



TC 5/SC 2/p 3:					Revision of D 31: General requirements for software controlled measuring instruments		
PG comments on 1WD:					TC5-SC2-p3-N001		
Circulation date:					22 Sep. 2017	Convener: Mr. Esche, Mr. Grasso Toro	Closing date for voting and/or comments: Monday 30 July 2017 at 23:59 CET
Date comments submitted:					20 Dec. 2017	Please type your comments in this form and post it (in Word format) as soon as possible and <u>no later than the closing date</u> in the PG Workspace (Technical work → PG Workspaces)	
PLEASE INSERT THE COUNTRY CODE AND THE PART AND CLAUSE NUMBER IN EACH ROW. PLEASE DO NOT MODIFY THE NUMBER OF COLUMNS IN THE TABLE.							
Country Code ¹	Part	Clause/ Subclause	Paragraph/ Figure/ Table/	Type of comment ²	COMMENTS	PROPOSED CHANGE	OBSERVATIONS OF THE CONVENER/PG on each comment submitted
NL-1		General		Ge	According Article I 4) of the Convention one of the main task of OIML is unification of methods and regulations. OIML vocabularies and OIML Documents have been produced and decisions have been made as part of Resolutions the at CIML level to help to reach this aim. Where referred to the NL proposed changes are based on the contents of these OIML publications and CIML resolutions.		in line with the intention of the WD
CA-2		General		Ge	Regarding “less technical details”, the use of technical detail in examples, which are intended to show how a requirement may be satisfied, is appropriate and helpful.	In the actual requirements, perhaps technical details should be reserved for the device specific documents.	We suggest to reduce the amount of technical detail, to transform D31 from some kind of textbook into a toolbox to be applicable for all instruments. Some additional detail in the examples may be helpful and should be discussed.
NL-3		2.3		Ge	It should be made clear that software requirements and related evaluation may be applicable to separate modules.	Suggest to replace the term “sub-assembly” by “module” as defined in V 1:2013 or simply by “constituent”, which does not need to be defined.	This in line with comment JP-4 and NL-32. We suggest to use the term "module" instad of "sub-assembly.
AU-1		3		Ge	Definitions – The definitions do not align with the OIML B 6-2 (2012) requirements as specified in clause 4.6 and Annex A.	Suggest aligning with OIML B 6-2.	This appears to be reflected in many NL-comments, which will be refelected by the next WD.
CA-4		3		Ge	No concerns with proposed changes regarding “naming of hardware”		in line with the intention of the WD

¹ **MB** = Member body (enter the ISO 3166 two-letter country code, e.g. CN for China)

² **Type of comment:** ge = general te = technical ed = editorial

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NL-8		3.1		Ge	Please take into account the CIML 2011 Resolution 24 . containing the following requirements: a) that new, and revisions of existing OIML Recommendations and Documents should apply the terminology and definitions of the VIM and the VIML without amendment, b) that terms and definitions from international vocabularies from other fields (for instance statistics) may be adapted when the concept that they pertain to in legal metrology is different and that such conceptual differences should be explained in a note, c) that when, in OIML Publications other than Recommendations and Documents, terms and definitions are used that differ from those in the VIM and the VIML, these differences should be indicated in notes, as appropriate,	Amend where applicable to fully fulfil the CIML 2011 resolution 24 prescribed unification rules	This appears to be reflected in many NL-comments, which will be refelected by the next WD.
NL-9		3.1		Ge	During the revision of V 1 by OIML TC 1 all terms defined in D 31 at that time passed review. Those specifcly applicable for software and considered to be universally applicable within OIML were copied in the “6. Software in legal metrology” part of the V1and after amending the definitions such that these fulfil the B6-2 defined layout requirements.	Adapt the applicable definitions to the V1 (6) definitions unless a revision of a definition is required for the new version of OIML D 31. If so, it is advised to involve the OIML TC 1 secretariat, while this would also require an amendment of the term in V1 .	This appears to be reflected in many NL-comments. If we do not manage to deal with all of them at the meeting, we suggest to form a subgroup to revise the terminology. Also covers NL-24.
NL-10		3.1.1		Ge	Acceptable solution: This contains universal wording that should not be redefined. The definition contains more than one phrase, which is not an accepted format.	Suggest to delete the term and definition	This is in line with the WD. We suggest to delete the definition.
NL-13		3.1.7		Ge	Commands: Concerns universal wording that should not be redefined. The definition contains more than one phrase, which is not an accepted format.	Agree to delete the term and definition	This is in line with the WD. We suggest to delete the definition.
NL-14		3.1.8		Ge	Communication	Agree to delete	This is in line with the WD. We suggest to delete the definition.
NL-16		3.1.10		Ge	Cryptographic certificate: The definition contains more than one phrase, which is not an accepted format. Moreover the second and third sentences are requirements and for that reason should not be part of a definition in terminology.	Move the second and third sentence to a different location	We agree and suggest to move the sentences "The data set is signed by a trustworthy institution with an electronic signature. The assignment of a public key to a subject can be verified by using the public key of the trustworthy institution and decrypting the signature of the certificate." as a Note before the Example in 5.1.3.2.d

