WELMEC

European cooperation in legal metrology

WELMEC Working Group 7 Report 2009

Working Group No 7 "Software"

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1. Details of the membership of the Working Group
(Please indicate the Countries, other Organisations and the names):

At present 16 member countries (AT, BG, CZ, DE, DK, ES, FI, FR, NL, NO, PT, PL, SE, SI, UK, RS) and 5 European organisations (CECIP, CECOD, CITEF, EURELECTRIC, FACOGAZ) are represented in WG7. OIML has an observer status. Iceland wishes to be informed on activities.

2. Progress and activities since last Report:

2.1 Meetings:

The 14th Working Group 7 meeting was held at NMI, Delft, The Netherlands, on 5 / 6 March 2009 and the 15th meeting on 4 / 5 February 2010 at PTB in Berlin, Germany.

2.2 Progress and activities:

Application of WELMEC Guide 7.2
As in the years before, the application of WELMEC Guide 7.2 was analysed and discussed.. Improvements of the guide were incorporated into the issue 4 of the guide, which has been published on the web site of WELMEC.
Subject of further considerations after the adoption of issue 4 were in particular:
- Different depth of examination by Notified Bodies (see resolutions R2 and R3 as well aus task 1 of the recent meeting)
- Use of the software download feature (see resolutions R4 and R5)
- Requirements to measuring instruments that use universal computers (see resolution R6 and task 2)

Organisation of support for improved consideration of essential software requirements of MID in harmonised standards
WG 7 has started in 2009 an analysis of the consideration of software-related essential requirements in normative documents and harmonised standards. The result of the analysis is an unsatisfactory coverage of the respective essential requirements in harmonised standards. Consequently, the focus of the discussion in the recent meeting was how WG 7 can support to improve the situation. For the results, refer to resolutions R8 and R9 as well as to task 3.

Skills and knowledge required for working with WELMEC Guide 7.2, training concept
WG 7 led an intensive discussion on knowledge required for performing examinations based on WELMEC Guide 7.2, on addressees of training and on the the technical content of a training prgramm. The results are laid down in resolutions R9, R10 and R11. For further activities, refer to task 4. In its technical part, task 4 is closely related to task 1.

Resolutions of the recent meeting

R1: MID Revision
WG 7 has not submitted any proposal for the revision of MID, but looked through the list of proposals in order to be prepared for possible consequences on the work of WG 7. With respect to the proposal of WG 2 that the term "adequately protected software" is not clearly defined, WG 7 refers to the risk class concept introduced in WELMEC Guide 7.2 for a differentiated interpretation of an adequate protection.

R2: Harmonised application of WELMEC Guide 7.2
WG 7 expresses its discontentedness with the big difference in interpretation of the WELMEC Guide 7.2 by the Notified Bodies, although the guide gives clear recommendation how to perform examinations. WG 7 will contribute to overcome this problem and identifies as first addressees of measures the Notified Bodies. WG 7 will get into contact with all registered Notified Bodies.

R3: Harmonised application of WELMEC Guide 7.2
WG 7 assumes that a first necessary step towards an improved harmonised application is an improved knowledge of the software-related examination practice of Notified Bodies, their problems and needs for further information or training. To take up the situation, a questionnaire to be sent to all Notified Bodies is deemed to be helpful. Depending on the responses, a seminar for Notified Bodies could be an appropriate further step.

R4: Software download
WG 7 accepts an addition to the part D of WELMEC Guide 7.2, where a sealable switch or protection parameter is recommended to disable the download possibility for countries where software download for instruments in use is not allowed. This addition shall be included in WELMEC Guide 7.2 within the next revision.

R5: Software download
For the time being, WG 7 in its majority does not see the need to lead a discussion about the general classification of the download feature into higher risk classes.

R6: Part U of WELMEC Guide 7.2
WG 7 confirms the need for the advancement of the part U and appreciates the proposals submitted by MIRS and PTB. Based on these proposals, the advancement shall be brought forward. The results will be brought into the next revision of WELMEC Guide 7.2.

R7: Consideration of software-related essential requirements of MID in harmonised standards
WG 7 identifies an unsatisfactory consideration of essential requirements of MID in harmonised standards. Furthermore, the group basically senses a gap of understanding between software comunity and measurement comunity.

