



Legal metrology training

Metrology training in general - and legal metrology training in particular - present a number of characteristics which render their approach difficult. These characteristics are mainly:

- the wide variety of metrology applications: mechanics, electricity, electronics, acoustics, chemistry, atomic energy, biology, etc.;
- the rapidity of developments in scientific and technical fields, which require both training and training facilities to be constantly updated;
- the wide range of activities and responsibilities (research, maintenance of primary standards, calibration, type examination, verification, law enforcement, market surveillance, etc.), which necessitate various levels of education (scientists, engineers, inspectors, technicians, etc.); and
- the fact that in any given country, the number of persons requiring training at each level of education and for each application may only be very small, thus rendering permanent training facilities expensive and difficult to manage.

All these facts explain why OIML activities aimed at developing and harmonizing the content of legal metrology training have to date progressed so slowly, and have practically been limited to the publication of a basic curriculum for legal metrology personnel (OIML D 14, 1989) and of a directory of existing training systems with an associated bibliography (OIML P 2, 1987). These two publications are now at least partly out of date and their revision should start soon. A number of informative papers have also been published in the OIML Bulletin.

However, things are now changing and significant progress has been made in certain countries and regions, especially offering training possibilities to developing countries.

Just as examples, for a number of years the *Deutsche Akademie für Metrologie* has organized training seminars on

specific legal metrology matters, in English. In France, the *École Supérieure de Métrologie* reopened last year and will offer high level training in industrial and legal metrology, in French and in English. Similar situations now exist in other OIML Member States.

The difficulty resulting from the low number of trainees at the national level may be alleviated for example by using shared training facilities, a solution which could be advantageously adapted at regional level. In the same way, the training of inspectors or technicians from developing countries may be facilitated by the "train-the-trainer" approach, as developed by the Australian National Standards Commission, whereby legal metrology experts are specially trained in a developed country before passing on their knowledge in their own country.

The development of new communication techniques also contributes to facilitating legal metrology training: videos or CD Rom's on the evaluation or verification of measuring instruments may be elaborated in certain developed countries, translated into different languages and used in developing countries. The Internet will offer increased possibilities, for example the use of virtual instruments associated with interactive software.

All these initiatives that are developing at national and regional levels must nevertheless be coordinated in order to avoid excessive duplication of efforts and divergences in training approaches. For example, training on the evaluation and verification of measuring instruments should be in line with the provisions of the relevant OIML Recommendations. This is why the "accreditation" or "certification" (some use the word "validation") of legal metrology training is becoming an increasingly important discussion topic within the OIML.

This issue of the OIML Bulletin offers Australian views on this problem, which will very shortly have to be carefully dealt with within the OIML. ■