OIML TC9 / SC2 comments / commentaires :

Revision of OIML R61 2004E - Automatic Gravimetric Filling Instruments
Second Committee Draft (2CD) Part 1: Metrological and technical requirements
Part 2: Metrological controls and performance tests

Date to return comments: **30 April 2014**

OIML TC9 / SC2 Secretariat

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Member State/ Liaison	R61 Parts 1 and 2 2CD		Member Comments	Proposed changes	Secretariat's comments
	Page number	Document clause			
Austria		general	The current document of D11 is D11:2013. In this revision we refer to previous one. We suggest changing the reference to the current document and check for differences.		Amended.
Austria	7	0.1.1.1	What are chemical properties? We are questioning the necessity of declaring these properties.		Definition amended. See comments from Netherlands.
	7	0.1.7	Editorial: "mear urand" to "measurand"		Amended.
Austria	8	0.2.2	Editorial: Missing space (device(s)associated)		Amended.
Austria	9	0.3	Editorial: space between "theAGFI".		Amended.
Austria	9	0.3.1.1	The definition of weighing module is twice (also in 0.3.11.6). Is there a specific meaning to have the same word "weighing module" defined twice differently?		0.3.11.6 is deleted and corresponding references corrected.
Austria	17	0.5.2.4	Where is the difference between MPME and MPE? As far as there is only one definition, it seems to us to be the same. If MPME is relevant, it should be also amended in 0.8 "Abbreviations and Symbols"		The text *"maximum permissible measurement error (MPME)" is* deleted since it is not used in the document.
Austria	18	0.5.2.6	Editorial: space between "(see4.2.1)"		Amended.

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Austria	22	4.2.3	The paragraph is unclear. Please change the beginning of the first sentence to: "For AGFIs, where it is possible to **have a preset value,** the maximum difference…"		Amended.
Austria	23	4.6	Referring to NL-28: The value of Minfill also depends on the particle mass itself referred to the intended product.	Therefore we suggest amend - product to the list as further significant influence.	"product" is added to the list.
Austria	25	4.7.3	The term "mobile" seems to irritate a little bit and could be misinterpreted in reference to 8.3.1. , 2nd paragraph. AGFI (for verification) need to be tested fully assembled and fixed in the position in which it is intended to be used.	Therefore we suggest deleting the term "mobile" to prevent this contradiction. We understand the requirements in that way, that for verification the 2nd paragraph in 8.3.1 is mandatory.	"mobile" is deleted.
Austria	27	5.8	"tracking" twice Delete one term "tracking"		Corrected.
Austria	40	8.3.1	We think that it is also very important to test the instrument for tilting at initial verification, if it is liable to be tilted.	We strongly support remaining the sentence "The requirements of 4.7.3 apply if the instrument is liable to be tilted." In this case it will be necessary to define a special test procedure for initial verification in dynamic mode.	Sentence inserted as proposed. For initial verification, reference is made to the tiling test in A.6.2.9.
Austria	49	A.4.3	In addition to comment 8.3.1: We think the mounting of the instrument and the surroundings itself could have also a significant influence on the measurement result and should therefore be tested.	We suggest including the sentence after the last paragraph: "If the AGFI is liable to be tilted, the test in A.6.2.8 may also be performed."	Text inserted as proposed.

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Austria	65	A.6.2.7	Repeating the test for voltage at upper limit is missing.	We suggest amending at the end of the Test information: "Repeat the test also for the upper limit."	The test in A.6.2.7 is for the low voltage (minimum supply voltage) of internal battery. The voltage at the upper limit is tested in A.6.2.8.
Austria	66f		Editorial: Correct "AFGI" to "AGFI"		Amended.
Austria	66	A.6.2.8	The testing procedure for tilting should be amended with a different wording to state the tilting in each direction. "to be tilted longitudinally" could be misunderstood to be meant only in one direction. We think it is more clearly to describe the tilting in each direction.	Change the last sentence to: "This test shall be repeated for each direction (longitudinally backwards and forwards, transversally leftside and rightside)." Please change the last sentence also in the following chapter "Tilting when loaded".	Sentence amended as proposed.
Austria	66	A.6.2.8.3	Change the wrong reference in the text "The test in A.6.2.8.3 only applies…" to "The test in A.6.2.8.1 only applies…"		Amended.
Austria	66	A.6.2.8.2	Change the numbering of this paragraph from "A.6.2.8.2" to "A.6.2.8.1.2"		Amended.
Austria	66	A.6.2.8	Referring to 4.7.3 the control of the reaction of the instrument to tilting must be tested too. We suggest amending following sentence. "If 4.7.3 b) applies, the mentioned requirements must be tested in addition."		Text added.

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Austria	66	A.6.2.8.3	Please include a second test load, because there is mentioned only Max. This is contradiction to the previous test methods mentioned in A.6.2.8.1 / A.6.2.8.2.	We suggest amending a second test load, close to the lowest load, where the mpe changes.	Amended. "*Test at a load close to the lowest load where the maximum permissible error change"* is inserted.
Austria	67	A.6.2.8.3	2nd Paragraph: Not all AGFI's are possible to be tested statically. Therefore we think this weighing test is to be meant dynamically as described in A.8.	Please change the wording "static weighing tests as above" to "weighing tests as above"	Amended as proposed.
Austria	67	A.6.3.1	Note 3 seems to suit better in A.6.3 Switch it to A.6.3.		Note 3 moved as proposed.
Austria	72	A.6.3.4.1	Referring to other OIML recommendations the requirement the limits are 2000 MHz and not 2700 MHz. Where does this value come from? We should focus a harmonized way.		The OIML D11 tables provided by The Netherlands are used. The frequency range in these tables is now up to 3000 MHz
Austria	81	Annex B B.1.1	The term constituent is nowhere defined.	We suggest using the term "module", if it fits the content or create a new definition.	"modules" is inserted.
Austria	81	Annex B B.1.1	3rd paragraph: The term device is unclear and should be more specified.	Change "device" to "display of the AGFI or printed". Point d) should not be a point in the list. Please create an own paragraph for this point	Amended as proposed.
Austria	81	B.1.2	Please delete "/or" The Recommendation is for AGFI – the whole instrument and should be focused on this and not on the several constituents. In addition this term "constituents" is not defined.		Amended. "constituents" is replaced with "modules"
Austria	82	B.1.3	2nd Paragraph last sentence:	We suggest including the additional possibility for printing the current parameters.	"and printing" is inserted.