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NL-17		3.1.11		Ge	Cryptographic means: The definition contains more than one phrase, which is not an accepted format. The second note does not concern the definition of the term. If necessary this should be described separately in a different clause.	Re-edit. Move the second note	Suggest to add a definition "electronic signature to include the following: "Electronic signing of data with the purpose of enabling the receiver or user of the data to verify the origin of the data, i.e. to prove their authenticity or to check that the data are unchanged, i.e. to prove their integrity." Also delete the first part of the note.
AU-4		3.1.29		Ge	Is the new definition required? It would appear that it is entirely consistent with "legally relevant" as defined in OIML V 1.	Suggest retaining the OIML V 1 definition.	Reference to V1 has been deleted. New definition was agreed at the Berlin meeting. TC1 is to be informed.
NL-26		3.1.35		Ge	Open network: Does not fulfil the requirements for a definition; is only applied in a note to a sub-clause and cannot be properly distinguished between any more.	Suggest to delete	OK, since "closed network" is also not used anymore, we should consider deleting that as well (as requested in NL-12).
NL-27		3.1.36		Ge	Performance: The definition is in conflict with its use in Annex B. The Term (single word) is considered too widely in use and therefore difficult to reduce its scope.	It is suggested to delete this term as is also done in OIML D 11. OIML D 11 now only defines "performance test".	We should copy the definition for "performance test" from D11 and delete "performance".
NL-32		3.1.49		Ge	Sub-assembly: If a definition is needed, due to a restriction then the word "module" could probably better be applied. In those cases where this term is used in a more generic manner it would probably be better to use "constituent" and to not further define this word	Use "module" instead of sub-assembly (Where the term "sub-assembly" is applied without restriction it is suggested to apply "constituent")	This in line with comment JP-4 and NL-3. We suggest to use the term "module" instad of "sub-assembly.
JP-4		3.1.49		Ge	The term "sub-assembly" seems unfamiliar to metrology experts. Another term in the new V 1 (2013) should be used.	Suggest to replace the "sub-assembly" with "module" based on the new version of OIML V1:2013.	This in line with comment NL-32 and NL-3. We suggest to use the term "module" instad of "sub-assembly.
NL-34		3.1.51		Ge	Time stamp: The definition contains more than one phrase, which is not an accepted format (Does not fulfil the OIML B 6-2: A.2 defined rules). Furthermore the second sentence should not be part of terminology. This sentence could be considered a requirement	Move the second sentence to the D 31 body.	Suggestion to move the second sentence to 5.2.3.7
NL-40		4.3		Ge	"..TCs or SCs..". Adapt to the changes in OIML technical work. See OIML B 6	Change to : "...Project Groups..". in all occurrences	Suggest to change all occurences to "project groups"
AU-10		5.1.1		Ge	With regards to the responsibility for ensuring the correct software identification; in some jurisdictions, the entity named on the Type Approval Certificate is responsible for all aspects of the measuring instrument described on the certificate.	In practice it may be the responsibility of the hardware manufacturer, but legally responsibility may rest with the Certificate holder.	The additional sentence: "The relevant OIML Recommendation should allow or disallow this exception." refers to manufacturer responsibility. Proper re-writing of this might make the statement clearer.

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NL-46		5.1.3.2.b		Ge	Support deletion.	At least correct the sequence of phrases in this statement and change to “may be activated through the user interface”	in line with the intention of the WD, will be taken into consideration
NZ-5		5.1.3.2.c		Ge	Fuel dispenser manufacturer in New Zealand comment: This is a rather simplistic view of the situation. In some cases static parameters are acceptable and could be secured.	Require further clarification.	Offer to add clarification to 5.1.3.2c to describe under which circumstances parameters need to be displayed.
NZ-8		5.2.1.1.b		Ge	Fuel dispenser manufacturer in New Zealand comment: It is difficult to demonstrate that data cannot be inadmissibly influenced in a fool proof way. The only way we can see is by the use of verifiable software. Is this acceptable?	Add acceptable solution.	Using verifiable software should be acceptable, although not mandatory. An acceptable solution should not be added here, since it would mix examination of source code and verifiable generation binaries. In addition, the requested acceptable solution is beyond the scope of D31 so far.
NZ-10		5.2.1.2.d		Ge	Fuel dispenser manufacturer in New Zealand comment: If there is an operating system running how to handle interrupts? Interrupts are all but essential in reactive realtime embedded systems. If an interrupt occurs while a piece of legally relevant software is running what is the situation?	Further clarification required	Suggestion to rephrase clause 5.2.1.2.d to read "The legally relevant task should not be interrupted by legally non-relevant software". The current requirement could be turned into a note.
AU-11		5.2.2		Ge	In response to the comment, the requirement should be generalised.	We support the alternative, generalised text.	in line with the intention of the WD, will be taken into consideration
AU-12		5.2.3		Ge	Agree with the generalised text.	Agree with the generalised text.	in line with the intention of the WD, will be taken into consideration
AU-13		5.2.3.2		Ge	The checking function should be undertaken for both secure and insecure storage. What can be guaranteed to be completely secure?	Include both secure and insecure storage. Or alternatively remove references to ‘insecure’ so that it applies to all forms of storage and all types of transmission channels.	in line with the intention of the WD, will be taken into consideration
BR-8		5.2.6.2		Ge	Verified Update: At least a seal is to be broken and a subsequent verification and another sealing procedure should be performed.		Clause 5.2.6.2 appears to be stating implicitly that a seal needs to be broken. However, a sentence could be added to clarify this. Suggestion: Add "A physical seal needs to be broken for the update to take effect." before "A person should be on the installation site..."
BR-11		5.2.6.3c-d	Example	Ge	Traced Update: This is the very procedure INMETRO uses; a specific system was developed for this task.		
BR-12		5.2.6.3e		Ge	INMETRO requires this too.		

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JP-5		3.1.49	Example	Te	Examples of sub-assembly should be updated. Use the modern examples for weighing instrument in the reference OIML V 1:2013 4.04 – Module	Replace the current examples with the examples in OIML V 1:2013 -Module as shown below. Example Typical modules of a weighing instrument are: weighing module, load cell, indicator, analog or digital data processing device, terminal, primary display.	In line with the intention of the WD, will be taken into consideration. No change was done since the relevant clause was removed after the Berlin meeting.
BR-2		5.1.3.2.a	Example	Te	There is no way to securely store a private key in software.	This storage should be done inside certified secure modules.	Certified secure modules (such as TPMs) may be used for certain measuring instruments to ensure even higher resistance to attacks. The example should be simplified. Suggestion to delete the sentence "The key for decryption is hidden in the legally relevant program of the universal computer". No change was implemented since the subject is already addressed by 5.2.3.2.
JP-8		5.2.4		Te	The meaning of “portability” is not clear. We could not find what requirement is indicated with this term.	We would like to know what is the requirement for “portability”.	"portability" and "compatibility of hardware" are supposed to express the same notion here. However, since the term is not used anywhere else in D31, it could be deleted.
CA-1		3			No concerns with using most current appropriate references for terminology and definitions		OK
NL-23		3.1.28			Intrinsic error: This term was not deleted from V1 because it is e.g. used in the definition of “fault”	To be maintained using the V1:2013,0.06 definition.	in line with the intention of the WD, will be taken into consideration
NL-5		3		Ed	Reference should be made to OIML V2-200 instead of VIM3. V2-200 is the OIML publication version of this vocabulary.	Change all references starting VIM3: 2012 to OIML V2-200: 2012 (available in OIML website publication listing)	in line with the intention of the WD, will be taken into consideration
NL-6		3		Ed		Try to avoid referring to non-vocabularies for terms and definitions	OK
NL-7		3.1 All terms		Ed	Non of the sub clauses completely fulfil the requirements for a Terms and definitions as presented in OIML B 6-2 A.2; comprising: The main requirements are: 1. the unmodified definition can replace the term at all the places in the document where the the term is applied. 2. The definition is not a sentence and as a consequence it does not start with a capital character nor ends with a dot 3. The term not definition does start with a capital character. There's no dot at the end of the definition while it is not a sentence.	Amend to fully fulfil the OIML B 6-2: A.2 defined presentation rules	agreed, should be dealt with in conjunction with NL-8
NL-18		3.1.12		Ed	Data domain: The definition contains more than one phrase, which is not an accepted format	Suggest to covert the second phrase to a note	OK

