

WELMEC 4  
(Issue 4)

# WELMEC

European cooperation in legal metrology

## Type Approval Agreement



February 2003

**WELMEC is a cooperation between the legal metrology authorities of the Member States of the European Union and EFTA. This document is one of a number of Guides published by WELMEC to provide guidance to manufacturers of measuring instruments and to notified bodies responsible for conformity assessment of their products. The Guides are purely advisory and do not themselves impose any restrictions or additional technical requirements beyond those contained in relevant EC Directives. Alternative approaches may be acceptable, but the guidance provided in this document represents the considered view of WELMEC as to the best practice to be followed.**

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# **Introduction to the WELMEC Type Approval Agreement**

## **Foreword**

WELMEC (European Cooperation in Legal Metrology) is at present a collaboration among the national authorities responsible for legal metrology in all fifteen countries of the European Union plus Iceland, Norway and Switzerland of the European Free Trade Association (Members) and also Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Rumania, Slovakia and Slovenia (Associate Members with signed Europe Agreements).

In 1993, when WELMEC was a collaboration among the national bodies responsible for legal metrology in all fifteen countries of the European Union plus Iceland, Norway and Switzerland of the European Free Trade Association the WELMEC Committee decided to seek to reduce barriers to trade in measuring instruments by preparing an agreement which would remove the need for multiple testing for the purposes of type approval against various national legal requirements. This agreement is based on OIML Recommendations and it represents a clear declaration of intent to grant approvals with a minimum of examination and testing where an instrument has already been granted approval by one of the signatories.

This publication of the Type Approval Agreement, Issue 4, includes amended Annexes and an extension to the validity as well as a description of the background and operation of the agreement. It also includes the full text together with the list of signatories.

WELMEC Secretariat  
February 2003

## **Background**

The Directive 90/384/EEC on non-automatic weighing instruments came into operation on 1 January 1993, highlighting the lack of equivalent harmonising legislation in Europe for other categories of measuring equipment. These remain subject to national regulations which differ from country to country in their scope and their technical requirements.

A Measuring Instruments Directive covering a specified list of instruments is now being prepared under the New Approach. This will have a wide scope and will make use of various combinations of modules from the Global Approach for the purposes of ensuring compliance of instruments with both general and specific essential requirements. In September 2000 the Commission of the European Union presented a "Proposal for a Directive of the European Parliament and of the Council on Measuring Instruments" (Brussels, 15.09.2000, COM(2000) 566 final, 2000/0233 (COD)) for the decision taking process within the European Union. Implementation of this Directive may still be several years away, therefore the need for the WELMEC Type Approval Agreement as an interim arrangement still remains.

Meanwhile, there is a growing assumption under European law that if a product has been tested and placed on the market in one Member State it should enjoy free movement throughout the European Economic Area without further intervention, unless there are over-riding safety considerations.

Against this background the WELMEC Committee has discussed since 1993 how technical and administrative barriers to trade in measuring instruments might be reduced or removed.

## **The International Organisation of Legal Metrology**

The International Organisation of Legal Metrology (OIML) prepares through its Technical Committees international Recommendations covering a wide range of measuring instruments. The aim is eventually to include test procedures and model report forms for all Recommendations to facilitate harmonised testing and a consistent presentation of results.

OIML has also introduced a Certificate Scheme under which member countries of the Organisation may issue certificates of conformity to the OIML Recommendations, once these have been formally adopted by the OIML Committee. While there is no obligation on other OIML member countries to accept such certificates, they may be presented by manufacturers as evidence of conformity with the requirements of a Recommendation for the purposes of type approval.

## **History and Structure of the Type Approval Agreement**

Following extensive discussion in 1993 the WELMEC Committee considered that OIML Recommendations could form the basis of a recognition agreement for type approvals within Europe. This agreement consists of a clear declaration on the part of the signatories of their firm intention to accept conformity with an OIML Recommendation as the basis for a national type approval with little or no further examination where the instrument has already been granted approval in another signatory country.

It can be seen that the agreement will open up an effective single market when two conditions are met. In the first place an instrument must have been granted approval by a national type approval body so that it can be legally used in that country. Secondly, the type approval body must issue a statement of conformity with the relevant OIML Recommendation or draft Recommendation. This statement may be in the form of an OIML Certificate. It is envisaged however that the agreement can operate on the basis of draft Recommendations approved in a postal vote by the International Committee of Legal Metrology in which case the statement may be issued in an alternative form.

