

## SEMINAR 2020

## Progress and our genius for compromise

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Metrological regulation is done largely by the control of measuring instruments and so it is concerned with the precise disciplines of metrology and engineering. In the development work of the OIML we also find a quite different discipline that depends on judgement and a long-term view of progress rather than a precise solution. In the global harmonisation of legal metrology there are compromises to be made. The acceptable solution is not always the best solution, but it is necessary to find the approach that will meet people's needs and aspirations. It is then possible to move forward, to make some progress.

The scope and power of this method is a major asset that we should be aware of. It is embedded in the Convention and procedures of the OIML.

The theme of this paper is to be the talent we have for reconciling many different national and regional perspectives in our work and the importance of understanding certain issues which could impede our progress. In this case our talents include not only personal abilities and good-will but also our collective, constitutional and procedural assets, and practical engineering logic that can sometimes make the right solution fairly obvious.

We must not ignore the scientific foundations of our work, and the need for technical investigations and development; but it is fair to say that progress in the OIML depends on *agreement*; that is agreement between Member States. One can see that there is already a high level of agreement on general objectives, but it is not easy to agree on how to attain the objectives. The steps on the way are quite complex. To reach agreement on a complex proposition there has to be a good understanding of the issues, usually involving technical, procedural and also "consequential" factors. Under the heading of consequences we should include, for example, the effects on manufacturers, traders and consumers - everyone involved needs time to resolve their national economic and commercial priorities, and, we hope, the needs of their citizens.

So let us examine the means we have for making agreements and see what we might do to improve them. Agreement depends on *consensus*, together with *confidence* in the process, and a genuine *commitment* to implement decisions.

Firstly, agreements cannot be made by votes; there has to be a genuine meeting of minds - a consensus.

There is also a *process*. We have the means (the machinery) to take what may be no more than an idea from one person's mind and develop it through the structures and procedures of the organisation until we have a global agreement, established in writing. This is quite a remarkable process, and its ongoing success is a major achievement, especially for the facilitating role of the Bureau; but it cannot work well unless all participants are *confident* in it. We should not be content with structures and procedures until they engender confidence.

Then there must be commitment to the outcome. We are not involved in an academic exercise. Legal metrology is above all practical. Decisions that we make can affect the lives of ordinary people, everywhere. But agreements that do not lead to action may be worse than useless. Without a general commitment to implementation there is not only a denial of benefits to the citizen but also the possibility of establishing unfair advantage. These factors can lead to a justifiable reluctance to reach agreement.

So we need consensus, confidence and commitment.

We should have the courage to examine some of the problems or deficiencies that may inhibit *confidence* in the process. Then we should examine how things work out in practice, given time, established procedures and good will. What we find is encouraging, so much so that it should give us *more* confidence in the outcome and thus *more* commitment to the work.

In a seminar concerned with the future of legal metrology, we should keep in mind that there are two different dimensions or directions to the development work in the OIML, which can broadly be described as technical and procedural. On the one hand we develop Recommendations for control of particular measuring instruments or measurement processes, and on the other hand we develop the tools and machinery to reach agreements, and procedures for implementing them. Sometimes we find that agreement on procedural developments is more difficult, possibly because at this stage in the development of legal metrology, it is more important to us.

Deficiencies in the process may arise not of course from human failings but from the realities of culture, politics, history and geography, and often from our eagerness for progress. Occasionally we see:

- Inadequate consultation;
- Cabalistic working groups;

- Apparently “unequal” votes;
- Asynchronous progress;
- Failures in implementation.

Adequate consultation is necessary, at both national and international level, but it is not easy, even in the days of e-mail. However, it is a vital part of reaching a real consensus which carries the confidence of all parties. We must accept that the time involved is considerable, even when there are no unnecessary delays. In general, all parties should have an opportunity for consideration and comment and then to examine the comments and suggestions of all the others. We already have rules to this effect in the *Directives for OIML Technical Work*. Whatever we do to streamline procedures, we should not forget that confidence depends on open debate.

However, complex technical solutions do not generally come from open debate but from hard work in small teams. That is why we have working groups, where individuals can forget national priorities and concentrate on the creation of practical proposals. How far they should go before presenting proposals to their international committees is a matter for judgement, but it seems essential that all participating Member States should be kept informed of progress and be able to contribute as they wish. Unofficial networks can seem to be very effective, but they may be driven by national rather than technical priorities and they will be ineffective in the long-term if all parties are not confident in the outcome.

The term “asynchronous progress” refers to the fact that national and regional legislation must often be developed in a timescale appropriate to local priorities and therefore this is done independently of the OIML work upon which it should ideally be based. This is not always a bad thing. The world of technology and business moves on, and independent economies must react to it in accordance with the best available information, which may or may not be available in the form of the latest OIML Recommendation. Thus the OIML Recommendations must have an ongoing relationship to national and regional legislation. A prime example of the process may be found in the necessarily parallel but asynchronous development of the EU Measuring Instruments Directive (MID).

I have chosen what is possibly a contentious issue, to be the subject of a more detailed discussion. For convenience I call it the problem of “unequal votes”.