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NL-19		3.1.13		Ed	Device-specific parameter: The definition contains more than one phrase, which is not an accepted format	The second phrase has to be a note as in V 1: 4.12. So make the definition an exact copy of V 1: 4.12	OK
NL-20		3.1.19		Ed	Type evaluation: For obvious reasons if terminology is defined in a vocabulary, reference should only be made to the vocabulary and not to any other document where the term used. During its next revision OIML B 3 according CIML resolutions has to implement the V1 definition.	Delete the OIML B 3 definition	in line with the intention of the WD, will be taken into consideration.
NL-21		3.1.23		Ed	Fault: If terminology is defined in a vocabulary reference should only be made to the vocabulary and not to any other document where the term used. During the revision of OIML D 11 the V1 definition was implemented which is according to CIML resolutions	Delete the old OIML D11 definition	in line with the intention of the WD, will be taken into consideration.
AU-3		3.1.27		Ed	It is assumed references to Wikipedia will be removed in the final draft. It is assumed that it is included currently for informative purposes.	Remove reference to Wikipedia in final draft.	OK
NL-11		3.1.3		Ed	Authentication: The definition contains more than one phrase, which is not an accepted format.	Suggest to covert the example to a note	OK
NL-25		3.1.34		Ed	non-interruptible / interruptible measurement Not according to several requirements for definitions in terminology 1. More than one phrase 2. Repeating the term 3. More than one term defined	Suggest to replace by non-interruptible cumulative measurement measuring process with no definite end that cannot be stopped and continued again by a user or an operator without falsifying the result of the measurement interruptible cumulative measurement process of measurement of the quantity value of a substance that can be easily and rapidly stopped during normal operation without falsifying the measurement result	OK, to be adopted
NL-28		3.1.38		Ed	Sealing: The suggested deviation from V1 would not be appreciated by CIML	Please do not deviate from V1	In line with the WD, V1 definition will be kept.
AU-5		3.1.43		Ed	Suggest consistency with OIML V 1, but include the alternative definition as a NOTE to aid in understanding.	Include new definition as and informative NOTE.	OK
NL-30		3.1.44		Ed	Software module: The definition contains more than one phrase, which is not an accepted format	Convert the second sentence to a note	OK
NL-31		3.1.46		Ed	Software separation: The FGT57 suggested deviation from V1 would not be appreciated by CIML	Please do not deviate from V1	OK
NL-33		3.1.50		Ed	Test: Deletion, as suggested, is supported	Suggest to delete	In line with the WD, will be deleted
AU-6		3.1.50		Ed	Either D 11 or V 1 appears suitable. Perhaps both documents should be aligned in future.		OK
NL-35		3.1.53		Ed	Type-specific parameter: Not in agreement with V1. Second sentence should be a note.	Change to exact copy of V1 version	OK
NL-36		3.1.54		Ed	Universal computer: Does not fulfil the OIML B 6-2: A.2 defined rules	amend	suggestion: convert second sentence to a note.

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NL-37		3.1.56		Ed	Validation: Does not fulfil the OIML B 6-2: A.2 defined rules	amend	suggestion: Confirmation of fulfillment of the particular requirements for the specific intended use by examination and provision of objective evidence. No change was done since the relevant clause was removed after the Berlin meeting.
NL-12		3.1.6		Ed	Closed network: Only used to define “open network” which is only applied in a note to a sub-clause and at present cannot be properly distinguished between any more.	Suggest to delete the term and definition	since "closed network" is not used anymore, we should consider deleting
NL-38		4.1		Ed	“...the relevant OIML Recommendation”.	Suggest to amend to “...the applicable OIML Recommendation”	OK
NL-39		4.2		Ed	“.. normative documents ..”. Not defined in OIML.”	Suggest to amend to: ..all referred publications	OK
NL-47		5.1.3.2.c		Ed	“...the current parameter settings shall be able to be displayed or printed.”	Suggest to change to: “..displaying or printing of the current parameter settings shall be possible”	OK
NL-48		5.1.3.2.c		Ed	“..settable parameters..”	Suggest to use: “..adjustable parameters..” or “alterable parameters”	OK, settable will be changed to "adjustable/selectable"
NL-49		5.1.4.1		Ed	“The documentation submitted for type approval shall contain a list of faults that are detected by the software and its expected reaction and if necessary for understanding, a ...”	Suggest to change to: “The documentation to be submitted for type approval shall contain a list of the faults that will be detected by the software and the expected reaction and in case needed for understanding its operation, a...”	OK
NL-52		5.2.1.1.a		Ed	legally relevant functions	Change to “ <i>functions that are legally relevant</i> ” while they could also perform other functions	OK
NL-54		5.2.1.2		Ed	“OIML TCs and SCs may specify in the relevant Recommendation the software / hardware / data or part of the software/hardware/data that are legally relevant .” It is not only up to a TC or SC what is and what is not to be specified in a Recommendation.	Suggest to amend to read: “OIML Recommendations may specify which part of the software and data are considered legally relevant”	OK, change second sentence to "National regulations may specify which part of the software and data are considered legally relevant." No change was done since the relevant clause was removed after the Berlin meeting.
NL-56		5.2.1.2.a		Ed	“The conformity requirement applies to this part (see 5.2.5...)”	Suggest to delete this forward referring and thus unclear statement. 5.2.5 refers back, which is sufficient	OK
NL-57		5.2.2		Ed	Shared indications: It may be needed to simplify/generalize this sub clause in order to not prevent for innovations	Review	The entire subclause should be rewritten.
NL-59		5.2.3		Ed	If measurement values are used at another place than the place of measurement or at a later time than the time of measurement they possibly have to leave the measuring instrument (or sub-assembly) and be stored or transmitted in an insecure environment before they are used for legal purposes. In this case the following requirements apply	Suggest to amend to suggested text or to: If measurement values will be used at a location different from that of the measurement or at a later stage they possibly need to leave the measuring instrument (or constituents) and be stored or transmitted in an insecure environment before they are used for legal purposes. In that case the following requirements apply	In line with the WD, will be adopted. Would have to be rephrased in case of significant rewriting in clauses 5.2.3 and 5.2.4 (transmission and storing). Change was ultimately not adopted because of the separation of storage and transmission requirements.

