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NAWI Directive – Implementation and Application

by
Håkan Källgren

Seminar “ Legal Metrology & EU directives, New Legislative Framework”
Zagreb, Croatia, 3 – 4 November 2010



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Swedish Metrology and Quality AB

Håkan Källgren

Experience:

Employed at **SP Technical Research Institute of Sweden** in 40 years

Metrology visits to 39 countries

Major projects in Europe, Africa and Latin America

Quality assessments in 6 countries

Participant countries in metrology and quality training > 50

www.smquality.se

hakan.kallgren@smquality.se

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Non-Automatic Weighing Instruments (NAWI), 2009/23/EC

- The Directive (principles)
- Conformity assessment procedures
- WELMEC guides related to NAWI
- Relation to EN and OIML
- Comparison with EURAMET Guides
- *Possible EURAMET/WELMEC development concerning NAWI*



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Principles in NAWI

- The new approach
- The global approach



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Principles in NAWI

- Totally harmonised (full implementation 2003-01-01)
- Based on use of the instruments
- Free market for manufacturers
- Introduction of Notified bodies



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NAWI includes

1. Determination of mass for commercial transactions
2. Determination of mass for the calculation of a toll, tariff, tax, bonus, penalty, remuneration, indemnity or similar type of payment
3. Determination of mass for the application of laws or regulations or for an expert opinion given in court proceedings



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NAWI includes

4. Determination of mass in the practice of medicine for weighing patients for the purposes of monitoring, diagnosis and medical treatment
5. Determination of mass for making up medicines on prescription in a pharmacy and determination of mass in analyses carried out in medical and pharmaceutical laboratories
6. Determination of price on the basis of mass for the purposes of direct sales to the public and the making-up of pre-packages



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Interpretation of NAWI

Interpretation of essential points NAWI is made in:

WELMEC 2.7 Directive 90/384/EEC
Explanation and Interpretation



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Annex I Preliminary observations

”However, in the case of instruments used for direct sales to the public, display and printing devices for the vendor and the customer must fulfil the essential requirements.”

This means that e.g. Cash registers=POS should be involved in the conformity assessment procedures

The POS-guide ([WELMEC 2.2](#)) gives instructions how to handle POS i relation to weighing instruments.

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Testing required by NAWI

1. Essential requirements in annex 1
2. EN 45 501 (a new version is coming)
3. In reality OIML R 76 as well (edition 2006?)



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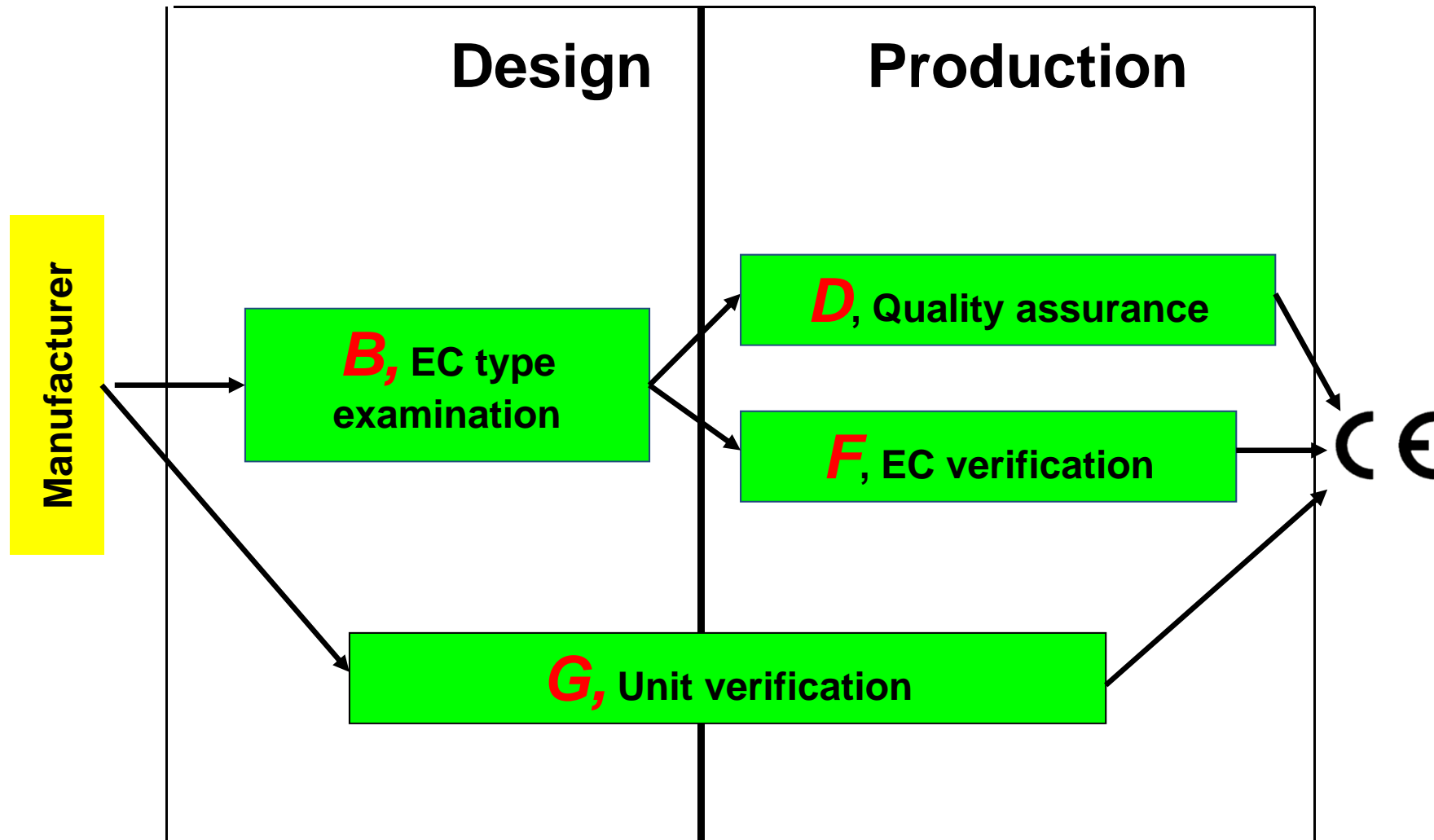