The full text of the agreement is given in Appendix 1. The agreement includes a short background note (based on 1993 requirements), followed by a description of the agreement and its operation. This includes (paragraph 7) the commitment by the signatories to issue national type approvals and it describes additional information about the testing of instruments (paragraphs 10 and 11) which must be included in test reports. There is also a reserved right for the signatories to perform further tests or examinations where these are necessary to establish conformity with specific national non-metrological requirements (paragraph 13). Paragraph 14 deals with the resolution of disputes, and there are provisions for termination, amendment and renewal of the agreement (paragraphs 16-18).

The agreement includes three annexes. The first of these lists the OIML Recommendations which are covered by the agreement. Annex 2 is a list of the national type approval bodies which are eligible to issue statement of conformity which will be accepted by the signatories, who are listed in Annex 3.

### **The Signatories**

The agreement was originally signed by representatives of 6 countries at the WELMEC Committee meeting in Borås, Sweden on 28 September 1993. Since then the list of signatories has grown steadily. With the addition, in May 1994, of Austria and Spain the document has now been signed on behalf of the national bodies responsible for type approval services in all fifteen countries of the European Union plus Iceland, Norway and Switzerland of the European Free Trade Association.

### **Amending and Extending the Agreement**

Since its inception in 1993, it has been clear that the agreement, if successful, could be amended to cover other measuring instruments. The agreement, which originally covered five automatic weighing instrument types, now includes fuel dispensers for motor vehicles (liquid other than water), direct mass flow measuring systems for quantities of liquids and multi-dimensional measuring instruments. These additions were achieved by amending the Annexes to the agreement in September 1995 and June 2002. If in the future further instruments are included and the responsibility for type approval of particular instruments does not rest with the existing signatories of the Agreement then additional bodies may need to be included.

The desirability of extending the agreement further and in particular the question of timing would be considered in the light of experience gained with current categories of instruments. Meanwhile, the principles on which the agreement is based should facilitate the acceptance of test results for the purposes of type approval of all measuring instruments.

Finally, it is important to remember that the WELMEC agreement was only intended to be a temporary measure, pending the negotiation of the Measuring Instruments Directive. Such a Directive would invalidate the agreement for those instruments included by creating a genuine single market and replacing national type approvals with EC approvals.

Thus it was agreed in September 1999 to extend the agreement until the time the Measuring Instruments Directive comes into force.

Full Text of the  
**WELMEC Type Approval  
Agreement**

last amended June 2002

## TYPE APPROVAL AGREEMENT

### Background

- 1 The Directive 90/384/EEC on non-automatic weighing instruments came into operation on 1 January 1993. From that date non-automatic weighing instruments may be placed on the market and put into use throughout the European Community on the basis of a single type approval granted by a notified body in any EC Member State. This arrangement will be extended to include EFTA countries on the establishment of the European Economic Area.

*[EEA Agreement is now in force and covers all EU and EFTA countries with the exception of Switzerland]*

- 2 Other measuring instruments will continue to be subject to national type approval in each country. A further New Approach Directive is under preparation. This further Directive is also expected to introduce EC Type Approvals for some of the measuring instruments covered within a few years.
- 3 Meanwhile, a number of OIML Recommendations have been published or have reached a final draft. These include several Recommendations with which individual countries are able to align their own national requirements.
- 4 OIML has introduced a Certificate Scheme, under which Member States may issue certificates of conformity with OIML Recommendations. These certificates may be accepted by other countries as evidence of conformity for the purposes of type approval, although no commitment to accept them may be assumed.
- 5 Following discussion, the members of WELMEC considered that OIML Recommendations could form the basis of a recognition agreement for type approvals within Europe. This agreement would go further than the OIML Certificate scheme, because the signatories declare their firm intention to accept statements of conformity from participating type approval bodies and by including specific draft OIML Recommendations before they are formally ratified at a meeting of the OIML.

### The agreement

- 6 The measuring instruments to which this agreement applies are those which conform to the OIML Recommendations and draft Recommendations listed in Annex 1.

*[Subsequently amended in September 1995 and June 2002 to include additional OIML Recommendations]*

- 7 Annex 2 lists the bodies able to grant original national type approvals and to provide statements of conformity with the relevant OIML Recommendations on the basis of tests carried out by themselves or under their direction. The signatories to this agreement (Annex 3) will issue a national type approval on the basis of a national type approval and statement of conformity with the relevant OIML Recommendation issued in accordance with the terms of this agreement by one of the bodies listed in Annex 2.

