




Item 8: OIML publications and technical activities

Item 8.1: Publications and project proposals

Item 8.1.2.1: Proposal for a new project - Update of R 60:2017

Proposal for a new project – Update of R 60:2017

	Proposal for a new project		
	Within:	OIML-CS Management Committee	
	Date:	16 October 2020	
Proposer(s) (Add line if required):			
Name: OIML-CS Management Committee	Country: N/A	Organisation: N/A	
Proposed convener(s)*:			
Name: OIML-CS Management Committee / BIML	Country: N/A	Organisation: N/A	
Type of proposed publication:	<input type="checkbox"/> New	<input checked="" type="checkbox"/> Update	<input type="checkbox"/> Revision
	<input checked="" type="checkbox"/> Recommendation	<input type="checkbox"/> Document	<input type="checkbox"/> Basic
		<input type="checkbox"/> Vocabulary	<input type="checkbox"/> Guide
Title of proposed publication:			
R 60 <i>Metrological regulation for load cells</i>			
Terms of reference of the project, including detailed time frame in accordance with the provisions specified in B 6-1, 6.2:			
See Annex A for the scope of the update. The OIML-CS Management Committee (MC) and the BIML will manage the process, with input from the TC 9 Secretariat.			
A Final Draft update of R 60 will be submitted to the CIML for approval in 2021.			
Why should the OIML develop this publication?			
See Annex A for information on the update. Following a consultation within TC 9, the OIML-CS MC have voted on the proposal to update R 60. 18 (out of 22) MC Members voted, with all 18 supporting the proposal – see Annex B for vote summary.			
Countries/Economies known to, or intending to apply this publication, if applicable:			
Under the OIML-CS, there are currently nine OIML Issuing Authorities, 10 Test Laboratories and 26 Utilizers/Associates for OIML R 60. The second highest number of OIML certificates have been issued for R 60.			
Relevant associated OIML publications:			
Load cells are used in a range of weighing instruments (R 50, R 51, R 61, R 76, R 106, R 107 and R 134).			
List of appropriate liaisons and their work related to this proposed project (include supporting documentation as necessary and reference it here):			
CECIP have indicated their support for the proposed update of R 60.			
* As the CIML Member(s) of the Country(ies) holding the convenership of this project, I/we recognise the importance of TC/SC/PG secretariat/convenership work and will make available the resources to ensure the work on the publication is completed in a timely and professional manner in accordance with the provisions in OIML B 6-1 and the detailed time frame as part of this proposal.			
Signature(s):			



TC 9	OIML R 60
TC comments on:	Periodic review of R 60

Background to OIML R 60

OIML R 60-1:2017 was approved for final publication by the International Committee of Legal Metrology (CML) at its 52nd meeting in October 2017.

Since its approval two addendums have been published, following which some additional errors were detected during the translation into French. However, OIML B 6, 6.11.5.2 stipulates that it is not possible to issue more than two amendments:

There shall be no more than two separate amendments to any publication. Any further proposals for amendment of a particular publication shall result in a full revision being undertaken by beginning a new project.

R 60 in the OIML Certification System (OIML-CS)

As R 60 is the second most used Recommendation in the OIML-CS, the Presidential Council proposed to include it on the list of high priority publications, meaning that it should undergo the Periodic Review process according to B 6, 6.12 every two years.

The first step in the Review Process is to hold a consultation within the OIML-CS Management Committee (MC). The issue was presented to the MC at its meeting held on 2 July 2020. The Secretariat of OIML TC 9 Instruments for measuring mass and density was also contacted and asked for feedback.

However, one of the main issues discussed at the MC meeting was related to the marking of load cells. The 2017 edition of R 60 includes the requirement to display the OIML certificate number on the plate of the load cell. However, this requirement contradicts the requirement in 4.4 of OIML-CS Document PD-06 Ed.2:

4.4 An OIML Certificate shall not be used as proof of conformity of an individual instrument with the requirements of the relevant Recommendation. In particular, neither the reference number of the OIML Certificate nor any other reference to the OIML (e.g. the OIML or OIML-CS logos) shall be affixed to an individual instrument.

Survey carried out by the TC 9 Secretariat

All the responses were in favour of maintaining the current edition of R 60, with the proposal of doing an Update to correct the editorial errors found..

Update proposal

Based on the above, the recommended course of action is to propose to the OIML-CS Management Committee, to develop an update of R 60 (B6 6.13.1.1). The Update shall cover the following items:

- the inclusion of the corrections that are currently in the amendments dated 2019-12-23 and 2019-02-07;
- the revision of subclause 6.2.1.f);
- the harmonisation of Parts 2 and 3 with the modifications indicated above;
- the inclusion of the corrections proposed by members of TC 9, in response to this survey.