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Austria	82	B.1.3	Last paragraph: Exclude the last paragraph "Software protection…" from the Note to be conform with D31		Agreed. Superfluous information deleted.
Austria	82	B.2.1 a)	Please change the beginning of the last sentence to: "These constituents form…"		Amended. "constituents" is replaced with "modules"
Austria	84	B.2.3	1st paragraph: For initial verification or subsequent controls it would not be possible to verify the transmitted data.	Therefore please delete "or transmitted in an insecure environment"	Text deleted as proposed.
Austria	85	B.2.3.1	For initial verification or subsequent controls it would not be possible to verify the transmitted data.	Please delete "or transmitted"	Amended. "constituents" is replaced with "modules"
Austria	85	B.2.3.2	1st paragraph: For initial verification or subsequent controls it would not be possible to verify the transmitted data.	Please correct "insecure storage" to "storage" and delete "or having received them from an insecure transmission channel" 3rd paragraph: Delete "or sending"	Text amended/ deleted as proposed.
Austria	84	Annex B general	Definition for "measurement value" is missing.		Replaced with "*measurement result*" which is defined in 0.1.7.
Austria	85	B3	Change the first point to the 1st paragraph. - Updating.. to Updating…		Amended.

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Austria	88	Annex E	Please amend in Example 1 the precondition in the first line to complete the specification for the example: "Estimated mass of the fills with 400 g"		Text added.
Australia			Australia does not have any comments to submit on OIML R 61 parts 1&2, 2CD, nor on OIML R 61 part 3 WD for Automatic Gravimetric Filling Instruments. NMI consulted with Australian stakeholders, but did not receive any comments.		Thank you.
Denmark	28	5.8.2	Delete the last part of first paragraph "for in-service inspection as specified in 4.2.1 for a fill equal to the Min or Minfill respectively of the AGFI"		Text deleted.
Denmark	29	5.8.4	Point b) does not set a limit on the zero-tracking as it only defines the maximum step size of the correction but not how often the correction is performed! We suggest the text changed to, "b) the corrections are not more than 0.5 d/sec." point b) in the note should be corrected in a similar way, "….subject to a maximum rate of correction of 0.5 d/sec."		Text amended.

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Denmark	35	7.10	We find that the requirements in clause 8 are applicable! So either remove "and with the requirements of clause 8." or exchange it with "particularly those of clause 7 and 8."		Superfluous text deleted.
Denmark	40	8.3.1	The AGFI shall always be examined for conformity with the approved type! The tests for compliance with the requirements in clause 4 and 5 are performed as part of the type examination, and for most of them there is no need for repeating them at initial verification. We suggest to change the wording of the first paragraph to, "AGFIs shall be examined for conformity with the approved type and shall where applicable be tested for compliance with clause 4 and 5 for the intended products and corresponding accuracy classes and when operated under normal conditions of use.		Amended as proposed.
Denmark	41	8.3.2	In c) change "method in 6" to "method in 9". In last paragraph change reference "5" to "4".		Amended.
Denmark	41	8.3.5	Remove the section! It is already written in 5.12.3.		Clause deleted.
Denmark	43	9.5.1	Exchange reference "5.14" with "6". 'value' has been removed so the following 'of the' should also be removed.		Corrected.
Denmark	44	9.5.2.1	Use "x" for pre-discharge and "y" for post-discharge so they are not confused with the three different AGFI operations a), b) and c).		"1"and "2" used.
Denmark	46	A.1.2	Change "7.3" to "7.10"		Amended
Denmark	46	A.2.2	Remove "and use the checklist given in OIML R 61-3". The checklist is used at type examination not at initial verification.		Text deleted.

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Denmark	66	A.6.2.8.2	Change section number to 6.2.8.1.2		Amended.
Denmark	66	A.6.2.8.3	Change section number to 6.2.8.2 After "Test severity: Two test loads at Min and Max at a tilt of 5%" should be added, "In case of AGFIs intended for installation in vehicles the test shall be conducted at a tilt of 10%."		Text added.
Denmark	69	A.6.3.2	All other OIML Recommendations for weighing equipment specify 1 minute as test time for the bursts, which is in accordance with both OIML D11:2013 and IEC 61000-4-4:2012. We see no technical reason for deviating from this, so please change "2 minutes" to "1 minute".		Amended. OIML D 11 tables adopted.
FR	-	-	General : page number and document clause are these of the clean version		Amended.
FR	-	-	General: We have to keep in mind these recommendations need to be aligned with D11.		Aligned as far as possible with D11.
FR	11/95	0.3.5 (tare device)	The paragraph should include some words on "preset tare" We suggest : - to modify the title to read "0.3.5 Tare" - to create "0.3.5.1 tare device" equivalent to the current 0.3.5 - to create "0.3.5.2" preset tare device" the content of which would be based on R76/2006 paragraphs T.2.7.5 and T.5.3.1		New terminology inserted as proposed.
FR	13/95	0.3.11 module, Figure 1	The text of cell n°5 of Figure 1 doesn't make sense. Propose to align with R76 and rename it "Further data processing"		Amended as proposed.