Decisions of common application in NAWI

Guide **WELMEC 2** "Directive 90/384/EEC
Common application Non-automatic weighing
instruments"

Gives advice in a number of details for testing
(mainly type approval questions)

Modules for NAWI conformity assessments



Not mechanical instruments



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EC type examination *Module B*

- A notified body verifies and certifies that an instrument representative of a production meets the requirements of the NAWI directive
- The notified body shall examine the design documentation and perform appropriate examinations in order to check the conformity with the essential requirements
- The notified body shall issue an EC type approval certificate (TAC) to the applicant (if all requirements are met)



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Modular testing (TAC) , NAWI

- Indicators WELMEC 2.1
- POS devices WELMEC 2.2
- Software WELMEC 2.3
- Load cells WELMEC 2.4 + OIML R 60
- Modular approach WELMEC 2.5

Further information > www.welmec.org



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EC declaration of type conformity (guarantee of production quality) *Module D,*

- The manufacturer declares that the instrument concerned is in conformity with the type as described in the type-approval certificate and that the instruments satisfy the requirements of NAWI.
- The notified body shall examine and evaluate the quality system of the manufacturer to determine whether it satisfies the requirements
- The notified body shall decide about approval of the system for the manufacturer and inform other notified bodies.

EC verification *Module F*

- The manufacturer shall take all necessary measures in the manufacturing process to ensure the conformity of the instrument as it is described in the type-examination certificate. The manufacturer shall draw up a written declaration of conformity that verifies and certifies that an instrument representative of a production meets the requirements of the NAWI directive
- The notified body shall carry out the appropriate examinations and tests in order to check the conformity of the weighing instrument to the requirements of the NAWI.
- The notified body shall affix, or cause to be affixed, its identification number on each instrument and shall draw up a written certificate of conformity.



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Module G, EC unit verification

- Approval of one measuring instrument
- The instrument has to be examined by a notified body
- The instrument can be verified without Type approval



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Conformity marking, NAWI

EC verified non-automatic weighing instruments shall be marked as follows:





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Article 14, NAWI

Member states shall take all steps to ensure that instruments bearing the CE conformity marking attesting conformity with the requirements of this Directive continue to conform to those requirements.



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Summary of documents related to NAWI

- WELMEC 2 90/384/EEC: Common Application
- EN 45501:1992/AC:1993 Metrological aspects of non-automatic weighing instruments
- WELMEC 2.1 Guide for testing Indicators
- WELMEC 2.2 Guide for Testing of Point of Sale Devices (POS)
- WELMEC 2.3 Guide for examining Software
- WELMEC 2.4 Guide for load cells (open approvals)
- WELMEC 2.5 Guide for modular approach
- WELMEC 2.7 Explanation and Interpretation

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NAWI and EURAMET

- NAWI and especially OIML R 76 is a base for the EURAMET guide /cg-18/v.02 Guidelines on the calibration of Non-Automatic Weighing instruments
- The EURAMET guide has especially evaluated the uncertainty evaluations



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Possible EURAMET/WELMEC development concerning NAWI

Solve misunderstandings about the difference
between NAWI and R 76

and

the EURAMET guide no. 18