## **OIML** technical activities

## Activités techniques de l'OIML

- 2002 Review
- 2003 Forecasts

- Rapport 2002
- Prévisions 2003

The information given on pages 73–79 is based on 2002 annual reports submitted by OIML secretariats.

Work projects are listed for each **active** technical committee and subcommittee that produced and/or circulated a WD or CD during 2002, together with the state of progress at the end of 2002 and projections for 2003, where appropriate.



Les informations données en pages
73–79 sont basées sur les rapports
annuels de 2002, fournis par
les secrétariats OIML. Les
thèmes de travail sont
donnés pour chaque comité
technique ou sous-comité
actif qui a produit et/ou
distribué un WD ou un CD
pendant 2002, avec l'état
d'avancement à la fin de 2002 et
les prévisions pour 2003, si approprié.

## **KEY TO ABBREVIATIONS USED**

WD Working draft (Preparatory stage)

Projet de travail (Stade de préparation)

CD Committee draft (Committee stage)

Projet de comité (Stade de comité)

DR/DD/DV Draft Recommendation/Document/Vocabulary (Approval stage)

Projet de Recommandation/Document/Vocabulaire (Stade d'approbation)

Vote CIML postal vote on the draft

Vote postal CIML sur le projet

Approval Approval or submission to CIML/Conference for approval

Approbation ou présentation pour approbation par CIML/Conférence

R/D/V International Recommendation/Document/Vocabulary (Publication stage)

For availability: see list of publications

Recommandation/Document/Vocabulaire International (Stade de publication)

Pour disponibilité: voir liste des publications

Postponed Development of project suspended pending completion of relevant

document by other international organization(s)

Développement du projet suspendu en attendant l'achèvement d'un

document correspondant par une (d')autre(s) organisation(s) internationale(s)

OIML TECHNICAL ACTIVITIES	2002	2003
TC 2 Units of measurement		
<ul> <li>Amendment<sup>*</sup> D 2: Legal units of measurement</li> <li>*harmonized with resolution of 22<sup>nd</sup> CGPM (Paris, 1999)</li> </ul>	1 CD	DD/Vote
TC 3 Metrological control		
Revision D 1: Law on metrology	1 CD	2 CD/DD
TC 3/SC 2 Metrological supervision		
Revision D 9: Principles of metrological supervision	3 CD	Vote/Approval
TC 3/SC 3 Reference materials		
<ul> <li>Revision D 18: General principle of the use of certified reference materials in measurements</li> </ul>	D	-
TC 3/SC 4 Application of statistical methods		
<ul> <li>Applications of statistical methods for measuring instruments in legal metrology</li> </ul>	WD	1 CD
TC 3/SC 5 Conformity assessment		
Mutual acceptance arrangement on OIML type evaluations	DD	DD/Vote
<ul> <li>Expression of uncertainty in measurement in legal metrology applications</li> </ul>	WD	1 CD
OIML Certificate System for Measuring Instruments	Approval	D
<ul> <li>OIML procedures for peer review of laboratories to enable mutual acceptance of test results and OIML certificates of conformity</li> </ul>	1 CD	2 CD
<ul> <li>Checklists for issuing authorities and testing laboratories carrying out OIML type evaluations</li> </ul>	DD	Vote/Approval
TC 4 Measurement standards and calibration and verification devices		
<ul> <li>Principles for the selection and expression of metrological characteristics of standards and devices used for calibration and verification</li> </ul>	WD	1 CD
Revision D 5: Principles for establishment of hierarchy systems for measuring instruments	2 CD	DD
<ul> <li>Revision D 6 + D 8: Measurement standards.</li> <li>Requirements and documentation</li> </ul>	3 CD	DD/Vote
<ul> <li>Revision D 10: Guidelines for the determination of calibration intervals of measuring equipment (Revision developed by ILAC)</li> </ul>	DD/Vote	Vote (ILAC)

OIML TECHNICAL ACTIVITIES	2002	2003
TC 5/SC 1 Electronic instruments		
<ul> <li>Revision D 11: General requirements for electronic measuring instruments</li> </ul>	2 CD	3 CD/DD
TC 5/SC 2 Software		
Software in legal metrology	WD	1 CD
TC 6 Prepackaged products		
Revision R 87: Net content in packages	DR	Vote/Approval
TC 7 Measuring instruments for length and associated quantities		
Revision R 35: Material measures for length for general use	WD	1 CD
TC 7/SC 1 Measuring instruments for length		
<ul> <li>Revision R 30: End standards of length (gauge blocks) (Poll among P- and O-Members on revision in 2002)</li> </ul>	-	1 CD or proposal to withdraw
TC 7/SC 3 Measurement of areas		
Instruments for measuring the areas of leather	WD	1 CD
TC 7/SC 4 Measuring instruments for road traffic		
Electronic taximeters	WD	1 CD
TC 8 Measurement of quantities of fluids		
<ul> <li>Vessels for public use         <ul> <li>(Combined revision of:</li> <li>R 4: Volumetric flasks (one mark) in glass;</li> <li>R 29: Capacity serving measures;</li> <li>R 45: Casks and barrels; and</li> <li>R 96: Measuring container bottles)</li> </ul> </li> </ul>	WD	1 CD
TC 8/SC 2 Static mass measurement		
<ul> <li>Annex to R 125: Test report format for evaluation of mass measuring systems for liquids in tanks</li> </ul>	WD	1 CD