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FR	22/95	4.2.3	The colleagues from the Netherlands have told they have doubts about existing filling instruments not applying a preset value. Therefore, they ask to delete a part of the paragraph. In fact, this was the case when R51/1996 was established; a lot of selective combination weighers only needed to preset limits and the instrument selected the first combination they found inside these limits to make a fill. This was for products having low prices and was also due to availability of components and software tools which were not so speedy as they are today. So, as this part was introduced following a French comment in the 90th corresponding to an existing situation, we can support the proposal of the Netherlands. We don't agree with the change proposed in 4.2.3 because the sentence seems strange and suggest to simply follow what our colleagues have suggested.		Sentence amended. See comments from Austria, Japan and Germany

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FR	23/95	4.6 (Minfill)	Don't understand why a lot of things are repeated but not exactly identical in 4.6 and in annex E. For example, Table 2 and Table E.1 give the same values but note a/ of table 2 differs from note a/ in Table E.1. We agree that it is very difficult to handle with MinFill as there are a great number of different cases that may occur on packer's lines and Table 2 and annex E are helpful to begin with this issue. Our key reason for having commented this concept of theoretical MinFill values is that on sites, packers may handle with products very easy to fill. In such cases, MPEs are OK even with nominal quantities that are less than the theoretical value That is the reason why we suggest to keep Table 2 but to add words telling that : "provided that product test results are inside the MPEs, smaller values of MinFills may be marked on an instrument". e.g class X(0,5) with d=100 g, product results were good with 12 kg. This value is less than the "20000 g" given in Table 2.		Text added as bulletin C in Table 2.

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FR	34/95	7.5 Influence factors	Agree with the principle of adding the possibility of condensing humidity. Beware however that modular/open approach is often used. We have not gained any experience on how cyclic or steady state humidity tests will work for a complete weighing instrument. The following may be thought in the scope of all weighing instruments recommendations.	We suggest to discuss of cases where a module has passed a steady state test and another a cyclic test. e.g indicator has passed a steady state test and the load-cell a cyclic test. - should only be combined together in a complete weighing instrument modules that have passed the same kind of humidity tests ? - if yes, should a certificate include statements that limit combination of modules ? - a lot of existing NAWIs include indicators having passed steady state tests and "CH" load-cells. This existing situation seems not to be critical, so would it be possible to include in R61 some sentence permitting a "mixing" of humidity tests ?	Will seek proposals from TC9/SC2 on "mixing" of humidity tests"

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FR	41/95	8.3.4 Determination of accuracy class X(x)	We propose a rewording of paragraph b/ to read something like : " b)Verify that accuracy classes marked in accordance with descriptive markings in 5.12 show a value of "*x* " equal to or greater than the value(s) of "*x* " determined as above. The operational accuracy class marking required in accordance with 5.12 shall show a value of "*x* " : - equal or greater than "x_{ref}" of the reference accuracy class for which the type was approved and which was laid down in the approval certificate, and - not greater than 2 or the value prescribed by national legislation (see note of 4.1) whichever is less".		Amended as proposed.
FR	43/95	9.4 Accuracy of standards	The note proposed in our previous comment has not been inserted. We propose to insert : "Note : it is recommended that the control instrument or the device used for control purposes are verified immediately prior to the material test."		Note inserted as proposed.
FR	43	9.5.1	Replace "conventional true" by "conventional value"		Amended. Similar comments from Netherlands and Denmark.
FR	48/95	A.3.7 Indication of a digit smaller than d	We propose to add a note telling that such indication is only for test purposes.		Note inserted as proposed.
FR	51	A.5.3.2.1	We should not use a "zero setting device" but make "on/off" successive.		"zero setting device" is replaced with "reset to zero"

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FR		A.6.2.8 Tilting	A.6.2.8.2 should be A.6.2.8.1.2 A.6.2.8.3 should be A.6.2.8.2		Corrected.
FR	67/95	A.6.3 Disturbance tests (in accordance with 7.2)	Germany suggested to add a 3rd note in A.6.3, but this note has been put in A.6.3.1. This note should be moved from A.6.3.1 to A.6.3. We wonder how this clause (which makes sense) would be applied in practise where a lot of modules (indicators or analogue data processing units) have got certificates issued under R76 and are asked to be used in AGFIs.		The note has been moved to A.6.3. The complete instrument should be tested with all the modules fitted. In addition, Part 3 of WELMEC Guide 2.8 inserted in Annex E as proposed by Germany"
FR	88	Annex E Example 2	Replace "Minfill alue" by "Minfill value".		Corrected.
Germany		0.5.2.6	The note is a little bit difficult to understand. Should the word "that" in "is that appropriate to" be deleted?		Terminology amended in accordance with Netherlands' comments.
Germany		4.2.3	After the second brackets the words "the maximum difference" should be inserted otherwise the subject of the sentence is missing		Text inserted as proposed.
Germany		4.7	The last paragraph contains a fragment from R50: the "belt weigher" should be replaced with "AGFI".		Amended.
Germany		4.7.2 d)	Considering road vehicle batteries here, we would have to consider the corresponding EMC tests (e.g. as per ISO 7637, see our remark to)		Test for power from external 12V and 24V road vehicle batteries given in A.6.2.8
Germany		4.7.3	The first paragraph deals with AGFIs (plural), so should it really read "... which does (singular) not have..."?		Text corrected.

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Germany		4.7.3 a)	Shouldn't it read "Where a levelling device and a level indicator ***are***..."?		Amended.
Germany		5.8.2	Last paragraph: The same should apply to tare device, the more so as combined zero-setting and tare-device will be allowed. Proposal: "After zero or tare setting..."		"or tare" is added.
Germany		7.9	1st paragraph: "... with interfaces which allows...", should read "... with interfaces which allow..."		Amended
Germany		8.2.3.2	The term "simulator" is not unambiguously used (see also A.6.1.2 and A.6.1.2.2). On the one hand it is meant to be a simulation set-up on the other hand it stands for a device simulating a (strain gauge) load cell. So please consequently re-name "simulator" to "instrument simulator" or "simulation set-up" where an incomplete instrument intended for laboratory testing is meant. [Remark: Unfortunately there is no clear distinction in R50 either. We should avoid that problem at least with R61]		Amended. "Instrument simulator" is inserted.