*[Subsequently amended in September 1995 and June 2002 to include notes as to the applicability of the agreement in relation to particular measuring instruments]*

- 8 It must be clearly stated by the body granting the original type approval, on the type approval certificate or in a separate statement of conformity, that the instrument in question conforms completely to the relevant OIML Recommendation or draft Recommendation.
- 9 Tests of conformity will be performed in the laboratory(ies) designated by the body granting the original type approval. The laboratory(ies) chosen must observe the principles established in international guidelines on testing (in particular EN 45001).

- 10 When two or more laboratories have been involved in the testing procedure, the test report(s) shall indicate the list of tests performed by each laboratory. In the exceptional case where a manufacturer or his representative has performed certain tests, this must be clearly indicated in the test report(s).
- 11 In principle, all the type approval tests should be performed on the same instrument (or several if requested) without adjustment during or between the tests (except as required by the test procedure or by using the means available to the user). If this is not the case, the test report must indicate:
- in the event of an adjustment or an intervention,
    - \* the reason for the adjustment or intervention
    - \* the nature of the adjustment or intervention
    - \* a list of the tests performed before the adjustment or intervention which were not performed thereafter;
  - in the event that all the tests were not performed on the same instrument, the list of the tests performed on each instrument. In the case where the instruments were not exactly the same, details of the differences must be given.
- 12 A type evaluation report, including the various test results obtained, must be prepared in the format provided in the relevant OIML Recommendation or draft Recommendation. The manufacturer will be responsible for requesting these documents in order that they can be made available to the bodies responsible for subsequent type approvals.
- 13 The signatories reserve the right to perform any further tests or examinations which they may consider necessary to establish the conformity of an instrument with their specific non-metrological national requirements, eg currency indications and language markings.
- 14 In the event of a dispute concerning the operation of this agreement, the signatories will attempt to resolve any issues which arise by agreement among themselves. If, in spite of these efforts a signatory is unable to accept a statement of conformity, he shall give reasons for this in writing. A written explanation will be distributed to all the signatories of this Agreement.
- 15 The signatories agree to collaborate in order to increase mutual awareness of, and develop mutual confidence in their type approval facilities.
- 16 Any signatory may terminate his participation in this agreement by informing the other signatories in writing.
- 17 This agreement may be amended with the agreement of all the signatories.
- 18 The agreement will remain in force for an initial period of two years, after which it may be renewed by correspondence.

*[Subsequently renewed in September 1999 extending the agreement until the time the measuring instruments Directive comes into force]*

28 September 1993

**Annex 1: List of OIML Recommendations and draft Recommendations covered by this agreement**

- (i) OIML Recommendation (R 107) on Discontinuous Totalising Automatic Weighing Instruments.
- (ii) OIML Recommendation (R 106) on Automatic Rail Weighbridges.
- (iii) OIML Recommendation (R 50) on Continuous Totalising Automatic Weighing Instruments.
- (iv) OIML Recommendation (R 61) on Automatic Gravimetric Filling Instruments
- (v) OIML Recommendation (R 51) on Automatic Catchweighing Instruments
- (vi) OIML Recommendation (R 105) on Direct Mass Flow Measuring Systems for Quantities of Liquids
- (vii) OIML Recommendations (R 117 and R 118) on Fuel Dispensers for Motor Vehicles
- (viii) OIML Recommendation (R 129) on Multi-dimensional Measuring Instruments

Note: The OIML Recommendations must include a type evaluation report approved in a postal vote by the International Committee of Legal Metrology.

**Annex 2: List of type approval bodies eligible to issue Statements of Conformity to the relevant OIML recommendations under this agreement.**