OIML TECHNICAL ACTIVITIES	2002	2003
TC 8/SC 3 Dynamic volume measurement (liquids other than water)		
<ul> <li>Revision R 86: Drum meters for alcohol and their supplementary devices (Combined with revision R 117 and R 105)</li> </ul>	WD	1 CD
<ul> <li>Revision R 118: Testing procedures and test report format for pattern evaluation of fuel dispensers for motor vehicles</li> </ul>	3 CD	Delayed
<ul> <li>Revision R 117: Measuring systems for liquids other than water (Combined with revision R 105 and R 86)</li> </ul>	WD	1 CD
TC 8/SC 4 Dynamic mass measurement (liquids other than water)		
<ul> <li>Revision R 105: Direct mass flow measuring systems for quantities of liquids (Combined with revision R 117 and R 86)</li> </ul>	WD	1 CD
TC 8/SC 5 Water meters		
<ul> <li>R 49-1: Water meters intended for the metering of cold water (including requirements for electronic devices)</li> </ul>	Amended R 49-1	Amended R 49-1 to be republished
R 49-2: Test procedures	Amended R 49-2	Amended R 49-2 to be republished
• R 49-3: Test report format	2 CD	DR/Approval
TC 8/SC 6 Measurement of cryogenic liquids		
Annex D to R 81: Test report format	R (publication delayed)	R (to be published)
TC 8/SC 7 Gas metering		
Metering systems for gaseous fuel	2 CD	3 CD/DR
Compressed gaseous fuel measuring systems for vehicles	2 CD	3 CD/DR
TC 8/SC 8 Gas meters		
• Combined revision of R 6, R 31 and R 32	WD	1 CD
TC 9 Instruments for measuring mass and density		
Revision R 74: Electronic weighing instruments	1 CD	2 CD (Depending on progress of revision D 11)
TC 9/SC 1 Nonautomatic weighing instruments		
Revision R 76: Nonautomatic weighing instruments	WD	1 CD

OIML TECHNICAL ACTIVITIES	2002	2003
TC 11 Instruments for measuring temperature and associated quantities		
<ul> <li>Revision R 75: Heat meters (Part 1: General requirements; Part 2: Type approval and initial verification tests)</li> </ul>	R	-
• R 75-3: Heat meters. Test report format	WD	1 CD
TC 11/SC 1 Resistance thermometers		
Revision R 84: Resistance-thermometer sensors made of platinum,	Approval	R
copper or nickel (for industrial and commercial use)		
TC 11/SC 2 Contact thermometers		
• R 133: Liquid-in-glass thermometers	R	-
TC 11/CC 2 Padiation the remove atoms		
TC 11/SC 3 Radiation thermometers	22	
<ul> <li>Revision R 48: Tungsten ribbon lamps for calibration of optical pyrometers</li> </ul>	DR	Vote/Approval
<ul> <li>Standard black-body radiator for the temperature range from – 50 °C to 3000 °C</li> </ul>	WD	1 CD
TC 12 Instruments for measuring electrical quantities		
<ul> <li>Revision R 46: Active electrical energy meters for direct connection of class 2</li> </ul>	WD	1 CD
TC 13 Measuring instruments for acoustics and vibration		
<ul> <li>Review of all TC 13 publications and projects (TC 13 Secretariat taken over by Germany)</li> </ul>	Activity restarted	Project proposals
TC 16/SC 1 Air pollution		
<ul> <li>Annex to ISO 3930/OIML R 99: Test report format for the evaluation of instruments for measuring vehicle exhaust emissions</li> </ul>	1 CD	2 CD
<ul> <li>Continuous measuring instruments for NO<sub>x</sub> emissions</li> </ul>	-	WD
• Continuous measuring instruments for SO <sub>2</sub> emissions	WD	1 CD
<ul> <li>Continuous measuring instruments for CO emissions</li> </ul>	-	WD