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Germany		9.2.1 c)	The recommendation to test at 100 g, 300 g, 1000 g and 15 000 g has been deleted although it would make sense to use these test fillings. Looking at table 1 it is obvious that at these loads the permitted relative error (i.e. in percent) is minimized for the smallest possible filling. Example: For a 100 g fill the absolute error is 4.5 g, that is, 4.5% of the fill. The same goes for e.g. 200 g (where a percentage value is to be applied) but since the fill is larger and larger fills a normally easier to be realized this case is less critical. The same principle applies to 300 g (MPD = 9 g = 3%) and 500 g (MPD = 3%): The smaller fill needs to be realized with the same accuracy as the larger one. All in all there are more reasons to keep the sentence as before than to omit it.		Text re-inserted. Originally deleted due to China 's comments in the 1CD consultation
Germany		A.6.1.2.3	REMARK: Connecting peripheral equipment may improve the conditions for the AGFI under test in comparison to having mere cables connected to the interfaces. This is so because current from coupling electromagnetic radiation to the cables can be guided to the grounding of the peripheral device connected as well instead of being guided into the AGFI and causing problems there. In other words: connecting peripheral devices may lead to not having worst case conditions.		Last sentence deleted. Subject to TC9/SC2 approval.
Germany		A.6.2	1st table: Deleting the word "test" under item A.6.2.1 we should consequently not insert "test" in the 3rd row (item A.6.2.3)		"test" is deleted from A.6.2.3

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Germany		A.6.3	Since under A.6.2.7 a test specific for road vehicle power networks has been introduced we should consequently introduce the disturbance tests for systems mounted on road vehicles as well (see R76, B.3.7) However, we might renounce to the test under A.6.2.7 as we did in R50 (CIML draft of April 2013).		OIML D 11 tables provided by Netherlands adopted. Special EMC tests from R76 B3.7 inserted as proposed.
Germany		A.6.3.2	There is obviously a contradiction: Tables 12.1 and 12.2 have the same title but I guess the second one is intended for mains power lines only because a higher test voltage is listed there. As per D11 (2013, table 26) the recommended higher test level for AC and DC mains is 2 kV; the recommended higher test level for signal, data and control lines is 1 kV (D11, table 28). So either "AC and DC mains…" has to be re-inserted on top of table 12.2 (in lieu to "signal, data and control lines") or it has to be inserted on top of table 12.1, while "on signal data and control lines" is deleted and the test levels of tables 12.1 and table 12.2 must be swapped (table 12.1: 2 kV, table 12.2: 1 kV).		"AC and DC mains…" re-inserted in title of Table 12.2.
Germany		A.6.3.5	The "note" contains obsolete information with regard to the length of the cable. According to the latest edition of IEC 61000-4-5 (2006) the limit length from which on a test has to be performed has been reduced to 10 m. Generally we should try to refer to the latest IEC EMC standards to keep pace with technical development as well as possible.		2nd sentence in the note deleted.

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Germany		B.2.5	2nd dot: The legal situation may differ from one country to another, however, I think that in most countries the user is responsible for keeping the data. That being the case the data may never be deleted automatically, that is, without the consent of the user.		Text "*with the consent of the user* "is inserted.
Germany		B.3	1st dot: It should read "…of a**n** instrument…"		Amended.
Germany		C.2	The 1st sentence may be misunderstood: "it is not acceptable to test the temperature effect on no-load indication on one EUT and the combined effect on a different one." The wording "different one" may imply that instead it may be another one of the same type and with the same technical properties. This, however, should not be generally accepted or, in other words only be accepted with regard to EMC tests which may be performed on another specimen of the same type having the same technical data. All influence tests should be performed on the very same instrument.		The following text deleted "*For example, it is not acceptable to test the temperature effect on no-load indication on one EUT and the combined effect on a different one*."
Germany		D.1	Last paragraph: "… in R60-3…" should read "… in R61-3…"		Amended.

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Germany		Annex E	The second item is an idea about the informative annex E. I think it is a good idea to have that annex and I'd like to propose to supplement that annex by information from WELMEC Guide 2.8. What is the background? I believe that in most countries where AGFIs are being submitted for testing and approval the main modules (indicator, load cells) have already been tested before. Most commonly there is a type approval for a nonautomatic weighing instrument, considering the modular approach under R76. If so, then the indicator has been tested as a module. This being the case, however, test results of the indicator testing are available. I consider it a good method to use these for calculations and assessments as per WELMEC Guide 2.8 in order to facilitate the test procedure. So I'd say that we should make this information available to our colleagues outside the EU, as we did with the contents from other WELMEC Guide e.g. when revising R76. If the information is contained in the informative annex, it is not obligatory to follow the calculations and the advice but it may be taken as an accepted procedure. In case part III of that Guide is considered as being to extensive then I could try to cut it down a little bit. The most easy way would be, of course, to adopt chapter III completely		Part 3 of WELMEC Guide 2.8 inserted as proposed.