R8: Consideration of software-related essential requirements of MID in harmonised standards
WG 7 offers support to bridge the identified gap by two ways:
  (1) By development of compact standard blocks for utility meters following the principles of WELMEC Guide 7.2. These blocks shall bring the ideas of WELMEC Guide 7.2 closer to standardisation bodies.
  (2) By advising standardisation bodies to adapt the standardisation blocks to the respective measuring instrument class and to include them into the respective standards.

R9: Training concept
First and foremost WG 7 assumes a need for training activities for measurement people who also perform software tests. This is the category of engineers who perform the examinations

or who decide to include other specialists. There is a relation to resolutions R2 and R3.

R10: Training concept
Based on the identification of the first addressees of training activities, the training should include:
    (1) Training on examples such as accepted solutions. This is considered as most effective.
    (2) Training on features of IT components that require the consultation of IT specialists.

R11: Training concept
WG is ready to discuss its approach to a training concept at an OIML workshop to be held in September 2010 in Orlando/Florida.

R12: References to IT standards in WELMEC Guide 7.2
WG 7 basically considers the idea to insert references to IT standards as a good idea. However, due to unforeseeable effort to establish effective references, for the time being this extension of the guide deems not to be feasible.

R13: Data Privacy
WG discussed the question whether the issue of securing the data privacy that comes up with smart metering and smart grids is a problem that might be covered by essential requirements of MID. Although there are similarities between data privacy protection and data integrity and data authenticity protection from the security technology perspective, WG 7 does not find a reasoning to backtrace the data privacy problem to MID. However, when proposing acceptable technical solutions for the protection of measurement data, one should consider their applicability for data privacy problems.

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3. Proposed programme for future work:

Task 1: Questionnaire (Related to R3)
WG 7 will develop a questionnaire to be sent to all Notified Bodies. This questionnaire shall help to identify the situation with software examination at Notified Bodies. It shall in particular find out the training support needed by Notified Bodies.

Step 1: Consultation of WELMEC chair to get a principal approval (Convener, March 2010)
Step 2: Drafting a questionnaire (PTB, April 2010)
Step 3: Circulation and Commenting in WG 7 (Convener, May 2010)
Step 4: Sending out to Notified Bodies (Convener/WELMEC Secretariat, June 2010)
Further steps are to be decided depending on the responses.

Task 2: Part U of the WELMEC Guide 7.2 (related to R6)
WG 7 continues the advancement of the part U of the guide.
Step 1: Combination of the proposals under consideration into
       one new draft part U as discussed at the meeting (PTB, MIRS, March 2010)
Step 2: Circulation and Commenting in WG 7 (convener, April/May 2010)
Further steps depend on the results achieved by end of May.

Task 3 Harmonised standards
Step 1: Consultation of WELMEC chair about appropriate activities
Step 2: Development of draft standard blocks under consideration of the discussion at the
       meeting (PTB, March 2010)
Step 3: Circulation and Commenting in WG 7 (convener, April/May 2010)
Further steps depend on consultation with the WELMEC chair, on contacts to European standardisation bodies or possibly further influences

Task 4: Training concept
The WG 7 approach to a training concept shall be presented at the OIML workshop announce for September 2010 in Orlande/Florida. The person who gives the presentation is still to be determined.

4. Recommendations for approval by the WELMEC Committee:

None

5. Proposals for solutions:

(1) Harmonised application of WELMEC Guide 7.2
WG 7 assumes that a first necessary step to improve a harmonised application is an improved knowledge of the software-related examination practice of Notified Bodies, their problems and needs for further information or training.
Based on this assessment, WG 7 suggests to develop and to send around a questionnaire to all Notified Bodies. Depending of the responses, a seminar for Notified Bodies could be an appropriate further step.

(1) Harmonised standards
WG 7 offers support to better integrate the software-related essential requirements into harmonised standards. The following steps seem to be helpful:
  (1) Development of standard blocks containig the relevant technical features addressed by the respective essential requirments of MID. As regards the technical content, the standard blocks shall follow WELMEC Guide 7.2.
  (2) After having completed the blocks, WELMEC urges CEN to incorporate them into the harmonised standards, in a transition phase by referencing to the blocks, later in connection with the next revision by full integration, i.e., by adaptation according to the specifics of the measuring instrument.
  (3) WG 7 offers consulting support when adapting the blocks to the particular measuring instruments.