OIML TECHNICAL ACTIVITIES	2002	2003
TC 9/SC 2 Automatic weighing instruments		
<ul> <li>R 134: Automatic instruments for weighing road vehicles in motion Part A - Total vehicle weighing</li> </ul>	Approval	R
Part A - Annex C: Test report format	DR	Approval/R
<ul> <li>Automatic instruments for weighing road vehicles in motion Part B - Axle weighing</li> </ul>	3 CD	DR
Part B - Annex C: Test report format	3 CD	DR
Revision R 51: Automatic catchweighing instruments	3 CD	DR
Revision R 61: Automatic gravimetric filling instruments	DR	Vote/Approval
TC 9/SC 3 Weights		
• Revision R 111: Weights of accuracy classes $E_1$ , $E_2$ , $F_1$ , $F_2$ , $M_1$ , $M_2$ , $M_3$ plus test procedures and test report format (including requirements of R 47: Standard weights for testing high capacity weighing machines)	(Final) CD	DR/Approval (CIML postal approval)
Revision R 33: Conventional value of the result of weighing in air	2 CD	DR
• Revision R 52: Hexagonal weights, ordinary accuracy class from 100 g to 50 kg	DR	Vote/Approval
TC 9/SC 4 Densities		
Hierarchy scheme for density measuring instruments	2 CD	DR
TC 10/SC 1 Pressure balances		
Pressure transducers with uniform output signal	2 CD	3 CD
TC 10/SC 2 Pressure gauges with elastic sensing elements		
Pressure transmitters with elastic sensing elements	1 CD	2 CD
<ul> <li>Combined revision of R 101: Indicating and recording pressure gauges, vacuum gauges and pressure vacuum gauges with elastic sensing elements (ordinary instruments) and R 109: Pressure gauges and vacuum gauges with elastic sensing elements (standard instruments)</li> </ul>	1 CD	2 CD
TC 10/SC 5 Hardness standardized blocks and hardness testing machines		
<ul> <li>Rockwell hardness testing machines (combined revision R 11; R 12; R 36 and R 39)</li> </ul>	1 CD	2 CD

OIML TECHNICAL ACTIVITIES	2002	2003
TC 16/SC 2 Water pollution		
<ul> <li>Revision R 100: Atomic absorption spectrometers for measuring metal pollutants in water</li> </ul>	1 CD	2 CD
<ul> <li>Revision R 83: Gas chromatograph/mass spectrometer/data system for analysis of organic pollutants in water</li> </ul>	WD	1 CD
<ul> <li>Revision R 116: Inductively coupled plasma atomic emission spectrometers for measurement of metal pollutants in water</li> </ul>	1 CD	2 CD
TC 16/SC 3 Pesticides and other pollutant toxic substances		
<ul> <li>Revision R 82: Gas chromatographs for measuring pollution from pesticides and other toxic substances</li> </ul>	1 CD	2 CD
TC 16/SC 4 Field measurements of hazardous (toxic) pollutants		
<ul> <li>Fourier transform infrared (FTIR) spectrometers for measurement of air pollutants</li> </ul>	1 CD	2 CD
TC 17/SC 1 Humidity		
Revision R 59: Moisture meters for cereal grains and oilseeds	WD	1 CD
TC 17/SC 2 Saccharimetry		
Automatic refractometers. Methods and means of verification	(Project proposal)	1 CD
TC 17/SC 4 Conductometry		
<ul> <li>Revision R 56: Standard solutions reproducing the conductivity of electrolytes</li> </ul>	1 CD	2 CD
<ul> <li>Methods of measurement of the conductivity of electrolytic solutions (SC 4 proposes to combine this project with the revision of R 56)</li> </ul>		
Revision R 68: Calibration method for conductivity cells	WD	1 CD
TC 17/SC 5 Viscometry		
<ul> <li>Reference standard liquids (newtonian viscosity standard for the calibration and verification of viscometers)</li> </ul>	WD	1 CD
TC 17/SC 6 Gas analysis		
Procedures for calibration of mine methanometers	WD	1 CD
• Procedures for calibration of alarms of combustible gases and vapors	WD	1 CD

OIML TECHNICAL ACTIVITIES	2002	2003
TC 17/SC 7 Breath testers		
Revision R 126: Evidential breath analyzers	WD	1 CD
TC 17/SC 8 Instruments for quality analysis of agricultural products (New SC established in 2002)		
Measuring instruments used for protein determination in grains	Project proposal	WD
TC 18/SC 1 Blood pressure instruments		
Revision R 16: Manometers for instruments for measuring blood pressure (sphygmomanometers) (including Test report format):		
• R 16-1: Mechanical non-invasive sphygmomanometers	R	-
R 16-2: Automated non-invasive sphygmomanometers	R	-
TC 18/SC 2 Medical thermometers		
Revision R 7: Clinical thermometers, mercury-in-glass with maximum device	WD	1 CD
TC 18/SC 4 Bio-electrical measurements		
Revision R 90: Electrocardiographs (including the Test report format)	(BIML proposed to revise R 90)	WD
Digital electrocardiographs and electrocardioscopes	1 CD	2 CD
TC 18/SC 5 Measuring instruments for medical laboratories		
Spectrophotometers for medical laboratories	DR	Vote/Approval