4 HOW WILL THE DEVELOPMENT OF REGIONAL AND LOCAL AUTHORITIES AFFECT INTERGOVERNMENTAL ORGANIZATIONS SUCH AS THE OIML?

Jean-François Magaña, BIML Director

Globalization in legal metrology has been on its way for centuries

Historically in feudal organizations taxation depended on local authorities, on the definition of measurement units, and on the systematic prosecution of fraud-related offences concerning the quality and quantity of products traded. Originally, legal metrology was a consistent system locally within each feudality, using the definition of measurement units as a basis and extending to that of good measurement practices. But the downside of this local consistency was that important discrepancies were witnessed from one region to another. Traders had to travel with their own measures and instruments, and had to deal with significant differences in units and/or in measurement standards from one city to another.

The formation of states, which brought these feudalities together into "merged federations", was accompanied by a number of harmonization measures: the language of the ruling bodies became the national language, currencies were unified and were managed by central government, local taxes on the transit of goods were progressively abolished, and the measurement units in use in the central capital city became the national measurement standards. The prosecution of fraud-related offences concerning the quality and quantity of goods generally remained within the scope of local regulations and jurisdictions. As the centuries passed, each country established its own national measurement system, but local units sometimes survived and were used locally as customary units.

By the end of the 18th Century, the situation of metrology in most countries had already become quite complex. The uniformity and consistency which had existed in the feudalities had sometimes given way, at national level, to the coexistence of national and local units bearing the same name, but having different values. In France for example, one could have to deal with the pound of Paris (the national one), but also with the pound of Bordeaux or of other cities. The local jurisdictions, in charge of fair trading, practiced legal metrology at their level, but no authority was in charge of unifying measurements and legal metrology regulations at national level.

During the 19th Century, the development of energy and technologies resulted in the emergence of industry and in the acceleration of trade. The systems of units were unified in each country, in order to answer the new needs of science, technologies and the economy. These systems were extended to new fields of measurements, giving rise to new units. A singular country, whose scientists and philosophers had cooperated together for decades, made a political decision at the very beginning of the 19th Century to abolish the old unit systems and to introduce a new scientific-based system. In so doing, France anticipated the future needs of unification and consistency and proposed

the metric system to other nations. However, this new system was only generalized when the economy and industry felt there was a real need, some decades later.

The rapid development of national trade during the 19th Century convinced most governments to introduce some degree of consistency into their regulations related to measuring instruments used in trade, thus rebuilding a national legal metrology system. However in a number of countries, and especially in federal states, the prosecution of fraud-related offences and the implementation of legal metrology controls remained the responsibility of local authorities. Legal metrology was then often rebuilt in a bivalent way, where measurement units and measurement standards, and most often technical requirements, were the responsibility of the central authority or government, while the implementation of legal metrology controls was the responsibility of local authorities or governments.

Very soon, the necessity to harmonize measurement standards at international level appeared and this resulted in the adoption of the Metre Convention in 1875. The international situation at the end of the 19th Century (and up to the middle of 20th Century) reproduced on a larger scale the situation which had prevailed nationally at the end of the 18th Century: a fairly good harmonization of measurement units and of measurement standards at international level, but diverging national legal metrology requirements and sometimes even specific custom-designed units.

At the end of World War II, a number of Inter-Governmental Organizations – among which the OIML – were founded. All these Organizations had for objective to set up (by consensus) mechanisms for regulation in fields in which countries previously acted individually: international relations (UNO), health (WHO), alimentation (FAO), development (UNDP, OECD), finance (IMF), trade (GATT then WTO), etc. The OIML's objective is to contribute to setting up a *Global Measurement System*, as described in the report published by CIML Immediate Past President Knut Birkeland.

Everything could have continued to progress within the OIML, as in other Organizations, in a steady and foreseeable way. Based on the legitimacy of states and on their competence, the OIML developed model regulations on the basis of which Member States would voluntarily harmonize their national regulations and recognize each other's measuring instruments and measurement results. In this way, the dialogue between states would have been a simple way to provide the intended regulations, if the end of the 20th Century had not brought about a number of new transformations which also had to be taken into account.

