UPGRADING SCHEME

CECOD BEST PRACTICE FOR MI-005 INDUSTRIAL MEASURING INSTRUMENTS

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• 39-41, rue Louis Blanc ★ 92400 Courbevoie ★ 92038 Paris la Défense Cedex
• Tél : **01 43 34 76 81** ★ Fax : **01 43 34 76 82**
• E-mail : **cecod@cecod.eu** ★ Web : **www.cecod.eu**

SCOPE:

The MID review document emphasizes that “the most problematic area is the combination of old and new components for liquid dispensers other than water” (MI-005) and “the recommendation of the evaluators is that the Commission and the Member States attempt to address the problem and not wait for the end of the transition period” (cf. CSES recommendations, MI-10-054 June 2010).

Industrial Stationary Measuring Systems are mostly a market of systems to be extended or to be renewed (a revamping market).

As per MID regulation in force, the alternative for the revamping is either to change the part by a part of the same manufacturer (and thus according to the certification of the said original manufacturer) or to change the whole measuring system. In case of revamping by changing the part, only the original manufacturer holds the evaluation rights allowing him to obtain a type certification for the existing measuring system with a new part. Thus only the original manufacturer is in a position to offer a cost effective revamping.

The MID review document also pointed out the “unclear definition of what level of modification of a MI constitutes only a repair and what a new instrument” (cf. CSES: main findings of the evaluation).

It results of these:
- Unfair competition on the revamping market because the original manufacturer is the only manufacturer in a position to offer a cost effective solution.
- Infringement of MID for revamping to get round the too heavy constraints.
- Barriers to trade, as understanding of issue (and associated allowed solutions) is not common. In each country, manufacturers / providers of solutions with strong historical links are favored by the knowledge of the specific approach of the Member State’s metrological authorities and related bodies.

The scope of this document is to provide clarifications and to address the issue of revamping existing MI in a fair trading approach and in compliance with MID legal framework. This document is a best practice guide presenting the “Upgrading Scheme” establishing a harmonized and consistent approach to that matter.

It should be noticed that this matter is not only a transitional period issue (article 23 of MID). As long as MID will be in force the Upgrading Scheme will be necessary for the revamping of MI that have been put into service either under a MID certification or under national regulation.

As a whole, it is expected that such an Upgrading scheme will reduce nearly by an half the cost of revamping existing measuring systems compared with the cost of rebuilding brand new measuring systems when only one part has to be changed.

• 39-41, rue Louis Blanc ★ 92400 Courbevoie ★ 92038 Paris la Défense Cedex
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1) Domain

The Upgrading Scheme is settled for the revamping market of stationary Industrial Measuring Systems.

Considering that the market of Industrial Measuring Systems on vehicle is a market of new instruments and that implementation of MID do not encounter major difficulties in that field, the Upgrading Scheme is dedicated to stationary instruments (i.e. a tank-truck loading measuring system or a measuring system on pipeline or for loading ships, etc.).

The Upgrading Scheme allows for revamping a Measuring System either according to national regulation or to MID, depending on the certification of the parts involved.

2) References to standards

Welmec Guide 8.8.

3) Terms, acronyms and symbols

EC:

Evaluation Certificate as per Welmec Guide 8.8.

MI:

Measuring Instrument.

NoBo:

Notified Body as per MID.

Owner:

Owner of the MI to which the Upgrading Scheme is applied.

Part:

A part of a measuring instrument which performs a specific function and can be evaluated separately. This also includes devices, modules, software and peripherals, for example but not limited to: printers, data storage devices and (personal) computers.

PC:

Part Certificate as per Welmec Guide 8.8.

Producer:

The Original Equipment Manufacturer (OEM) that produces the part.

SC:

Statement of Conformity: see chapter 5) hereunder.

Technical Documentation:

In the present document, Technical Documentation refers to the documentation defined in article 10 of MID.

4) Modular approach

The Upgrading Scheme implements the modular approach as defined by Welmec Guide 8.8.

Following the modular approach each MI is composed of parts. The Upgrading Scheme consists in changing a MI composed previously of existing parts in an upgraded MI composed partly of previously existing parts (called the remaining parts) and partly of new parts.

Modular approach as per Welmec Guide 8.8 is to be completed by guides for the modular evaluation of the main parts (including compatibility criteria); this should be dealt by Welmec WG10.

Given the modular approach, the Upgrading Scheme rests on the fact that the owner of the remaining parts implicitly holds a user right, attached only to the very parts owned, on the evaluation assessing the compliance of the said remaining parts. This user right combined with the evaluation of the new parts (PC or EC) and compatibility criteria allows for the possibility of a conformity assessment of the MI.