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NL-60		5.2.3.2		Ed	...belong to the legally relevant software part	Suggest to amend toare considered part of the legally relevant software	OK
NL-71		6.3.2.2		Ed	For consistency and readability reasons:	Start <i>Application</i> to read “For validating correctness...”	OK
NL-72		6.3.2.3		Ed	For consistency and readability reasons:	Start <i>Application</i> to read “For validation.....”	OK
NL-73		6.3.2.4		Ed	Application: “Construction of the flow of measurement values through the data domains subject to legal control. Examination of the software separation	Alternative text: “For analysis of the software design concerning the control of the data flow of measurement values through the data domains that are subject to legal control, including the examination of the software separation”.	OK
JP-11		6.4	Table 2	Ed	In the item, Severity Level (II) on the row 5.2.1.1 of Table 2, “AD+FA/CIWT” is a typo.	Please correct to “AD+DFA/CIWT”.	OK
IR-1		General		Ge	We don’t have any comment at this stage.		
NL-53		5.2.1.1.b		Ge	“During type testing..” Probably not restricted to type testing only, but also during any other verification	Suggest to delete these 3 words	To show that SW cannot be inadmissibly influenced, an examiner would need to have access to the documentation. We assume that the documentation will normally only be available during type testing. Should a longer explanation be added here?
AU-14		5.2.3.4a		Ge	We do not agree with the NOTE. It may be the case that utility meters are required to store both the cumulative value and the incremental usage data in order to allow subsequent bill reconciliation. As such storage capacity is an important requirement.	Delete the NOTE.	The note should be rephrased.

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AU-15		6.3		Te	<p>The inclusion of methods that require analysis of source code, such as DFA, CIWT and SMT, should be specified for 'Severity Level II'.</p> <p>Also, need a statement to the effect that these 'Severity Level II' can only be specified as mandatory by the relevant national metrology authority. Software is just another component of a measuring system, and while it is important to ensure that it functions correctly, this should be in the context of the performance of the measuring instrument as a whole, rather than individual components.</p> <p>OIML do not insist on analysing the material, construction and mechanical properties of a turbine in a flowmeter, we establish requirements and performance criteria that the flowmeter must achieve when subjected to specified test procedures – the same should be true of software. We should establish requirements and test/validation procedures and assess performance. In addition the storage of huge quantities of proprietary source code represents a significant operational risk to a national metrology authority</p>	<p>Amend the document to clarify that DFA, CIWT and SMT methods are only required for 'Severity Level II'.</p> <p>Add a note that only relevant national metrology authority can mandate the requirements for 'Severity Level II'.</p>	<p>The suggested assignment of DFA, CIWT and SMT to "Severity Level II" is already reflected by Table 2. An additional note in Clause 6.3 could be provided to explain this. A note about the national metrology authority would be in conflict with the work of instrument-specific OIML SCs and TCs.</p>
JP-9		6.3.1-2	Table 1	Te	<p>Please clarify the meaning of the word "pattern" in Table 1 of 6.3.1. It seems to have the same meaning with the term "functioning pattern" in 6.3.2. We could not find the definition of this term, however. According to the note of 2.04 in OIML V 1:2013, "pattern is used in legal metrology with the same meaning as type". This note does not applicable to this case however. It seems that "functioning pattern" is not used in legal metrology.</p>	<p>Please define the term "functioning pattern" and use this term consistently in this draft.</p>	<p>Suggestion to use "specimen" instead throughout the document.</p>
JP-10		6.3.2.3		Te	<p>WELMEC Guides in the References of 6.3.2.3 may be elaborated or unnecessary because the clause to be referred is unspecified.</p>	<p>Please make one of the following changes: either (1) specify the clause(s) to be referred in the WELMEC Guides, or (2) delete the reference "WELMEC Guides" from both 6.3.2.3 and ANNEX A.</p>	<p>Agreed, the relevant clauses have been specified in 6.3.</p>
NL-69		6.3.1	Table 1	Ed		<p>omit the use of "pattern" use "type" instead</p>	<p>Suggestion to use "specimen" instead throughout the document.</p>
JP-12		6.5		Ed	<p>The last word "patterns" seems to be ambiguous.</p>	<p>We are unable to suggest a change. In the former version, the word "components" was used and it made the sentence understandable.</p>	<p>Suggestion to use "specimen" instead throughout the document.</p>

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CA-3		General		Ge	Regarding “no extra declarations”, Measurement Canada’s type evaluation of software controlled electricity and gas metering devices is based on a combination of documentation review, attestations of compliance and functional testing. From our perspective, the statements of completeness and attestations of compliance provided by the applicant do have value. The applicant is attesting to full disclosure within their documentation and to their compliance with our requirements.		We understand Measurement Canada's concerns and feel that this is going to be the opinion of a number of countries outside the EU. However, "extra declarations" are not actually part of the software examination process. Instead, they act as an additional legal/organisational safeguard for examiners. A suggestion to solve this issue can be adding: the "national-entity" decides when the "SW-examination process" ends. (a statement of completeness can be part of the process, according to national-procedure). Suggestion to include a statement on this matter in the Introduction section (1) of D31. This should be dealt with in conjunction with JP-1. Possible topic for an SG. The suggestion was agreed upon at the Berlin meeting.
JP-1		6.1		Ge	‘No extra declaration ‘in ‘list of changes spread through the document’	Please make one of the following changes: either (1) reinsert the deleted statements about the manufacturer’s declarations as before, or (2) add a statement “the manufacturers shall state the correctness and completeness of the documentation” to 6.1 (documentation to be supplied for type approval), and to Checklist in Annex B as a new item.	We understand Measurement Canada's concerns and feel that this is going to be the opinion of a number of countries outside the EU. However, "extra declarations" are not actually part of the software examination process. Instead, they act as an additional legal/organisational safeguard for examiners. A suggestion to solve this issue can be adding: the "national-entity" decides when the "SW-examination process" ends. (a statement of completeness can be part of the process, according to national-procedure). Suggestion to include a statement on this matter in the Introduction section (1) of D31. This should be dealt with in conjunction with CA-3. The suggestion was agreed upon at the Berlin meeting.
NL-66		6		Ed	Approval” should be “evaluation” where it concern the activity.		Maybe a generic term like "examination" is needed to suit different legislations.

