

MEASURING INSTRUMENTS DIRECTIVE (MID)

Advantages and risks

Since many publications have been made and discussions held regarding the new MID recently, I will focus this article on presenting the current status and major aspects, especially in comparison to previous regulations, advantages, risks and open questions.

Directive 2004/22/EC of the European Parliament and of the Council of the European Union on measuring instruments (Measuring Instruments Directive – MID) adopted on 31 March 2004 was published in the Official Journal of the European Union on 30 April 2004 and is thus effective. All member states were required to transpose the MID into national law until 30 April 2006 and have to enable implementation from 30 October 2006.

This implementation is delayed in several countries, including Germany. However, Germany will enable due implementation by a transitional regulation in 2006.

Definition of MID

The MID is a Directive of the European Union (EU) according to the so-called “New Approach” and applies to 10 types of measuring instruments subject to metrological control, which include gas meters and volume conversion devices. In the past, volume conversion devices had not been covered by a European Directive. The regulations are effective until the measuring instruments are placed on the market and/or put into use. Member states shall take all appropriate measures to ensure that only measuring instruments that meet the Directive’s requirements are placed on the market or put into use. The requirements for “measuring instruments in use” such as maximum permissible errors, terms and modalities for re-verification, etc. have to be regulated by the member states.

As regards gas meters, the Directive applies for residential, commercial and light industrial use. In Europe, no uniform definition could be found. Consequently, there are different regulations in each country. In the Netherlands, for instance, the limit is fixed at 170,000 m³/year.

Germany adopted the general wording of the MID and demands national metrological control for areas not covered by the MID. An exemption for larger quantities will be allowed similar to the current values. The manufacturers will have their devices approved according to the market requirements.

Objectives of the MID

The Commission wants to enable free movement of goods by harmonising the Single European Market. Furthermore, only basic requirements supplemented by some product-specific requirements shall be stipulated by the “New Approach” in contrary to the former single directives. These are independent of specific technologies and therefore do not impede technical progress and can be applied in the long term. Proof of conformity with the essential and product-specific requirements can be provided by harmonised standards (e.g. EN 1359) or normative documents (e.g. OIML R31).

Harmonised Standards

A standard is to be considered as harmonised if the Commission acknowledges compliance with the essential requirements. Once it has been approved, it has to be published in the European Official Journal. The standards for diaphragm, rotary and turbine gas meters (EN 1359 A1, EN 12480 A1 and EN 12261 A1) have been revised according to the requirements of the MID and have already been accepted by the Commission. Publication in the European Official Journal is expected to take place within the coming months. For volume conversion devices (EN 12405 A1), the same procedure was initiated, and is to be completed by the beginning of 2007.

Conformity

A “Notified Body” has to assess whether the product, the production process and the tests meet the requirements. In Germany, the PTB (German Metrological Institute) will be authorised by the Federal Ministry for Economy and Technology. The manufacturer verifies the conformity of a measuring instrument with the Directive and affixes the corresponding marking under his responsibility, for example:

CE marking	Metrology marking	Identification number of the Notified Body
		

How to mark the required seals still has to be ascertained. The legislature has replaced the former preventive system (type approval and initial verification) with a repressive system (market surveillance). Consequently, the manufacturers of measuring instruments assume more responsibility.

Potential advantages and risks of the MID

First of all, the MID imposes additional requirements involving further testing and approval efforts for all manufacturers. For volume conversion devices and diaphragm meters with mechanical temperature conversion, European approvals are then also possible.

Manufacturers can react to technical progress more quickly than with the previous inflexible system that was based on former experience with known technologies. The manufacturers will be granted greater liberty, but at the same time a higher degree of responsibility is imposed. This raises the question whether all players will act with the same responsibility.

Will the Notified Bodies apply the same quality standards? And since CE-marked devices may be placed on the European market without additional tests, to what extent will the Notified Bodies be able to supervise manufacturers outside Europe in a sensible way? Will market surveillance operate effectively given the scarce resources of public authorities?

Transitional regulations

The former European Directives will be repealed with effect from 30 October 2006. This means that new approvals can only be applied for on the basis of the MID. Present approvals will be effective until their end of validity, but no longer than 30 October 2016. Technical modifications will be

permitted by means of supplements to existing approvals. There will be a period during which measuring instruments will be approved according to both systems and will be delivered either EEC-marked or marked with a MID Conformity label.

A Working Group, WG11, was founded within WELMEC (European Cooperation in Legal Metrology) to be responsible for open questions as to the application of the MID to utility meters. The partly controversial opinions within this group as well as among government representatives in Germany show that several matters are still not completely settled.

We, Elster Group, are already preparing the MID approval for our products and expect to achieve conformity in 2007.

The MID can be found at:
www.newapproach.org/directives/directivelist.asp
 Please choose Directive
2004/22/EEC

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NEWS FROM ELSTER-INSTROMET.COM

Convenient and targeted navigation

In the 2/2005 edition of the Elster-Instromet Profiles, we made reference to our redesigned, joint Elster and Instromet website that has replaced websites www.elster.com and www.instromet.com.

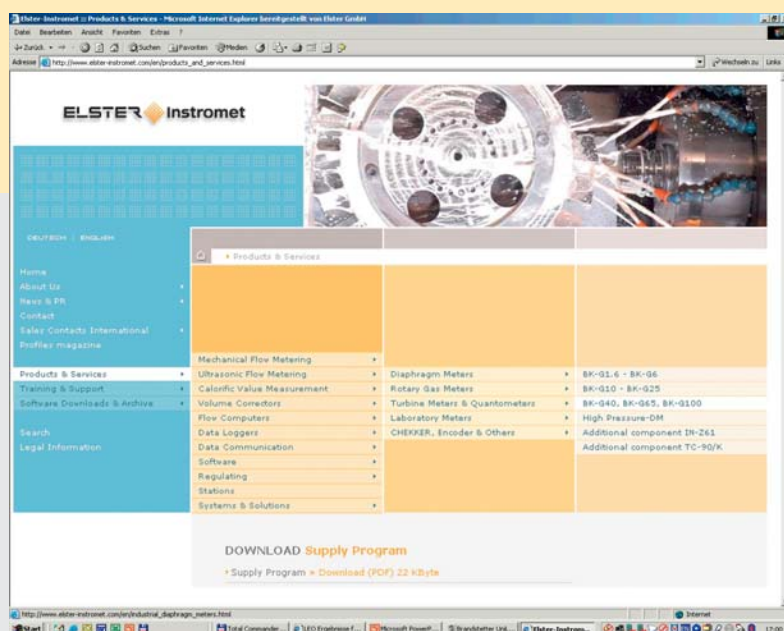


Fig. 1: Convenient, targeted navigation

Of course, it was not possible to convert to the new design over night. The pages in question contained too much information, in particular information of a technical nature, that is important to customers and that must be available at all times. This is why the content of the www.elster-instromet.com website was added successively, and the last and biggest navigation item "Products and Services" is now also complete. The navigation elements in the drop-down boxes lead you in targeted manner to the required product. The current path is displayed at the top and can also be used to move you back by clicking on the required level (Fig. 1). We have also optimised navigation in this process: in the past, you needed a "steady hand" to activate the drop-down boxes of the required level by moving the mouse horizontally, and this problem has now been fixed. Why not try it out?

And there is one further new feature: the www.elster.com URL is now used for the entire Elster Group. Do you need current information on the Elster Group or more information on the sectors of Water and Electricity? You can quickly find what you need at www.elster.com.

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