5) Conformity assessment

The Upgrading Scheme is based on the combination of 2 conformity assessment procedures:
- the conformity assessment of the remaining parts on the basis of a verification certificate delivered by the “in service control” authorities that states that the remaining parts have been continuously in service and re-verified duly and in due times.
- a conformity assessment similar to a “module G like” that states the conformity of the new parts and the compatibility of the parts and the conformity of the whole MI.

Such a conformity assessment in that way relies on the right that the permission of the owner of the certification of the remaining parts is not required and such a conformity assessment is limited to only a given MI and is not a certification valid for other similar MI.

The “module G like” can only be issued by a NoBo that can also act as a NoBo under the MID for Conformity Assessment Annex G for that particular MI. The NoBo shall issue a statement of conformity (SC) in respect of the examinations and tests carried out on the MI and including reference to the verification certificate of the remaining parts. The SC shall identify the MI for which it was drawn up.

A declaration of conformity shall be drawn up by the manufacturer and kept at the disposal of the national authorities for 10 years after the MI has been put into service. The SC shall identify the MI for which it was drawn up. The declaration of conformity shall identify the MI for which it was drawn up.

6) Liabilities

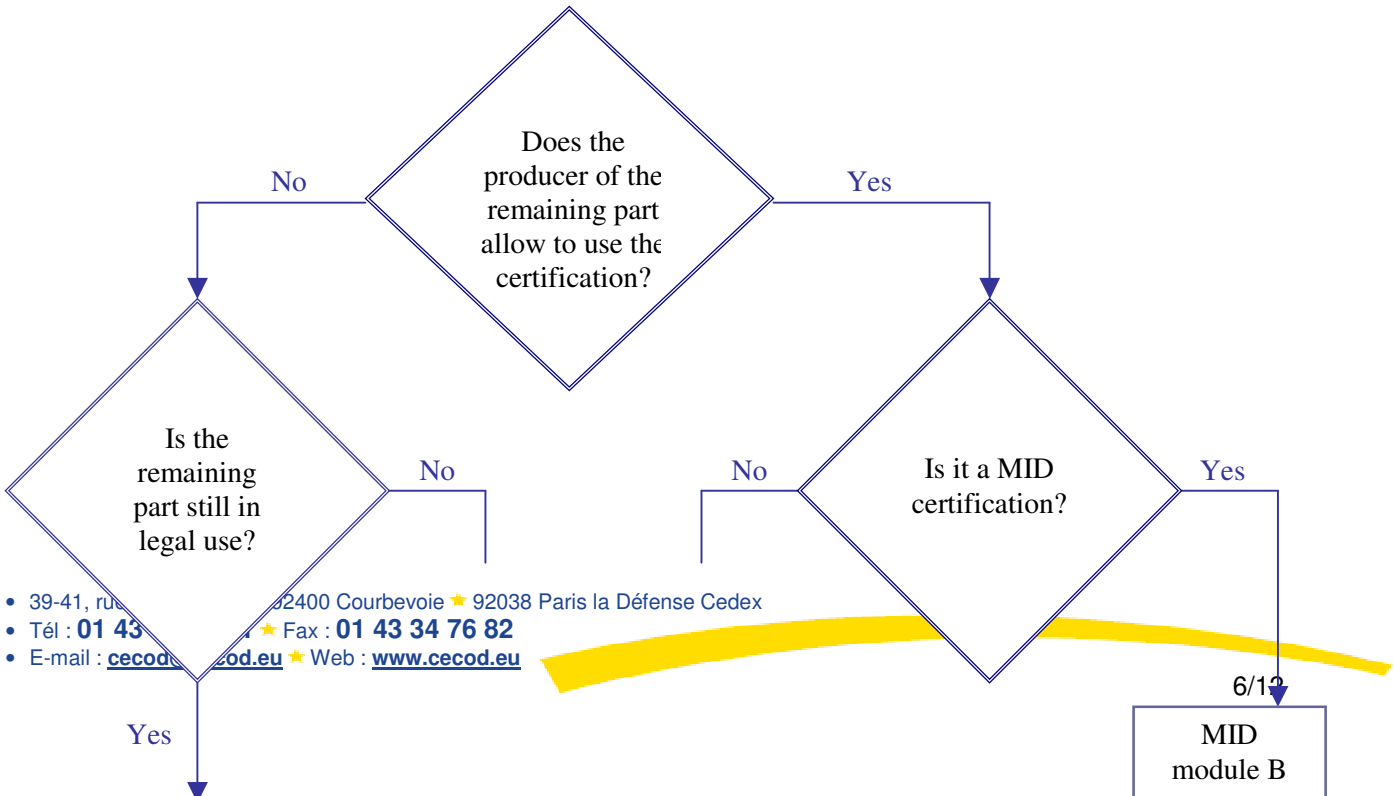
In the Upgrading Scheme the manufacturer is liable for the new parts and for the functioning of the whole and the owner is liable for the remaining parts.