Country	Organisation	R 50	R 51	R 61	R 105	R 106	R 107	R 117 R 118	R 129
<b>Austria</b>	Bundesamt für Eich- und Vermessungswesen	x	x	x	x	x	x	x	x
<b>Belgium</b>	Administration for Quality and Security, Brussels <sup>1</sup>	x	x	x	x	x	x	x	
<b>Denmark</b>	Danish Agency for Trade and Industry, Copenhagen	x	x	x	x	x	x	x	x
<b>Finland</b>	Safety Technology Authority, Helsinki <sup>2</sup>	x	x	x	x	x	x	x	x
<b>France</b>	Sous-direction de la Métrologie, Paris <sup>3</sup>	x	All except class Y(B)	x	x	x	x	x	
<b>Germany</b>	Physikalisch-Technische Bundesanstalt, Braunschweig	x	x	x	x	x	x	x	x
<b>Italy</b>	Ministero industria e Commercio, Rome	x	x	x		x	x		x
<b>Netherlands</b>	Nederlands Meetinstituut, Dordrecht	x	x	x	x	x	x	x	
<b>Norway</b>	Norwegian Metrology and Accreditation Service, Oslo	x	x	x	x	x	x	x	x
<b>Spain</b>	Centro Español de Metrologia, Madrid	x	x	x		x	x	x	
<b>Sweden</b>	SWEDAC, Borås	x	x	x		x	x	x	
<b>Switzerland</b>	Swiss Federal Office of Metrology, Wabern	x	x	x	x	x	x	x	x
<b>United Kingdom</b>	National Weights and Measures Laboratory, Teddington	x	x	x	x	x	x	x	x

<sup>1</sup> Now: Administration for Quality and Safety – SMD, Brussels

<sup>2</sup> Now: Inspecta Oy, Helsinki

<sup>3</sup> Including LNE

### Annex 3: Signatories

Country	Organisation	Signed by	R 50	R 51	R 61	R 105	R 106	R 107	R 117 R 118	R 129
<b>Austria</b>	Bundesamt für Eich- und Vermessungswesen	<b>A. Leitner</b>	x	x	x	x	x	x	x	x
<b>Belgium</b>	Administration for Quality and Security, Brussels <sup>1</sup>	<b>R. Eggermont</b>	x	x	x	x	x	x	x	
<b>Denmark</b>	Danish Agency for Trade and Industry, Copenhagen	<b>C. Johansen</b>	x	x	x	x	x	x	x	x
<b>Finland</b>	Safety Technology Authority, Helsinki <sup>2</sup>	<b>M-L. Junttila</b>	x	x	x	x	x	x	x	x
<b>France</b>	Sous-direction de la Métrologie, Paris	<b>J-F. Magana</b>	x	x	x	x	x	x	x	
<b>Germany</b>	Physikalisch-Technische Bundesanstalt, Braunschweig	<b>W. Schulz</b>	x	x	x	x	x	x	x	x
<b>Greece</b>	Ministry of Development, Athens	<b>Ch. Dimitrakopoulos</b>	x	x	x	x	x	x	x	x
<b>Iceland</b>	Löggildingarstofa, Reykjavik	<b>G. Fridgeirsson</b>	x	x	x	x	x	x	x	x
<b>Ireland</b>	Legal Metrology Service, National Standards Authority of Ireland, Dublin	<b>P. Farragher</b>	x	x	x	x	x	x	x	x
<b>Italy</b>	Ministero industria e Commercio, Rome	<b>G. Riccioni</b>	x	x	x		x	x		x
<b>Luxembourg</b>	Direction des Contributions Directes et des Accises, Steinsel <sup>3</sup>	<b>J. Kirchen</b>	x	x	x	x	x	x	x	x
<b>Netherlands</b>	Nederlands Meetinstituut, Dordrecht	<b>R. Charité</b>	x	x	x	x	x	x	x	
<b>Norway</b>	Norwegian Metrology and Accreditation Service, Oslo	<b>K. Lindlov</b>	x	x	x	x	x	x	x	x
<b>Portugal</b>	Instituto Português da Qualidade, Lisboa	<b>N. Cartaxo-Reis</b>	x	x	x		x	x		
<b>Spain</b>	Centro Español de Metrologia, Madrid	<b>M. Martin Peña</b>	x	x	x		x	x	x	
<b>Sweden</b>	SWEDAC, Borås	<b>G. Lindstrom</b>	x	x	x		x	x	x	
<b>Switzerland</b>	Swiss Federal Office of Metrology, Wabern	<b>U. Toggweiler</b>	x	x	x	x	x	x	x	x
<b>United Kingdom</b>	National Weights and Measures Laboratory, Teddington	<b>P.K. Badger</b>	x	x	x	x	x	x	x	x

<sup>1</sup> Now: Administration for Quality and Safety – SMD, Brussels

<sup>2</sup> Now: Inspecta Oy, Helsinki

<sup>3</sup> Now: Service de Metrologie, Steinsel