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JP	Many	General comment on 0.5.2.6, 4.6, 5.8.4, A.5.3.5, A.5.5, A.8.2.4, Annex E and Annex F	The term "***0.25 MPD***" (or "***0.5 MPD***") appears many times in three different expressions below. *a) 0.25 MPD* *b) 0.25 MPD in-service (4.6, A.5.3.5 and Annex E)* *c) 0.25 MPD in-service inspection (0.5.2.6, 5.8.4, A.5.5, A.8.2.4 and Annex F)*	Please clarify the differences among these expressions. We interpret that a) represents the MPD at initial verification in Table 1 and both b) and c) represent MPD in-service inspection. If our understanding is correct, the same expression should be used for b) and c).	Corrected. Should be: "0.25 mpd, or 0.25 mpd in-service", where applicable.
JP	p.7	0 Terminology	In OIML documents, 'terminology' is usually placed after 'scope'. We recommend aligning with the standard format proposed by OIML B 6-2.		Amended as proposed.
JP	p.20	2 scope	Are mechanical AGFIs, if they exist, included in the scope? This is just an inquiry and we will not request any changes.		The scope does not exclude mechanical AGFIs. Such an instrument will be subjected to the appropriate tests in R61.
JP	p.22	4.2.2 Maximum permissible error for static loads	It is not clear if this clause is specifying MPEs for static load or MPEs for influence factors. We propose changing the title as shown below because the influence factor tests in this draft (A.6) are always conducted using a static load. *4.2.2 Maximum permissible error (MPE) <u>of</u> static loads <u>for influence factor tests</u>*		Title amended as proposed.
JP	p.22	4.2.3 Maximum permissible preset value error	The reference should be "9.6" not "5.6."		Amended.

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JP	p.28	5.8.2 Accuracy of zero-setting and tare devices	Isn't "0.25 d" a mistake for "0.25 MPD", although it was corrected to "0.25 d" in 2CD?		Corrected to "0.25 MPD" Only 0.25 or 0.5 mpd is used throughout.
JP	p.40	8.2.3.3 Apportioning of errors, Table 3 NOTE 2	The reference should be "SH or CH tested" not "SH tested."		Amended.
JP	p.42	9 Test methods	The title of this clause should be "**Performance tests**" in compliance with the standard title for Part 2 specified in OIML B6-2.		Title amended.
JP	p. 46	Annex A	"Metrological control" and "performance test" in Annex A should be included in Part 2. We recommend aligning with the format proposed in OIML B 6-2.		Already included in Part 2. Part 2 starts with clause 8 in the document.

<table>
<tr><th rowspan="2">Member State/ Liaison</th><th colspan="2">R61 Parts 1 and 2 2CD</th><th rowspan="2">Member Comments</th><th rowspan="2">Proposed changes</th><th rowspan="2">Secretariat's comments</th></tr>
<tr><th>Page number</th><th>Document clause</th></tr>
<tr><td>JP</td><td>p.49</td><td>A.5.2 Warm-up time</td><td>It is more appropriate that this clause is included in "A.6 Influence factor and disturbance tests".

As shown by the two examples below, warm-up time seems to be regarded as an influence factor in OIML R 76 and R 60.</td><td>Example 1: Clause titles in OIML R 76 (2006)

A.5 Influence factors
A.5.1 Tilting (only class II, III and IIII instruments)
<u>A.5.2 Warm-up time test</u>
A.5.3 Temperature tests
A.5.4 Voltage variations

Example 2: Treatment of warm-up time in OIML R 60 (2000)

Table 7 Performance and stability tests for a load cell equipped with electronics
<table>
<tr><th>Test</th><th>Annex A test procedure</th><th>p_{LC}</th><th>Characteristic under test</th></tr>
<tr><td><u>Warm-up time</u></td><td>A.4.7.2</td><td>1.0</td><td><u>Influence factor</u></td></tr>
<tr><td>Power voltage variations</td><td>A.4.7.3</td><td>1.0</td><td>Influence factor</td></tr>
<tr><td>Short-time power reductions</td><td>A.4.7.4</td><td>1.0</td><td>Disturbance</td></tr>
<tr><td>Bursts (electrical fast transients)</td><td>A.4.7.5</td><td>1.0</td><td>Disturbance</td></tr>
<tr><td>Electrostatic discharge</td><td>A.4.7.6</td><td>1.0</td><td>Disturbance</td></tr>
<tr><td>Electromagnetic susceptibility</td><td>A.4.7.7</td><td>1.0</td><td>Disturbance</td></tr>
<tr><td>Span stability</td><td>A.4.7.8</td><td>1.0</td><td>Influence factor</td></tr>
</table></td><td>Warm-up test added to the influence factors section. Draft is renumbered accordingly.</td></tr>
</table>

Member State/ Liaison	R61 Parts 1 and 2 2CD		Member Comments	Proposed changes	Secretariat's comments
	Page number	Document clause			
JP	P.54	A.5.5 d)	The reference should be " c)" not "(3)."		Amended.
JP	P.54	A.5.5 e)	The reference should be "Ref (1) "not "Ref (x)."		Amended.
	P.66	A.6.2.8 Tilting	The reference should be "A.6.2.8.1.2" not "A. 6.2.8.2." The reference should be "A.6.2.8.2" not "A.6.2.8.3." Due to the correction stated above, replace "A.6.2.8.3" with "A.6.2.8.2" after revising A.6.2.8.2.		Amended.
JP	p.60, p.64 & p.76	A.6.2.3.2, A.6.2.7 and A.7	Each test procedure in Annex A should be described in a consistent way. For example, the test item 'Preconditioning' or 'Precondition' in the tables may be deleted because it is specified as 'not necessary'.		The OIML D11 tables provided by The Netherlands are used. This provides consistency in the tests description.
JP	P.78	A.8.2.3 (d) Procedure for metrological material tests	The term "control AGFI" is used only once in this draft. If it is a misprint, it should be "control instrument".		Amended. "control instrument" inserted.
JP	P.79	A.8.2.3 (g) Procedure for metrological material tests	The reference should be "(b) to (f)" not "(2) to (6)."		Amended.
JP	P.79	A.8.2.4 Determination of accuracy class, X(x) (in accordance with 8.2.5)	The reference should be "4.2.3" not "4.4." The reference should be "X(x)" not "(x)."		Amended.
JP	P.86	D.1 Type Approval	The reference should be "R61-3" not "R60-3."		Amended.