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NL-67		6.1		Ed		Change “approval” in the title and in its first use in the second paragraph to “evaluation”	Maybe a generic term like "examination" is needed to suit different legislations. The suggestion was agreed upon at the Berlin meeting.
NL-68		6.2			“...OIML D 11:2013, are based on well-defined test setups and test conditions and can rely on precise comparative measurements.” Explicitly not true for those D11 tests which concern non deterministic influences so using D11 as an example is not valid.	Delete the reference to D 11 change “severity level” to “risk”	Since D31 should not judge the quality of other OIML publications, we support the deletion of the reference. The change from "severity" to "risk" should be discussed in conjunction with NL-2. The suggestion was agreed upon at the Berlin meeting.
NL-2		General		Ge	Severity level: OIML D 11 2013 does no longer apply “severity level” while “severity” in relation to “level” is considered quite subjective or unclear in a lot of cases. Moreover in the IEC vocabulary IEV number 161-04-41 this term has been indicated “deprecated”. In the new IEC standards it is noticed that the term is no longer in use.	To be more objective it is suggested to apply “risk level” or “level of risk” in OIML D 31.	support the suggestion, will discuss at the meeting to change "severity" to "risk" and the implications thereof. Derived changes in NL-41, NL-42 Possible topic for an SG. The suggestion was agreed upon at the Berlin meeting.
UK-1		8			Welmec 7.2 is quite clear in defining risk classes and what needs to be implemented to achieve them. This draft does not define any risk classes so it is difficult to decide what level to apply the rest of the document to.	The only references are to normal and severe risk levels. If these are the only two levels, more specific guidance needs to be provided as to what constitutes severe risk.	Defining risk levels instead of severity levels as mentioned in NL-2 and NL-68 seems feasible. However, more specific guidance for risk levels would interfere with the drafting of OIML Requirements and would out of the scope of D31. The suggestion was agreed upon at the Berlin meeting.
NL-41		4.3		Ed	“Severity” often is linguistically incorrectly used and the use should be depreciated as is suggested by ISO. OIML D 11 omits as much as possible the use of the word severity as in “severity level”	In this case in D 31 it is suggested to use “which level of risk...”	agreed, should be dealt with in conjunction with NL-2
NL-42		5.1		Ed	“sub-assemblies” probably not restricted I ... normal severity level... II ...raised severity level...	suggest to use “constituents” instead of “sub-assemblies” and to use I ... normal risk level... or level of risk II ...raised risk level... or level of risk	agreed, should be dealt with in conjunction with NL-2
NL-74		6.3.2.6		Ed	“severity level”	change to “risk level”	should be discussed in conjunction with NL-2 The suggestion was agreed upon at the Berlin meeting.

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CA-8		General		Ge	<p>The next generation of smart electricity meters will be designed with LR metrological software running on an operating system that may be routinely updated with patches, apps, etc. as well as with LR traced updates.</p> <p>The current version of D31 only appears to consider operating systems in relation to universal devices (e.g. desktop computers running legally relevant software on some OS platform) and not built for purpose devices.</p>	<p>An update of D 31 needs to consider and provide for these advances in technology while retaining the required legal controls.</p> <p>A revision of this document should include provisions for built for purpose metering devices running legally relevant software on an OS platform running (e.g. electricity meter, flow computer). These provisions would need to consider how the functionality and security of the legally relevant software is not compromised while still providing for local or remotely initiated OS patches/updates and ensuring the continued validity of the device's verification status. The provisions for the legally relevant software updating/modification capabilities (e.g. trace updates) would need to be suitable for application to built for purpose metering devices running legally relevant software on OS platforms.</p>	<p>We feel that the traced update from clause 5.2.6.3 is applicable to all measuring instruments regardless of their type (universal vs. Built-for-purpose). However, this should be discussed at the meeting. At the Berlin meeting it was agreed, not to change the WD.</p>
US-2		General		Ge	<p>Was the legally relevant software version on this instrument evaluated by the type approval authority as evidenced by the presence of the software version on the Certificate of Conformance(CC).</p>	<p>The CC must contain a listing of approved legally relevant software versions for the instrument type.</p>	<p>This would seem to be dependent on national legislation. In some countries, a new software version may always result in a new TEC/CC. Maybe we can add a suggestion here for countries in which more than one software version per type is allowed. The suggestion was agreed upon at the Berlin meeting.</p>
US-3		General		Ge	<p>What records of parameter and legally relevant software changes can be found in the audit trail.</p>		<p>The "traced update" from clause 5.2.6.3 already covers this, since it requires all updates to be logged in the audit trail. Clause 5.2.6.3.e also lists the old and the new software identification, the timestamp and an ID of the downloading party as minimum information to be included in the audit trail</p>
US-4		General		Ge	<p>Often inspectors information about how to display the legally relevant software version and access the audit trail is limited in the field, but they do have access to the CC. The most efficient tool would be to provide this information in the CC.</p>	<p>If the device is equipped with an audit trail, the CC must contain the method on how Inspectors can access and print the contents of the audit trail,</p>	<p>Clause 5.2.6.3.e implicitly states that it should be possible to display the contents of the audit trail. Maybe the explicit requirement from clause 5.2.6.4 (audit trail for legally relevant parameters) could be copied. A note should also be added to include the necessary steps for displaying the audit trail in the TEC. The suggestion was agreed upon at the Berlin meeting.</p>