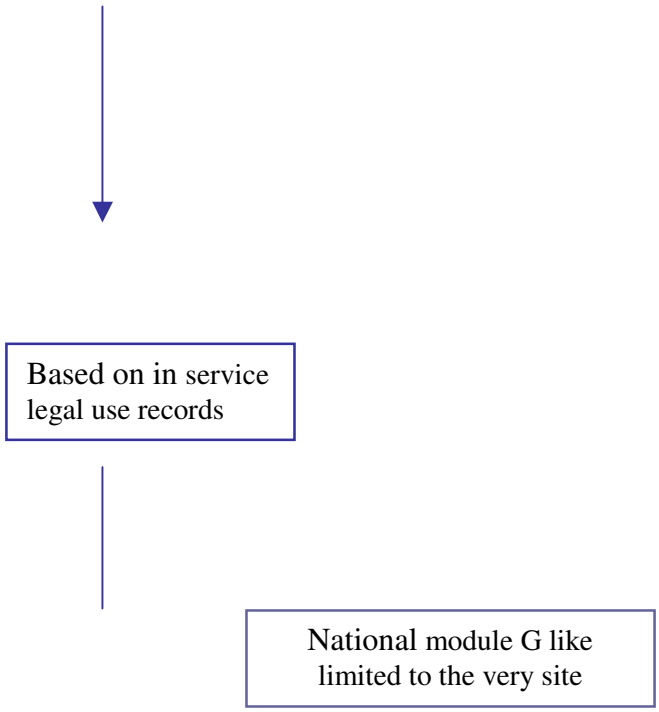
Such a liability scheme is in compliance with usual commercial contract for the revamping of installations.

The manufacturer choose the NoBo that shall carry out the appropriate examinations and tests as set out in the relevant documents referred to in Article 13 of MID, or equivalent tests, to check the conformity of the MI or have them carried out. The application of the manufacturer to the chosen NoBo is countersigned by the owner.

7) Guidance chart

The following chart explains the Upgrading Scheme and shows when the Scheme can be applied and the cases where it cannot.





• 39-41, rue Louis Blanc ★ 92400 Courbevoie ★ 92038 Paris la Défense Cedex
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ANNEXES (A to Y)

Annexes are needed to extend descriptions, give examples, and give correspondence references/tables (reserve Annex Zx to usual informative links to EU Directives)

• 39-41, rue Louis Blanc ★ 92400 Courbevoie ★ 92038 Paris la Défense Cedex
• Tél : **01 43 34 76 81** ★ Fax : **01 43 34 76 82**
• E-mail : **cecod@cecod.eu** ★ Web : **www.cecod.eu**

Bibliography

Welmec Guide 8.8: Guide on the general and administrative aspects of the voluntary system of modular evaluation of measuring instruments

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TIPS AND TRICKS ON HOW TO USE THIS TEMPLATE

Scope

This document is to give a simple template for CECOD Study Groups that have to write a guide. This template is based on usual CEN Standard writing, but excluding any unnecessary information.

It is only a template, and must be used as a guide, to help not forget key information/items.

Some tips

- (Refer to D000002 document for document numbering)
- Put all paragraphs and sub-paragraphs in your draft guide, and put “NOT APPLICABLE” behind each paragraph that is not needed
- While preparing your draft, and to help in understanding, complete each paragraph that you have not yet started with the words
    - “NOT YET WRITTEN”: when you think you will do it later
    - “LOOKING FOR IDEA”: when you want colleagues to bring some stuff to help you
    - “FOR REVIEW”: when you want colleagues to look at paragraph in a strong way

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Rules:

- Use CEN/ISO convention each time it is possible
  - MANDATORY (no choice)
    - "SHALL" means it is mandatory to DO
    - "SHALL NOT" means it is mandatory to NOT DO
    - Do not use MAY or MUST
  - RECOMMENDATIONS (preferred solution but not mandatory)
    - "SHOULD" means it would be better to do it that way
    - "SHOULD NOT" means it would be better to not do it that way
  - AUTHORISATION
    - "CAN" or "MAY" means it is possible to do… as an alternative
    - "CAN NOT" or "MAY NOT" means it is possible to not do… alternative
    -
- Use English always. If any reference to a non English document, put title in both languages (native and English) with clear reference to date, revision. If possible, give link to English translation if available
- Proposed English references are: Shorter Oxford English Dictionary, Concise Oxford Dictionary, Collins Concise, English Dictionary, Webster's New World College Dictionary or Chambers Concise Dictionary
- Avoid any commercial or ® or © reference if possible
- When building annexes, try to determine as early as possible if it is an informative or a normative annex
- When referring to an existing standard (example: EN 1360)
  - If you are sure that standard you refer to will remain non regressive, mention only the standard without the year it was released (eg: EN 1360)
  - If you think the standard you refer to might evolve to something not compatible with the guide you are writing, specially on essential requirements, mention standard with year of release (eg: EN 1360:2005)

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