Member State/ Liaison	R61 Parts 1 and 2 2CD		Member Comments	Proposed changes	Secretariat's comments
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NL-1	7	0	To be modified. Most relevant terminology from B 3, D 11 and D 31 can be found in new VIM and VIML. For terminology in principle only vocabularies should be referred to.	Delete reference to B3. Consider also deleting reference to D 11 and D 31	OIML B3 reference deleted. D11 and D31 kept because there are references to them in the draft.
NL-2		references	Example : OIML R76, T.2.7.2.1 [7] The manner of referencing is not expected in OIML (see B 6-2)	Apply [OIML R76, T.2.7.2.1] or only [7]	Amended.
NL-3	7	0.1.1	Implementation of definitions of basic physical quantities should strongly be omitted. A Recommendation is not intended to be an encyclopaedia.	Delete	Definitions are useful for situations where the Recommendation is translated into several languages.

Member State/ Liaison	R61 Parts 1 and 2 2CD		Member Comments	Proposed changes	Secretariat's comments
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NL-4	7	0.1.1.1	***particle mass*** Quite a few problems concerning this definition. 1. The origin of this word combination is related to "***reference particle mass"*** applied in the Recommendation, which stands for "**the mass of a reference particle**" So a combination of *"mass"* and "*reference particle*" Defining the combination "*particle mass*" therefore is incorrect. "*reference particle"* could be defined instead. However applying the English word *"particle"* may lead to misinterpretation, while "particles" are associated with objects having very small masses like atoms or molecules. 2. Another observation is that in this definition *"mass"* appears to be interpreted as an object (material) instead of the physical quantity. So it contradicts with the above definition of mass being a physical quantity, which implies that replacing in 0.1.1.1 the word *"mass"* by its definition is not possible. 3. In the terminology repeating the term in a definition is not allowed.	One could define: Reference piece or reference object, but perhaps better to define: **Reference nub(ile)** small localized object to which can be ascribed physical or chemical properties such as volume or mass.	reference nub(ile) may also lead to interpretation, since "nubile" is not generally associated with measurement. Proposal is to use "reference mass" which is easily explanatory in conjunction with the definition in 3.1.1.
NL-5	7	0.1.4 0.1.5 0.1.7	No need to define in this Recommendation	Delete	The secretariat proposes that these terms be kept in order to maintain some terminology consistency with other AWI Recommendations and R76.

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NL-6	7	0.1.6 Note	This note applies to "mass" and "weight" not to weighing instrument	Correct to " .. *action of gravity to that body."* Delete the note. This note could only be applied for 0.1.4. If decided to keep 0.1.4. insert this note below the definition of 0.1.4	Amended. Note moved to 0.1.4.
NL-7	8	0.1.8	Definition term does not refer to weighing only	Delete "weighing" in the definition, making the definition universal in line with the term.	Deleted.
NL-8	8	0.2.1	Incorrect English grammar in the definition *weighing instrument operating without the intervention of an operator and /or follows a predetermined program of automatic process characteristic of the instrument*. The source of this definition appears to be the English MID definition, although amended. Furthermore this MID definition appears to be not completely correct as well, when compared to the French and Dutch definition. Main problem is the different way in which the word "characteristic" is applied by the use of a wrong. The MID states: *"An instrument that determines the mass of a product without the intervention of an operator and follows a predetermined programme of automatic processes characteristic of the instrument."* In order to align the English definition with the Dutch and French version it should read: *"An instrument that determines the mass of a product without the intervention of an operator and follows a predetermined programme of automatic processes (being) characteristic for the instrument."*	Correct to: weighing instrument operating without the intervention of an operator and ~~/or~~ following a predetermined program of automatic processes characteristic for the instrument. Alternatively the word "typical" could be applied instead of "characteristic". This would rather deviate from the MID "/or" is not correct while it would mean that an intervention of an operator could still be applicable during the predetermined program.	Amended as proposed.

Member State/ Liaison	R61 Parts 1 and 2 2CD		Member Comments	Proposed changes	Secretariat's comments
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NL-9	9	0.3.1.1 0.3.1.3 0.3.1.4 0.3.1.4.3	These definitions cannot replace the term while they comprise 2 sentences. A slight amendment will solve this issue.	0.3.1.1 replace: *"...measured. This device may..* " by : *"...measured that may.."* 0.3.1.3 replace: *"...module.It may..* " by : *"...module that may.."* 0.3.1.4 "*device that controls…*" replace: *"...process .The devices may..* " by : *"...process and may.."* 3.1.4.3 replace: *"...value .The device may..* " by : *"...value and may.."*	Amended as proposed.
NL-10	9	0.3.2.1	Definition to be amended to fit OIML D 11(2013)	Include OIML D 11 (2013) 3.1 **electronic measuring instrument** instead of **electronic instrument** and copy the definition. Replace all occurrences of "*electronic instrument"* by "*electronic measuring instrument"*	Amended as proposed.
NL-11	10	0.3.2.2	**electronic device** device employing electronic sub-assemblies and performing a specific function. Electronic devices are usually manufactured as separate units and are capable of being independently tested. OIML D 11, 3.2 [4] Definition to be amended to fit OIML D 11(2013) While the definition of electronic subassembly was deleted this definition should also be amended and aligned with OIML D 11 (2013'	Change to: **electronic device** identifiable part of an electronic measuring instrument that performs a specific function. Keep the notes but refer to OIML V1 (2013) 4.04 instead of OIML B 3. (While OIML B 3 is not a vocabulary and module is defined in the VIML)	Amended as proposed.
NL-12	12	0.3.9	Reference incorrect In note "also" is redundant	Change to VIML 6.08 Suggest to change note to: "Note: Often referred to as …."	Amended as proposed.