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BR-9		5.2.6.3		Ge	Traced Update: INMETRO digitally signs the software update, generating an private/public key pair for each measuring instrument manufacturer/model. It is supposed to enhance this procedure using digital certificates.		A requirement should not refer to or include a technical acceptable solution (such as digital certificates). As stated by BR-10, the example illustrates the suggested solution. This should be dealt with in conjunction with BR-10, BR-11 and BR-12. No change is needed in the document.
BR-10		5.2.6.3b		Ge	Traced Update: This may not be an universal requirement. Legally relevant software, that is not fixed, can perform this task.		This should be dealt with in conjunction with BR-9, BR-11 and BR-12
CA-5		3.1.42		Ge	Definition of “software identification” still includes “inextricably linked” which seems inconsistent with the proposed revisions under 5.1.1		As suggested by Measurement Canada, the phrase should be removed in the definition. Suggest to change the definition to "Sequence of readable characters (e.g. version number, checksum) that represents the software or software module under consideration." To be discussed at the meeting. The suggestion was agreed upon at the Berlin meeting.
NZ-2		5.1.1		Ge	Fuel dispenser manufacturer in New Zealand comment: It may be complicated to identify the legally relevant software.		As stated in 5.2.1.2, "National regulations may prescribe that a specific software / hardware / data or part of the software / hardware / data is legally relevant." Therefore, D31 cannot prescribe rules to identification of legally relevant software. To be discussed in conjunction with NL-43.
NL-44		5.1.1		Ge		Concerning integrity it is suggested to further discuss the matter and to try to harmonize with WELMEC	We should discuss the matter of "identification vs. Proof of integrity" at the PG meeting. From a theoretical standpoint both concepts do not need to be linked. This should be discussed in conjunction with NL-43 and CA-6 (risk based requirement). WELMEC WG7 decided that ensuring the integrity of SW also ensures that any identification generated by that SW is unchangeable. The suggestion was agreed upon at the Berlin meeting.

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AU-9		5.1.1		Ge	With regards to the comment, can the identification include certain wildcard characters to allow for some changes to software versions?	Happy to take advice from WELMEC with regards to this issue.	The issue is implicitly addressed in the Note to clause 5.1.1. Maybe the notion of "conformity to the approved type" should be expanded or turned into a new separate requirement.
CA-6		5.1.1		Ge	The software identification allows a device owner and an enforcement official to confirm the version number of installed software has obtained type approval. This alone does not guarantee the installed version is identical to the version that obtained type approval. If there is perceived risk or concern in this regard, the requirement for inextricably linking software identification to LR software is appropriate. Measurement Canada's software security specs currently require LR software parts to be identified with a version number that is nextricably linked to the software using a hash code. However, in practice this has only been enforced for the fixed LR and LR software parts of devices to be approved with a traced update capability.	The requirement for inextricably linking software identification to software should be risk based. The purpose could be to confirm the initially or subsequently installed (e.g. via traced update) version is identical to the approved version and/or to confirm the installed version has not been corrupted or modified (intentionally or unintentionally) in an unauthorized way during the device's time in service.	We should discuss the matter of "idenfication vs. Proof of integrity" at the PG meeting. From a theoretical standpoint both concepts do not need to be linked. This should be discussed in conjunction with NL-43. WELMEC WG7 decided that ensuring the integrity of SW also ensures that any identification generated by that SW is unchangeable.
NL-43		5.1.1		Ed	"The identification shall be inextricably linked to the software itself and shall be presented or printed on command or displayed during operation or at start up for a measuring instrument that can be turned off and on again. If a sub-assembly/an electronic device has neither display nor printer, the identification shall be sent via a communication interface in order to be displayed/printed on another sub-assembly/electronic device."	Alternative text (if maintained) "The identification shall be inextricably linked to the software and shall be: - presented or printed on command or - displayed during operation or - displayed at start up for measuring systems that can be switched on and off . If a constituent of the measuring system has neither display nor printer, the identification shall be sent to some other device via a communication interface in order to be displayed/printed on this device"	restructuring is OK, should be discussed in conjunction with NZ-2. A rephrased suggestion was agreed upon at the Berlin meeting.
BR-1		5.1.1		Ed	Word "inextricably". This is only possible using a hash function. Using acceptable hash functions (SHA-256 or SHA-3) leads to long tokens, difficult to handle by humans. In Example: "checksum". Checksum are fragile functions, subject to collision.	To eliminate this word. Use hash instead (SHA-256 or stronger).	should be discussed in conjunction with NL-43 and NZ-2. A rephrased suggestion was agreed upon at the Berlin meeting.
NL-63		5.2.3.5		Ge	Transmission delay: Does not concern storage so should not be a sub clause of 5.2.3	Suggest to amend: Maybe Annex A of R 139-1 provides some information on the way this can be done.	Suggestion to separate transmission and storage into two clauses (maybe following Annex A of R 139-1). Should be dealt with in conjunction with comment NL-58.

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NL-64		5.2.3.6		Ge	Transmission interruption: Does not concern storage storage so should not be a sub clause of 5.2.3	Suggest to amend: Maybe Annex A of R 139-1 provides some information on the way this can be done.	Suggestion to separate transmission and storage into two clauses (maybe following Annex A of R 139-1). Should be dealt with in conjunction with comment NL-63.
NL-58		5.2.3		Ge	This part of D31 probably needs to be reorganized. There is a conflict between this sub clause and 5.2.3.4. This sub clause should restrict to storage in a general way and not only to data “leaving” the measurement system.	Suggest to amend: Maybe Annex A of R 139-1 provides some information on the way this can be done.	Suggestion to separate transmission and storage into two clauses (maybe following Annex A of R 139-1). Should be dealt with in conjunction with comment NL-63. The suggestion was agreed upon at the Berlin meeting.
NZ-1		General			Looking at OIML D31 it seems that this approach to regulating the software particularly in liquid dispensers is flawed. It consists of a set of requirements that in many cases are specified to be correct if an observer reads the source code. This can show the intent of the code but events in other parts of the code can cause this to be untrue.	We see that the intent of this appendix is two fold: 1) Ensure that the software operates correctly as specified. 2) Ensure that no fraudulent activity is going on. The only really sure way of doing this is by the use of verifiable and validated code and ensuring that the code is physically secure. The SW-V-diagram would give everyone confidence that that the software was error free and had not been modified for fraudulent purposes.	The "VnV" is dealt with in several other international standards. As stated in the introduction of the Document, software quality and development process are beyond the scope of D31. The task of ensuring software quality will largely depend on national legislation and on the quality control system of the manufacturer. Could be discussed in conjunction with NZ-11 and NZ-6.
NZ-6		5.1.4.1		Ge/Te	Fuel dispenser manufacturer in New Zealand comment: This fault detection could fall into two categories, (i) Faults in the measuring system as a whole (hardware faults or mechanical faults) and (ii) Faults in the software. The detection of mechanical faults and the documentation of how to detect them seems sensible. For detecting faults in software looking at parameters and reviewing the code is not very satisfactory.	Suggest to include some sort of software verification toolset (such as SPARK 2014).	As stated in the introduction of the Document, software quality is beyond the scope of D31. The task of ensuring software quality will largely depend on national legislation and on the quality control system of the manufacturer. Could be dealt with in conjunction with NZ-1.
NZ-11		6.3.1	Table 1	Ge/Te	Fuel dispenser manufacturer in New Zealand comment: We understand the requirement for wanting to be sure that the algorithms or functions do what their specification says that they do. However we see that this is very difficult to check. Examination of code or software testing can never prove 100% coverage whereas software verification can. The section 5.1.2 says to examine algorithms and function either by: (i) Metrological tests (ii) Software tests (iii) Software examination	Provide an alternative option such as “Software Verification”. Please see further notes at the end of this table.	The "VnV" is dealt with in several other international standards. As stated in the introduction of the Document, software quality is beyond the scope of D31. The task of ensuring software quality will largely depend on national legislation and on the quality control system of the manufacturer. Could be discussed in conjunction with NZ-1 and NZ-6.