Results of the survey

Survey to Open OIML R 60 (2017) as a Project					
Member State	P or O Member	Re-confirm in existing form	Revise	Update	Withdraw
Spain	P	×			
South Africa	P	×			
Finland	P	×			
Sweden	P			×	
Slovenia	O	×			
Canada	P	×			
Japan	P	×			
Germany	P			×	
Republic of Korea	P	×			
France	P			×	
United States	P	×			

Country Code ¹	Part	Clause/ Sub clause	Paragraph/ Figure/ Table/	Type of comment ²	COMMENTS	Proposed change	OBSERVATIONS OF THE CONVENER/PG
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Comments to the text of R 60

ZAR	1	6.2.1		ge	<p>Mandatory markings on the load cell</p> <p>The following mandatory markings shall be clearly and indelibly marked on the load cell:</p> <p>This means that the load cell may not be marked with a sticker label, aluminium or otherwise as it is not indelible</p> <p>Describe the sentence better or give a definition for indelible as stickers can be removed and replaced with a different sticker/label.</p>	The following mandatory markings shall be clearly engraved on the load cell:	
ZAR	1	6.2.1	f)	ge	<p>From OIML-CS document Pd - 06 Ed2</p> <p>4.4 An OIML Certificate shall not be used as proof of conformity of an individual instrument with the requirements of the relevant Recommendation. In particular, neither the reference number of the OIML Certificate nor any other reference to the OIML (e.g. the OIML or OIML-CS logos) shall be affixed to an individual instrument.</p> <p>OIML R60 is in contradiction with the rules of the OIML Certificate System.</p>	Delete clause 6.2.1 f)	

Country Code ¹	Part	Clause/ Sub clause	Paragraph/ Figure/ Table/	Type of comment ²	COMMENTS	Proposed change	OBSERVATIONS OF THE CONVENER/PG
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FR					<p>The current R60 has been published only three years ago and France thinks it is too early to decide to revise it.</p> <p>During the translation in French of parts 1 and 2, we found some mistakes in formula in the English version and informed BIML. Other countries found other editorial mistakes. Amendments were published but it seems some mistakes still exist, in particular in part 3. In these conditions, it could be a good idea to update editorially only the R60 in order to integrate all necessary corrections.</p>		
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Country Code ¹	Part	Clause/ Sub clause	Paragraph/ Figure/ Table/	Type of comment ²	COMMENTS	Proposed change	OBSERVATIONS OF THE CONVENER/PG
DE	1	5.5.1			<p>Creep</p> <p>The section:</p> <p>Regardless of any value declared by the manufacturer for the apportioning factor, pLC, the MPE for creep shall be determined from Table 4 using the apportioning factor, pLC = 0.7.</p> <p>does not fit the Example:</p> <p>Load cell class: C3 (declared by the manufacturer)</p> <p>Apportioning factor: pLC = 0.7 (declared by manufacturer)</p> <p>Applied load: $D_{max} = E_{max}$ (test specification)</p> <p>Maximum difference between the reading = $0.7 \times (0.7 \times 1.5 \text{ v}) = 0.735 \text{ v}$</p> <p>Table 4 using pLC = 0.7 leads to $0.7 * 1.5 \text{ v} = 1.05 \text{ v}$</p>		
DE	2	2.10.4			<p>Determination of barometric pressure effects</p> <p>It is nowhere defined or explained what a “sufficient design justification” looks like.</p>		
DE	3	6.9			<p>Barometric pressure effects</p> <p>Why are there so many rows (7) in the table? According to R60-2, 2.10.4 only two measurements are performed.</p>		

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DE	3	6.11			<p>Warm-up time</p> <p>Why is there a table for preloads? According to R60-2, 2.10.7.3 the preloads shall be performed before switch-on. Therefore, no indications can be read and noted.</p>		
DE	3	6.12			<p>Power voltage variation</p> <p>According to R 60-2, 2.10.7.4 and R 60-3, 2.2.2 the test is performed according to R 60-2, 2.10.1.1 to 2.10.1.12 whereas R 60-3, 6.12 suggests a test according to R 60-2, 2.10.7.11.</p> <p>Table 6.12 (b) is unnecessary. Nowhere else in R 60, a test varying the power supply frequency is described.</p>		

ANNEX B



OIML CERTIFICATION SYSTEM (OIML-CS)

Voting Result (12 October 2020) Periodic review: Proposal to “update” OIML R 60

Country	Name	Action
AUSTRALIA	Loizides	Agreed
BELGIUM	Wouters	Agreed
CAMBODIA	EM	Agreed
CANADA	Tremblay	Agreed
COLOMBIA	Duran Tellez	Agreed
CUBA	Arruza Rodriguez	Agreed
FRANCE	Lommatzsch	Agreed
GERMANY	Ulbig	Agreed
INDIA	Dixit	Agreed
JAPAN	Yamazawa	Agreed
KOREA (R.)	Kim	Agreed
NETHERLANDS	Schmidt	Agreed
RUSSIAN FEDERATION	Komissarov	Agreed
SLOVAKIA	Kral	Agreed
SOUTH AFRICA	Ferreira	Agreed
SWITZERLAND	Mathew	Agreed
UNITED KINGDOM	Awosola	Agreed
UNITED STATES	Ehrlich	Agreed

18 Votes received (all 18 agreed)

Result: The OIML-CS MC approves the proposal to “update” OIML R 60.