The construction of new economical and political blocks

In the second half of the 20th Century the industrial, commercial and financial structures developed in a transnational way, having developed in a national way during the 19th Century. This globalization is sometimes considered as a totally new phenomenon, but in fact it is a simple and logical continuation of the globalization pattern started one century before, which led these structures to develop naturally from local to national level. This globalization is of course now considerably accelerated by the development of information technologies.

During the 19th Century, local governments found themselves increasingly unable to regulate their respective economies and to face this growing trend towards globalization, and national governments had to take over this mission. Today, in a similar way, individual states are no longer able to achieve the required economic regulation and they are organizing themselves into regional structures (political and/or economic): the European Union, APEC, SADC, etc.

This construction is still under development, and in particular has neither abolished nor politically merged the individual states - which are in fact the only entities which may legally participate in intergovernmental Organizations such as the OIML. However, in the fields of activity of these Organizations, the Member States are also transferring an increasingly significant part of their power to the regional structures, which deal with support to the economy, technical regulations, taxes, social protection, etc., and which are players in the fields covered by the International Organizations, without being able to be members thereof.

It is possible to come to a consensus on a model regulation within the OIML, while a diverging model regulation would be adopted by consensus in a regional structure. As regional structures are not necessarily bound by the OIML Convention, they may issue diverging regional regulations and make them binding for their Member States. Those OIML Member States which are also Members of a regional structure may therefore lose a part of their autonomy and scope of responsibility, and may not be able to fulfill all their obligations towards the OIML. This power transfer from individual states to regional structures is a loss for the OIML, if the regional structures do not themselves participate in the OIML.

The fragmentation of states

When the United Nations was founded in 1945, there were initially 51 UN Member states. Today there are 189.

From the middle of the 20th Century onwards, an explosion was observed in the number of independent states, sometimes of a small size. This evolution resulted from a considerable demand for a return to specific cultural identities. A number of states which existed before the middle of the 20th Century were split into several smaller states corresponding to these cultural identities. Other states evolved towards a decentralized organization, in which a large autonomy was granted to local authorities. Local parliaments were sometimes installed, with quite far-reaching powers. Many states evolved towards a more federal organization, or split up into different states.

A question may be raised when states are fragmented into several smaller independent states: will technical structures be viable in each of these independent states? Is it appropriate - and possible - to develop Metrology Institutes and Legal Metrology Institutes in each of the smaller states which are similar to those which existed in the original country? What is the minimum population or gross national product necessary to be able to afford such institutes, and what capacity may be envisaged for them?

Federal organization raises a number of questions to Organizations such as the OIML. In the same way as the regional structures mentioned above do not have the status of a state and are not Members of the Organization, neither the local structures in a

decentralized state nor the states of a federation can individually participate in the OIML, while at the same time their increasing power may raise new technical barriers to trade.

The development of these federal or decentralized schemes transfers power to the local structures. Does this transfer, added to the transfer of power to the regional structures mentioned above, contribute to decreasing the power of the states? Shall we in the years to come, see most regulatory activities disappear at the level of states and be transferred partly to regional structures, partly to local authorities? What would then be the meaning of intergovernmental treaties such as the OIML Convention?

The trend towards privatization

Another evolution affects the role of the states in legal metrology: the present trend to privatize or to delegate the technical tasks of legal metrology to private bodies. Other lectures in the 2020 Seminar present the consequences of this evolution on the role of the states, but the consequences on the international activity of legal metrology may also be important.

A number of bodies in charge of important legal metrology tasks such as type approval and initial verification, are already private bodies. The technical competence required for OIML work for the most part lies in these private bodies and they play an increasing role in the Member State representations in the OIML structures. Is the OIML moving towards a more specialized allocation of competences and work, where the Member States would be essentially present in the Conference and where the Committee would essentially be composed of increasingly private technical bodies?

