	ESTONIA		
	Ethiopia	Ethiopia	
	Fui		
FINLAND	FINLAND		
FRANCE	FRANCE		
I RANCE			
	GABON		
GEORGIA	-		
GERMANY	GERMANY		
	Ghana		
Greece	Greece		
	GUATEMALA		
Hong Kong China	Hong Kong China		
HUNGARY	Hungary		
TIUNGARY			
1	ICELAND		
India	India		
Indonesia	Indonesia		
IRAN (ISLAMIC REPUBLIC OF)	IRAN (ISLAMIC REPUBLIC OF)		
IRELAND	IRELAND		
ISRAEL	ISRAEL		
ITALY	ITALY		
	HALT		
JAMAICA	1		
JAPAN	JAPAN		
	JORDAN		
KAZAKHSTAN	Kazakhstan	Kazakhstan	
INALAKTISTAN			
KENYA	Kenya	Kenya	

BIPM Members and Associates	OIML Members and Corresponding Members	Member States of OIML not MS of the BIPM	Member States of the BIPM not MS of the OIML
Korea, Republic of	Korea, Republic of		
	Kuwait		
	Kyrgyzstan		
Latvia	LATVIA		
Littiniaana	LIBYA		
Lithuania	Lithuania Luxemburg		
Macedonia (FYR)	MACEDONIA (FYR)	Macedonia (FYR)	
MACEDONIA (1 114)	MADAGASCAR	WINGEBOWN (1 TTC)	
MALAYSIA	MALAYSIA		Malaysia
Malta	Malta		
	Mauritius		
Mexico	MEXICO		Mexico
Moldova	Moldova		
	Monaco	Monaco	
	Mongolia Montenegro		
	MOROCCO	Morocco	
	MOZAMBIQUE	WIOROCCO	
Netherlands	Netherlands		
New Zealand	New Zealand		
	NEPAL		
Neguus	Nicaragua		
Norway	Norway Oman		
Pakistan	OMAN Pakistan		
PAKISTAN <mark>Panama</mark>	PANAMA		
1740400	Papua New Guinea		
	Paraguay		
	Peru		
PHILIPPINES			
POLAND	Poland		
Portugal	PORTUGAL		
Romania	QATAR ROMANIA		
RUSSIAN FEDERATION	RUSSIAN FEDERATION		
10000MW1 EDERATION	RWANDA		
	SAUDI ARABIA	Saudi Arabia	
Serbia	Serbia		
	SEYCHELLES		
SINGAPORE	SINGAPORE		SINGAPORE
SLOVAKIA SLOVENIA	Slovakia Slovenia	SLOVENIA	
SOUTH AFRICA	SLOVENIA SOUTH AFRICA	SLOVENIA	
SPAIN	SPAIN		
SRI LANKA	SRI LANKA	SRI LANKA	
	SUDAN		
SWEDEN	Sweden		
Switzerland	SWITZERLAND		
	SYRIAN ARAB REPUBLIC		
	TAJIKISTAN	Tanzania	
Thailand	Tanzania Thailand	Tanzania	Thailand
THAILAND	TRINIDAD AND TOBAGO		HAILAND
Tunisia	TUNISIA	Tunisia	
Turkey	Turkey		
UKRAINE	Ukraine		
	United Arab Emirates		
UNITED KINGDOM	UNITED KINGDOM		
UNITED STATES	United States		
URUGUAY	URUGUAY		URUGUAY
1/	Uzbekistan		.,
VENEZUELA		1	VENEZUELA

BIPM Members and Associates	OIML Members and Corresponding Members	Member States of OIML not MS of the BIPM	Member States of the BIPM not MS of the OIML
VIET NAM	VIET NAM	VIET NAM	
	ZAMBIA		

RED = Associate of the CGPM
BLUE = Correspondents of the OIML