Unequal votes may appear to be impossible. We have almost an excess of democracy - one country one vote and usually several stages of voting and approval. However, votes appear to be “unequal” if we suspect, for example, that one country, one policy one vote, is effected as: one region, one policy, 14 votes. Our North American friends will recognise this phenomenon, and Europeans colleagues *should* recognise it. As an inter-governmental organisation, the OIML necessarily works

at the level of sovereign states. The notion of equality among Member States is very important to us. For various reasons it is acceptable, some would say essential, to have equality in this forum, even when there are manifestly huge differences in the economic, demographic and geographical size of the Member States. Where there could be a problem however, is the situation where some of the sovereign Member States find themselves constitutionally linked, so that while retaining their separate votes they might be effectively bound to one policy by common legislative measures. You will of course know that I am talking of the natural concern that other industrialised economies have about the development of the MID in Europe. There may in fact be no real problem here, but it is an issue of fairness and common sense that could threaten our common cause if it is not explained or resolved.

I feel bold enough to raise this issue because, firstly I think that there is some obligation on the Europeans to consider an issue about Europe that concerns their international colleagues, and secondly I see that in practice there are many remedial factors in the situation and we find that the outcome is not as we may have perceived it to be. Thirdly it raises so many other points about how we work that it serves as an agenda for a discussion of the constitutional and procedural strengths of the OIML and a long-term approach to progress.

I am not advocating or contemplating any constitutional change. We can see plenty of examples in the world as a whole where, in spite of there being much greater need and real urgency, the lawyers and political scientists have failed to solve constitutional problems. In Europe we have many ingenious constitutional developments, including QMV - qualified majority voting, but these things are *hugely* complicated and still evolving after *fifty years*. Constitutional amendments are not for us here, certainly not in this forum.

That leaves us broadly with three other angles to consider: legal, logical and practical. Having in mind that the answers should all be consistent, and that we have very limited time here, I shall leave aside the legal enquiry for now, consider briefly the logical approach (to see if there may be a *real* problem) and concentrate on the practical approach. We will be encouraged to find that there are so many practical courses of action, designed to facilitate progress.

Logically, the “unequal votes” problem should only be a real problem if there are practical circumstances where Member States of the EU would be legally constrained by a European Directive to a point of view that is against their own national priorities. If this is not the case then they can make their own policy along with any other Member State. So the question is: could a Member State support a Recommendation that is inconsistent with an existing Directive?

Logically the answer is Yes; because we are talking of a *Recommendation*, to which there is, according to Article 8 of the Convention, a moral obligation for implementation *where possible*. That gives exactly the flexibility we need. Note that in practice it is a flexibility over *time*; it turns the problem of asynchronous development into an advantage. If national and regional legislation must logically *follow* the OIML Recommendations then, by the nature of development, there will be differences and scope for improvement at each stage.

In the case of the MID, the relevant OIML Recommendations were, quite rightly, the starting point for the specific instrument requirements, but the regulatory procedures have been developed and the performance requirements refined to some extent. This was necessary, where for example, performance requirements were not yet adequately defined by OIML Recommendations. Europeans will not be inhibited from contributing to further improvements developed in the forum of the OIML, which, in turn could eventually be incorporated into European legislation. (Incidentally, in some cases this can be done by a committee procedure and Commission Directives, avoiding the need for negotiating amendments to the main Directive.)

So, by simple logic in application of the most basic principles of the OIML Convention, we can see that "unequal votes" are *probably* not a real threat to anyone; and, moreover, we have other, more powerful and practical ways of dealing with this kind of problem:

- Common sense;
- Mutual respect;
- Individual responsibility;
- Good faith;
- Engineering solutions;
- Scientific facts;
- A long-term view; and
- Common objectives.

We should look at the ways we work to see how some of these factors are applied, and this will, incidentally, lead us to a view of where we are going - where will legal metrology be in 2020.

First there is a matter of common sense and good faith. A rather unusual, perhaps unique feature of the OIML Convention is that Member States "shall be *morally* obliged to implement [Conference] decisions as far as possible." What is the legal status of a moral obligation? I think that a moral obligation is less binding but more useful than a legal obligation. Without a legal requirement or a rigid timetable for implementation, Recommendations can more easily be developed to the point where they are universally acceptable and yet still achieve the necessary level of harmonisation in the long-term. In effect they specify the performance requirements and define the *direction* of development.

Generally speaking, if we decide where we are going, then we are more likely to make progress!

The work of the OIML is intrinsically linked to progress. Long-term development goes on regardless of local progress or national priorities. Technical Committees work to develop and revise Recommendations in a well-defined framework that is, in principle, quite independent of legislative projects in individual Member States and regions. As we have seen it is an asynchronous process which may seem inefficient to an impatient or legalistic mind. We can see it as natural that there should be supportive developments at various levels and regions, that are not exactly in phase. Regional development is now fully supported by the OIML - it is a part of the process.