Considering the perspective of several states sharing resources, any institute that owns costly equipment used by several states will enjoy, *de facto* if not *de jure*, competence in legal metrology in each of these states.

In this evolution towards privatization or delegation to private bodies, it could happen that a given private body be designated for type approval by several countries, that several private bodies from different countries merge or take on mutual shares, or that a private body becomes a major shareholder in other countries' bodies.

The international technical control bodies, who are active in the fields of security control, product certification, bulk quantity certification and quality systems certification, and who already provide measurement and calibration services, could quite rightly wish to play a specific role in national and international legal metrology.

Such evolutions, which are simply the continuation of the ongoing increasing tendency towards globalization, raise the crucial question for the OIML of the relevance of having formal relations with private transnational or international bodies, and having such bodies play a specific role in the global legal metrology system that the OIML has to develop.

Which evolutions can the OIML expect in this context ?

The above considerations do not question the utility of the OIML. The need for regulation mechanisms (at international level), compatible metrology systems, and a

Global Measurement System, become more and more evident as globalization progresses.

A possibility was conceived some years ago by observers from outside the OIML: to consider the OIML as a "plain" international standardization body and to transfer most of the OIML's work to the general international standardization bodies. But this would be an error. Indeed, the OIML deals with technical issues using methods close to those employed by standardization bodies, but the essential purpose is to harmonize regulations and legal requirements, and the legal aspects - the issues related to law implementation - are of major importance in the Organization's work, including that which seems to be of a purely technical nature. In addition, such an evolution would be contrary to the goals and efficiency of the OIML, as the commitment of Member States would disappear. The strength of the OIML, as a harmonization body, directly stems from the legal authorities of the member countries.

The Members of the OIML are states, and can legally only be states. In the future it will be necessary to improve the implementation of the obligations specified in the OIML Convention, and to make sure that these obligations are taken into account by the Regional Organizations as well as by the local authorities.

This requires a constant dialog between the OIML and the Regional structures in order to take account of their policies, to answer their needs and to encourage them to make use of the OIML in their policies. It is not foreseeable under the present Convention that regions become members of the OIML and participate in the formal process of decision making, nor in the adoption of Recommendations. On the other hand, regions could be more formally associated in the preparation of the OIML Action Plan and priorities. To accomplish this, it is essential that those regions that are already structured become or continue to be partners of the OIML, and that the OIML encourage the development of structures in those regions which are not yet organized.

An example of relations between regional structures and Intergovernmental Organizations must be noted. In the World Trade Organization, the members are states. However, the members of the European Union decided to delegate their powers in negotiations as well as their votes, to the European Commission. This is a very efficient way to better involve a Regional Organization in international work, and benefits at the same time the Regional Organization, its Members and the International Organization. This shows that establishing links between an International Organization and a regional structure is not only the task of the International Organization, but also that of the participating states. The development of relations between the OIML and Regional Organizations will not be done against the Member States' will, but in harmony with them.

To prevent subnational authorities from drawing up local regulations which diverge from OIML Recommendations is a difficult task for the OIML and can only be done by each Member state. The role of the OIML may only be one of monitoring, communicating information, and maintaining updated databases on national and local regulations. This function is an extension of the role of the OIML Documentation Center mentioned in the OIML Convention. This requires a very important reform of the principles of this Documentation Center, in particular using new information technologies.

The information society

A phenomenon which has appeared over the last few years may play a prominent role in the political and social evolution at international level, and in the future of International Organizations.

Globalization advances using the communication tools that technology and the economy provide it with. In the 19th Century, such communication tools were the railways, newspapers and telegraph. In the 20th Century, airplanes, radio, television and telephone were used and now - since the last few years - the Internet. These are the tools for the globalization of economies, trade and political organizations. They have different geographical ranges and have successively permitted globalization at the level of countries, then continents, and now worldwide. However, the use of these tools is not restricted to industry, banks and governments, now they are readily available to the general public. After a short period of diffusion and appropriation, these tools allow public opinion to be globalized, i.e. they allow the emergence of public opinion within their specific geographical range: a country, a continent, or the world.