Member State/ Liaison	R61 Parts 1 and 2 2CD		Member Comments	Proposed changes	Secretariat's comments
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NL-13	12	0.3.11	Reference to be made to vocabulary (VIML)	Change reference to VIML 4.04	Amended
NL-14	13	0.3.11.1.1	Better not make reference to another Recommendation especially when it is in revision (R 60) Furthermore the term is not further applied in R 61	Delete completely as required by OIML B 6-2 (A.1.1.5)	OIML R 60 [7] as proposed.
NL-15	15	0.4.2	**reference particle mass of a product** *mass equal to the mean of ten of the largest particles or pieces of the product taken from one or more fills.* See 0.1.1.1 and also notice that by the usage of the word "mass" in this case is not as a physical quantity (like defined in 0.1.1).	Suggest to replace by: **reference nub(-ile)** *object having a mass equal to the mean of ten of the largest nub(-ile)s or pieces of the product taken from one or more fills.*	Suggest using "reference mass" instead of "reference nub(-ile)" See comments above. Definition amended as proposed.
NL-16	14	0.4.4	"...test weights or masses..." The usage of the word "mass" in this case is not as a physical quantity.	Delete "...or masses..."	Deleted
NL-17	17	0.5.2.1 0.5.2.4	Not meant to use 2 definitions for one term in one Recommendation. This is different from a vocabulary where different similar terms may have one definition as to allow for a transition to one term. In such case there is always only one preferred term Therefore only the preferred term shall be applied in this Recommendation.	Apply "error" which is preferred in legal metrology, so delete " measurement error" Delete "maximum permissible measurement error (MPME)"	"maximum permissible measurement error (MPME)" deleted.
NL-18	18	0.5.2.5	Adjust to new vocabularies	Adjust definition "fault" VIML 5.12	Adjusted.

Member State/ Liaison	R61 Parts 1 and 2 2CD		Member Comments	Proposed changes	Secretariat's comments
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NL-19	18	0.5.2.6	It is required not to amend terminology as stated in the VIML and VIM. Moreover the terminology part of a Recommendation is not the place to introduce a requirement, while terminology should be as much as possible independent of the applicable Recommendation. By mentioning "fault greater than 0.25 MPD" a requirement is introduced, which contradicts with the required independency.	Suggested to solve as follows: 1.Delete "fault greater than 0.25 MPD" in 0.5.2.6 and amend to the exact definition as in VIML 2013 (5.14) 2. Introduce the term and definition of "fault limit" from the VIML 2013 (5.13) 3. Introduce in clause 4 (Metrological requirements) a sub clause in which the value is given to the fault limit being the value 0.25 MPE. 4. Delete the note. 5. replace at every location where stated "significant fault value" to "fault limit"	Amended as proposed.
NL-20	18	0.5.3	**"reference value for accuracy class (Ref(x))** value for accuracy class determined by static testing of the weighing module during influence quantity testing at type evaluation stage. Ref(x) is equal to the best accuracy class for which the AGFI may be verified for operational use." This definition contains a principle problem in the manner in which it is formulated. When reading the definition one could interpret it as if the **Ref(x)** is to be established during influence quantity testing. This however is not the intention and would be a wrong interpretation while during type evaluation the conformity to specifications is tested and it is not the moment when on basis of research specifications are established. So Ref(x) will need to be established by the manufacturer, prior to the type evaluation.	Amend to: **"reference value for accuracy class (Ref(x))** value for accuracy class specified by the manufacturer for the purpose of static testing of the weighing module during influence quantity testing at type evaluation stage. Ref(x) is equal to the best accuracy class for which the AGFI may be verified for operational use."	Amended as proposed.

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NL-21	19	0.6.3	NOTE 2 is not relevant. Notes in terminology may be deleted when not relevant	Suggest to delete Note 2	Note 2 deleted.
NL-22	20	0.8	- Listing is an undesirable mix of abbreviations symbols and equations. - Only equations should contain equal signs (=) Equality is not true for abbreviations and symbols Equations do not concern terminology and therefore should better be located	Split up the listing in 2 parts: e.g. 0.8 abbreviations and symbols and 0.9 equations Delete equal signs where no equations are concerned For example: **0.8 Abbreviations and Symbols** I indication I_n n^{th} indication L load ΔL additional load to next changeover point P indication prior to rounding (digital indication) E error **0.9 Equations** E = I – L (analogue) E = P – L (digital) P = I + ½ d – ΔL	Amended as proposed.
NL-23	20	2, For example	The AGFI can not comply with OIML R 87 because R 87 is about pre-packages, and does not concern requirements to measuring instruments	Delete "and fills less than or equal to 25 kg will need to comply with OIML R 87 [24]"	Text is informative and not essential, deleted.
NL-24	21	3	The names of units should be in lowercase	Replace capitals by lower case characters	Corrected.
NL-25	21	4.2	Title is strange	Change to "Error limits"	Amended.
NL-26	22	4.2.1 Table 1	(below table): for better understanding replace "find" by "determine"	replace "find" by "determine"	Amended.

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NL-27	22	4.2.2	In the way formulated in the note this would concern a requirement. A note however cannot contain a requirement. Reference to A.6 is not clearly indicating what is meant	Propose to make Annex F mandatory. And make a reference to annex F for the calculation of the errors and delete the word "Note" resulting in: "For AGFIs where the fill may not be equal to one load, the MPE applicable for a test on a static load shall be calculated in accordance with the error calculation in annex F clause F2.	Amended as proposed.
NL-28	22	4.4	See comment on 0.5.2.6 Furthermore: The limit for a fault (fault limit) concerns the maximum fault accepted when exposed to a disturbance. This differs from an "error" while an error concerns a deviation during normal operation, not caused by a disturbance. This clause however is mixing up "error" and "fault"	Amend The fault limit should be a requirement, not be part of the terminology.	Amended. The "Fault limit" value is defined in 4.7.4.
NL-29	23	4.6	The scale interval is also of influence to the Minfill (which is shown in the table)	Add to the note "- Scale interval"	Added.
NL-30	23	4.6 table	The row containing d = 0.5 g should show the decimal .0 or .5 to be consistent with the Note b)	Change 2nd row to show : 28.0; 11.0; 5.5 and 3.0	Amended.
NL-31	27	5.7	"...test weights or masses..." The usage of the word "mass" in this case is not as in the definition (as a physical quantity) but as an object having a certain mass.	Delete "...or masses..."	Deleted.
NL-32	28	5.8.2	Reference to Minfill is sufficient (Minfill >= Min)	Delete "Min or"	Deleted, See comment from Denmark.