Thirdly we have respect for and confidence in each other. Individuals can always have in their mind a right or logical solution, and this can lead them to the right way of applying national policy; indeed it enables them to contribute to the development of national policy. The normal everyday development procedure of the OIML provides a framework in which these things can happen. A well-structured logical document has a power of its own - national and regional priorities have relatively little influence when the long-term answer is fairly obvious and when the constitutional commitment is one of principle rather than legal observation. In this way individuals and Member States can function as independent voices.

There is also scope for creative compromise at a more technical level. A classic example is the concept of optional classes for specifying limits of error for measuring instruments. In general, where there is a range of requirements or where it is possible that performance will be enhanced by technological development, then the role of an OIML Recommendation is to provide the *framework* for specification and control of instruments, rather than a rigid prescription. The task then is to define a practical series of accuracy classes upon which Member States can base their legislation and into which manufacturers can aim their products. In effect we aim for harmonisation of development as a means towards harmonisation of regulation.

Technology is increasingly helpful when we seek scope for practical compromise. Software is powerful and memory is so cheap, that flexibility can be built in at very low cost. Thus it can be acceptable to require that a measuring instrument type shall have a *range* of functionality, enough to satisfy diverse national requirements, without placing a significant burden on the manufacturers. In time we may find that the national requirements are reconciled. One approach may become the norm, but in the meantime the OIML Recommendation will have been serving both or several parties, providing the means to move forward in the most logical direction.

In general our task is always to have a long-term view, to look further ahead to what is really the most efficient solution. Jean Monnet, who inspired the creation of the European Union, said that “major changes can be achieved if men’s minds can be directed to the point where their interests converge. That point always exists, but it takes trouble to find it.” If we look far enough ahead we can find it. In nearly all of the points I have made in this paper, time is an important factor. We need a long-term view.

The OIML itself could be viewed as a long-term project. “Long-term” because of the factors discussed above, and indeed a “project” because it has well-defined objectives which may ultimately be more or less achieved. To see where we are going in terms of international legal metrology, one might look at the position in some of the Member States where there is already an established structure of consistent metrological regulation. However, one might also find that, as Mr. Birkeland said of many of the Member States, there will still be inadequate co-ordination between the technical disciplines and administrative groupings.

Ultimately, the OIML will need to go on working in three areas:

- To maintain the established operational structures and documentation;
- To develop new machinery in response to the needs of continued technical, economic and social progress; and
- To respond to the continued evolution and rationalisation of government.

Perhaps in this era of globalisation we are at the peak of activity and by 2020 the workload will be declining or almost done. It seems likely that on a scale related to achievement of objectives, we can predict a natural growth curve which will be something like the curve shown in Fig. 1 and the corresponding workload could then be represented by the differential of the curve in Fig. 2.

So there is a broad peak of activity while all the main global objectives are achieved and this is followed by a lower workrate corresponding to ongoing maintenance

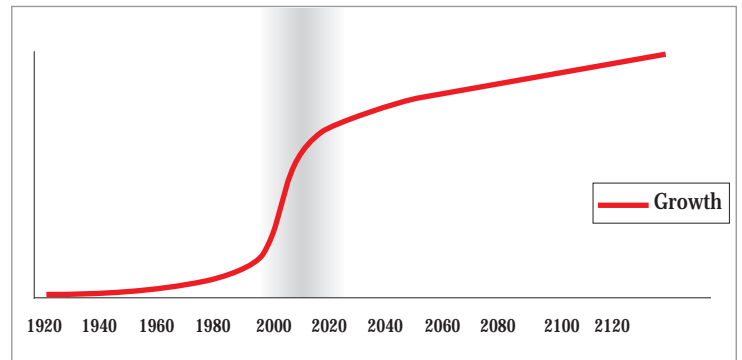


Fig. 1 Predicted natural growth curve

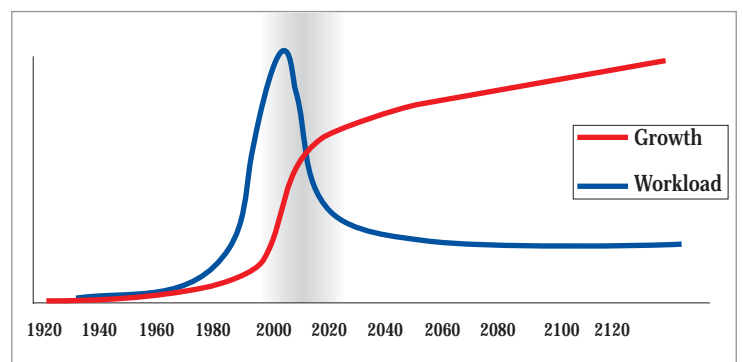


Fig. 2 Predicted natural growth curve and corresponding workload

and responding to changes. This is the simplest curve and even so it is not easy to quantify, but it is nevertheless useful in understanding what is likely to happen. We should think hard about the overall timescale and where we are now, on this curve.

I think there is still a long way to go, but in the meantime we should have:

- Confidence in our talent for reconciling national interests;
- Courage to address deficiencies; and
- Commitment to long-term progress. ■