Today we can observe the beginnings of an international public opinion, whose expression is just starting. International associations are expressing general concern about environment protection, durable development, food safety, and the need for mechanisms to regulate the globalization process. This international public opinion is still anarchic, it has no clear representation, it may not yet be democratic, but it is appearing and growing, it has a notable influence on national public opinions, and it will probably be a major political fact in the coming years.

This international public opinion needs counterparts to dialog with. Political counterparts are governments, collectively (G8 summits) or individually. But it also needs to have a dialog with Intergovernmental Organizations, who work on specialized issues on behalf of governments. It will be essential in the future that International Organizations be as transparent as possible for public opinion, that they provide all necessary information about their objectives and their work, and that they listen to the needs and concerns of this international public opinion.

Until now, the OIML did not have any direct communication with the public, all dialog went via the CIML Members. In the future, some direct communication on the part of the OIML with the public has to be envisaged, and a policy must be developed by the CIML for this. The awareness of governments on metrology and legal metrology will depend on the awareness of the public, and the OIML must help governments to answer the needs of the public in metrology.

Discussion

Comment: What is the situation with regard to the European Union?

Reaction: There is a general policy governing the relationship between the OIML and regional organizations (and not only the EU). When a region develops metrological regulations, the OIML must have close links with that region. There is perhaps not a unique way for developing and maintaining such links. In the case of the EU, the OIML must maintain links with the European Commission and with the Member States of the EU which must discuss between themselves the best way for Europe to be associated with their obligations as OIML Members. A solution has been implemented at the WTO level: for certain matters, a Member of the European Commission speaks on behalf of EU countries. But other approaches may be envisaged.

Comment: The world is perhaps not going in the direction of a worldwide government, but it is going in the direction of specialized worldwide organizations (WTO, WHO, OIML, etc.). Concerning judicial power, its internationalization is developing as well, which does not mean that each country will have the same laws, but that a supreme worldwide court might exist to solve problems including those relating to the fairness of international commercial exchanges, thus with an impact on OIML activities.

Reaction: This is of course an evolution which has to be carefully observed by the OIML.

Comment: In his introductory presentation, the CIML President evoked the possibility of a single worldwide center for metrology (including legal metrology) and accreditation. What is the situation about this?

Reaction: There is a global coherence between metrology, legal metrology and accreditation and in any case, the actions of the three international bodies that are competent in these fields must be closely coordinated. Today, their status is different mainly because national accreditation bodies often have a private or commercial status. A merger of ILAC and OIML cannot be envisaged in the short term. However it is possible not only to have close links between the three organizations but, why not, to decide on a ‘geographical’ rapprochement so that their bureaus/secretariats are located on the same ‘campus’ which would allow daily contacts. If we consider only the BIPM and the OIML, a merger would be possible owing to the intergovernmental status of both organizations.

Comment: It should be noted that in certain countries, there is a unique national body for metrology, legal metrology and accreditation. This permits close relations; however, the goals of the three activities and especially their ‘spirit’ are different.

Reaction (by the CIML President):

The concept of credibility in measurement is based on good legislation, market surveillance, traceable measurements, measuring procedures, quality systems, etc. which means that the three organizations responsible for these aspects at the international level should work more closely together and have a kind of common 'roof' if it is not possible to merge them into one body. An additional argument is that a unique organization (or three well coordinated organizations) would offer a better profile to governments and to the public.

Comment: Accreditation deals with conformity assessment. If type approval or verification in legal metrology are considered just as conformity assessment procedures, then it is possible to include them under the 'roof' of accreditation. But then legal metrology as such might disappear.

Reaction: This introduces the question 'What is legal metrology?'.