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AU-2		3.1.23		Ge	Another term should be used to define this concept to avoid confusion. Fault is a commonly used term in legal metrology. To avoid confusion, please align with definitions as specified in OIML VIML (V 1, 2013) or VIM (V 2, 2012).	Since the definition is referring to the defect that results in an error greater than the MPE, suggest the term be changed to "significant defect" or similar.	goes in line with the revision directives, should be discussed at the meeting. A definition for "significant defect" was added at the Berlin meeting.
AU-7		3.1.56		Ge	In principle "validation" should not include the term "verification".	Maintain the current definition that does not include "verification".	We could either stick to the old definition based on ISO/IEC 14598 and IEC 61508-4:2010 or adopt the given definition from BIPM's VIM3. This should be discussed at the meeting. Significant changes to terms and definitions based on V2-200 were agreed upon at the Berlin meeting.
AU-8		3.1.57		Ge	Suggest referencing the more up-to-date Vocabulary.	Suggest referencing the more up-to-date Vocabulary.	This is in line with the WD. We suggest to discuss which definition should be kept. Significant changes to terms and definitions based on V2-200 were agreed upon at the Berlin meeting.
NL-24		3.1.29		Ed	Legally relevant	Apply the V1 definition but probably this definition needs to be improved.(see NL-9 suggested action)	This appears to be reflected in many NL-comments. If we do not manage to deal with all of them at the meeting, we suggest to form a subgroup to revise the terminology. Also covers NL-24. The definition of "legally relevant" was subsequently changed at the Berlin meeting.
NL-29		3.1.40		Ed	Software: Does not fulfil the requirements for a definition	Delete or replace " <i>Generic term</i> " by " <i>part of a computer system.</i> "	This should be discussed at the meeting. TODO: research other definition of software. At the Berlin meeting, it was decided to delete the definition.
NL-15		3.1.9		Ed	Communication interface: The definition contains more than one phrase, which is not an accepted format. And it should not contain the word "interface"	Reformulate	suggestion: change to "part of an instrument that enables information to be passed between measuring instruments or sub-assemblies", suggested note: "Communication interfaces can be electronic, optical, radio etc."
NL-51		5.2.1.1		Ed		Consider the use of "constituents" instead of "sub-assemblies"	Should be discussed at the meeting, since "constituents" is not used in the document. At the Berlin meeting, it was agreed to use "components" instead.
NL-22		3.1.24		Ge	Fixed legally relevant software part	Contents to be discussed	OK

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NL-4		2.3		Te	The third note (third bullet) was applicable concerning the previous version of OIML D 11. Since the actual version 2013 concerns all measuring instruments, so not only the electronic ones, the text of this note is meaningless.	Delete the third bullet	The suggestion is valid. Proposal to discuss it at the meeting. The suggestion was agreed upon at the Berlin meeting.
JP-3		3.1.8		Te	Including ‘persons’ in the definition might not be necessary.	Delete “persons”.	Agreed. We should remove the word again. To be discussed at the meeting. At the Berlin meeting, it was decided to delete the definition.
JP-6		5.1.1		Te	The term “token” is unfamiliar to the metrology experts.	Please define “token” in terminology.	To be discussed at the meeting. Suggestion to replace "token" by "representation". The suggestion was agreed upon at the Berlin meeting.
JP-2		2.3		Ed	The relation between the software-controlled measuring instruments and the sub-assemblies is ambiguous.	Add a possessive “their” before “sub-assemblies” as shown below. The instruction given in this Document apply only to software controlled measuring instruments or their sub-assemblies.	Could improve clarity, needs to be discussed. The suggestion was agreed upon at the Berlin meeting.
NL-50		5.2.1		Ed	Metrologically critical	Legally relevant ?	OK, Should be changed to "legally relevant", but needs to be clarified at the meeting
NL-62		5.2.3.4.c		Ed	After the requirements in Clause 5.2.3.4.b are fulfilled and when the storage is full, it is permitted to delete memorized data when both of the following conditions are met: • the rules established for the particular application are respected; • deletion is carried out either automatically or after a special manual operation.	Suggest to amend: “Only after the conditions required in 5.2.3.4b have been met and insufficient memory capacity is available for storage of successive data, it is permitted to delete memorised data when both the following conditions are met: • the sequence of deletion of data will be in the same order as the recording order (fifo) while the rules established for the particular application are respected; • the required deletion will start either automatically or after a specific manual operation”	Ok, but should be discussed as a technical comment.
NL-70		6.3.2.1		Ed	“This is the basic procedure that has to be applied in any case.” Furthermore it is unclear what the meaning of “verbal” is in the Description	Suggested alternative: “Basic procedure, applicable during all software validation assessments” Suggest to delete “verbal” or use other wording	OK, heading will be rephrased. To simplify we suggest to replace "verbal description and graphical representations" with "documentation" in the description.
NZ-3		5.1.3.2.a		Ge	Fuel dispenser manufacturer in New Zealand comment: Mechanical sealing of the legally relevant software may not always be feasible.	Suggest any other alternative terms of mechanical sealing.	At some point, sealing will always have to rely on physical means. Software sealing might work with the help of a physical trust anchor. Maybe this notion could be expanded in the Document. Could use possible outcome of TC5/SC2/p2.