Member State/ Liaison	R61 Parts 1 and 2 2CD		Member Comments	Proposed changes	Secretariat's comments
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NL-33	31	5.11	.. with detachable masses which shall be either weights in accordance with OIML R 111 [5] .....purpose designed masses of any nominal value, .. AGFI. The usage of the word "mass" in this case is not as defined (as a physical quantity).	Replace by: .. with detachable weights which shall be either weights in accordance with OIML R 111 [5] .....purpose designed weights of any nominal value, .. AGFI.	Amended.
NL-34	32	5.12.4	Use correct form of markings	Change to read: a) at least Max, Minfill, …	Amended.
NL-35	34	7.2 a)	….shall not exceed the value of the significant fault specified in 0.5.2.6 , or…	Change to: …shall not exceed the fault limit specified in 4.x , or…	Amended.
NL-36	39	8.2.3.3	Use pi with the "i" in subscript	Change "pi" to "p_i"	Corrected.
NL-37	43	9.5.1	...to find the conventional true of the mass.....	Correct to "...to find the conventional value of the mass.....	Amended.
NL-38	44	9.7	***Mass and average value of the test fills*** What is meant is: "***Value of the mass and average value of the mass of the test fills"***	Correct to read (shortened form) ***"Value of the mass and average mass of the test fills"*** or ***"Mass and average mass value of the test fills"***	Amended.
NL-39	44	9.7	*"...being the conventional true value of the test fill. "*	Correct to: *"...being the conventional mass value of the test fill. "*	Amended.
NL-40	51	A.5.3.3	In case the MPD in-service (table 1) is in (absolute) quantity units (value in g) the equations should not mention 0.25 MPD in-service x Minfill but only mention 0.25 MPD.	Suggest to rephrase to *"0.25 MPD in-service at Minfill"*	Amended.
NL-41	53	A.5.5	the index k being a positive or negative whole number or zero. Values for significant fault shall then be calculated from the MPD for the reference class.	the index "k" being a positive or negative whole number or zero. Fault limit values shall then be calculated from the MPD for the reference class.	Amended.
NL-42	55	A.6.1.3.1		Replace (twice) "*significant fault value*" by "*fault limit*" (or fault limit value)	Amended.

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NL-43	56	A.6.2	New tables supplied (separately)	To be implemented	The OIML D11 tables provided by The Netherlands are used.
NL-44	67	A.6.3	New tables supplied (separately)	To be implemented All occurrences of "significant fault" replace by "fault limit"	The OIML D11 tables provided by The Netherlands are used.
NL-45	68	A 6.3.1	NOTE 3: In case ... is reached. To that end the preset value of the fill may be set to a value that exceeds the test load by exactly the significant fault. In case of exceeding the significant fault the AGFI would signal that the preset value has been reached by e.g. setting a digital output. Thus a significant fault due to transient disturbances can be detected.	Replace by: *NOTE 3: In case ... is reached. To that end the preset value of the fill may be set to a value that exceeds the test load by exactly the fault limit (value). In case of exceeding the fault limit (value) the AGFI would signal that the preset value has been reached by e.g. setting a digital output. Thus a significant fault due to transient disturbances can be* detected. Since "*exceeding the fault limit"* in principle is the same as *"the occurrence of a significant fault"*: Alternative *NOTE 3: In case ... is reached. To that end the preset value of the fill may be set to a value that exceeds the test load by exactly the fault limit (value). In case of the occurrence of a significant fault the AGFI would signal that the preset value has been reached by e.g. setting a digital output. Thus a significant fault due to transient disturbances can be detected.*	Amended. See comments from Austria.

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NL-46	88	F.1	Significant fault for multi-load AGFIs a) Significant fault for selective combination weighers: A fault greater .. in a fill. Example: For .. inspection is 1.5 % = 24 g. Hence the value of significant fault is: b) Significant fault for cumulative weighers: A fault greater .. per fill. Example: For .. is 7. The MPD .. or 120 g. Hence the value of significant fault is: NOTE: This definition of significant fault for .. Max.	Fault limit for multi-load AGFIs a) Fault limit for selective combination weighers: A fault .. a fill. Example: For .. inspection is 1.5 % = 24 g. Hence the fault limit is: b) Fault limit for cumulative weighers: A fault greater ... per fill. Example: For ..is 7. The MPD .. or 120 g. Hence the fault limit is: NOTE: This calculation of fault limit (value) for .. Max.	Amended as proposed.
NL-47	general		Type approval should only be applied where it concerns the statement of the result of the type evaluation. For example "type approval certificate" Where it concerns the action in order to test the conformity "type evaluation" should be applied.	Review the draft on the correct application of "type approval"	Amended "type approval" and "type evaluation" used in the draft as applicable.
POLAND	69	A.6.3.2	wrong number of table in text, there is "according to Table 11.1 and Table 12.2" over Table 12.1, there should be "according to Table 12.1 and Table 12.2"		Amended. D11 tables from Netherlands inserted.
POLAND	69	A.6.3.2	Doubled "on" in Table 12.1, there is "Bursts on on signal…", one "on" should be deleted.		Amended.
POLAND	70	A.6.3.2	Table 12.2 has the same title as Table 12.1, should be "Bursts (transients) on mains power lines"		Amended.

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Russia			Russia has no comments on the Working Draft (1WD) of R61 parts 1, 2, 3. Metrologists in Siberian Research Institute For Metrology (SNIIM) have worked with these recommendations		Thank you.
UK	16		**0.5.2.1 measurement error** error of measurement error Should this be: "error of measurement", or "error of measurement error", or {??}		"measurement error" will be used.