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BR-5		5.2.1.2a-d		Ge	It is weird to put constraints to the programmers themselves.	One should perform source code analysis instead.	Agreed. D31 should aim to establish software requirements not process requirements. We should discuss this at the meeting. The suggestion was agreed upon at the Berlin meeting.
BR-6		5.2.3.2		Ge	It is important to develop a full discussion on how to protect private keys.	NIST FIPS and Common Criteria requirements should be taken in account.	The notion is also reflected by recent changes to WELMEC Guide 7.2. If applied, significant changes would result. A subgroup could take care of this.
NL-65		5.2.5		Ge	Maybe “identity” is not correct in this concept. See WELMEC 7.2	to be discussed	Maybe the term “identification” could be used instead. This should be discussed at the meeting.
NL-45		5.1.3.2.a		Ed	“...may be necessary to secure measuring instruments having an operating system..” Further the subclause should be discussed while this could imply that a PC cannot be applied	Suggest to change to: “... <i>may be necessary to protect measuring instruments equipped with an operating system..</i> ” <i>Discuss the subclause</i>	Editorial change will be included. The problem of protecting measuring instruments equipped with an operating system should be discussed. Possible topic for an SG.
UK-2		General		Ge	In modern industry it is an increasingly common requirement to provide remote service assistance for fast response to customer needs.	This document covers transmission of data but there should be some guidance regarding remote control of the instrument using tools such as remote desktop, VNC, TeamViewer etc.	Remote control is already dealt with, since D31 has specific requirements on communication interfaces, see Clause 5.2.1.1.
UK-3		General		Ge	WelmeC 7.2 contains useful Instrument specific advice and specific requirements such as examples of legally relevant parameters. This is missing from this draft.	Include Instrument specific advice and specific requirements such as examples of legally relevant parameters.	D31 is considered to be a tool box for drafting instrument-specific Recommendations. Thus, any instrument-specific requirements should be created by the specific project.
UK-4		General		Ge	There is no guidance in this draft regarding the characteristics of a built for purpose measuring instrument compared with a universal computer. WelmeC 7.2 is very specific with this, defining a different set of requirements for each type of instrument.	Include guidance regarding the characteristics of a built for purpose measuring instrument compared with a universal computer.	We do not need a classification into type P and U in D31, since the Document in contrast to WELMEC Guide 7.2 only aims to provide general requirements that can then be adopted to the needs of the individual instrument class. This would cover both type P and type U.

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CA-7		General		Ge	Regarding “simplification concerning severity/validation”, it may be better to retain the flexibility of assigning severity (risk) levels for individual (or closely related) requirements rather than assigning a single severity level based on metering device type. The national authority may perceive varying risk levels for different requirements. We may consider severity levels to be variable based on the device’s provisions for security and protection, whether it has software updating / modification capabilities, its local and/or remote configuration capabilities, the complexity of its metrological functions, whether it is built for purpose or a universal device, whether it is intended to run on an operating system or not (e.g. an OS within a built for purpose device or on a universal device)		We agree with measurement Canada's observation. However, D31 should at least define a corridor of combinable protective measures and levels of inspection. This could facilitate the choices to be made by other PGs.
US-1		General		Ge	What is the legally relevant version of the software in the instrument being inspected, and	The CC must contain instructions on how Inspectors can display software versions in the field.	Clause 5.1.1 already states that the means of identification should be stated in the TEC.
NZ-4		5.1.3.2.b		Ge	Fuel dispenser manufacturer in New Zealand comment: Looking at the documentation for a function does not prove that it cannot be used in a fraudulent manner. It is possible to see the intent of the function but identifying how it will be used fraudulently and preventing it is a different matter. Intellectual property of the company in the code: If one company has a clever idea of how to prevent fraudulent activity they should be able to capitalise on this.		It is beyond the scope of D31 to impose restrictions on the relationship between manufacturer and examiner and possible non-disclosure agreements.
BR-3		5.1.4.1	Example	Ge	Checksums are ok for this task. Minimum should be CRC16 for instruments without software load, CRC 32 for instruments with software update.		Since this is an example, we should keep it as simple as possible without including new requirements.
NL-55		5.2.1.2		Ge	“National regulations may prescribe that a specific software / hardware / data or part of the software / hardware / data is legally relevant.” Irrelevant while in all cases national regulations prevail Recommendations. Recommendations are used to produce national regulations. If national authorities have good reasons to deviate there is no one that can forbid to do so	Suggest to delete	This clarification appears to be needed for the better understanding of the Document as a guideline.
BR-4		5.2.1.2		Ge	Separation of software parts should comprise use of two or more processors, with at least one for legally relevant purposes.	Perhaps it should refer to software and/or hardware separation within the same assembly. Microprocessors specially designed for software separation should be considered. In practice, it is much more likely to see hardware than software separation.	The separation described in the comment would appear to be hardware separation which would fall under clause 5.2.1.1.

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NZ-9		5.2.1.2.a		Ge	Fuel dispenser manufacturer in New Zealand comment: For certain companies, all the software may fall into the category of legally relevant. This is an issue as it would mean they have to show all of their intellectual property. If new code is being written to allow new features that do not affect the metrology of the system how can this be done and let the system retain its certification	Instead of giving out the complete software code (intellectual property), explore alternative options such as a self-declaration by the company and some confirmation to prove that the software is tested/checked using a software verification toolset.	It is beyond the scope of D31 to impose restrictions on the relationship between manufacturer and examiner and possible non-disclosure agreements.
BR-7		5.2.5		Ge	INMETRO has published a standard with a specific protocol to communicate with measuring instruments to perform integrity verification, among other functions.	Perhaps we could share and enhance it with OIML support.	Maybe the standard could be useful for improving clause 5.1.3.2 (fraud protection), but D31 should not focus on specifics.
NZ-7		5.2.1		Ge/Te	Fuel dispenser manufacturer in New Zealand comment: Clarification required on what is inadmissibly influenced	Suggest to allow the use of some sort of software verification toolset.	It will be up to national entities to decide what sort of influence may be considered "inadmissible". Thus, this appears to be out of the scope of D31.
JP-7		5.2.3.7		Te	It would be better to add some explanations to "specific field of application".	We propose to add "which might directly affect the commercial transaction" as follows. But if the information concerning the time of measurement is necessary for a specific field of application which directly affects the commercial transaction, the reliability of the internal clock of the measuring instrument shall be enhanced by specific means.	D31 should not focus on commercial transactions only, but provide general requirements. The current text can be interpreted in the suggested manner for the specific field of application and should thus not be changed.
NL-61		5.2.3.4		Ed	Automatic storing	Suggest to amend to Automatic storage	The clauses refers to the process of transferring data to storage. Thus the current working should be kept.