

Date: 17.12.2013

2014 Market surveillance programme for legal metrology in Germany

Objectives and tasks of market surveillance

This document describes the 2014 market surveillance programme for the placing on the market of measuring instruments and prepackages of the same nominal content (hereinafter referred to as prepackages) within the scope of the German *Eichgesetz* (Verification Act). It implements Article 18(5) of Regulation (EC) No 765/2008 in this field.

The regulations harmonised EU-wide by Directives on the placing on the market of measuring instruments do not establish State inspections as a prerequisite for market access for a measuring instrument (such as calibration or type approval). Distributors must therefore resort to notified bodies to ensure on their own responsibility that their products comply with the regulations.

The counterpart to these market access provisions is a market surveillance system which is designed to ensure that distributors meet their obligations and that only compliant products are placed on the market or put into operation, thereby upholding the objectives of consumer protection, fair competition and the protection of health and safety.

Pursuant to Directive 76/211/EEC, the goal of market surveillance for prepackages with identical nominal content is to establish that the actual capacity of prepackages at the time of production is, on average, no lower than the nominal content.

Scope of the market surveillance programme

The programme applies to market surveillance within the framework of the *Eichgesetz*.

This Act (in conjunction with the *Eichordnung* [Weights and Measures Regulation]) transposes into German law guidelines for measuring instruments subject to Community harmonisation legislation:

Directive 2009/23/EC on non-automatic weighing instruments;

Directive 2004/22/EC on measuring instruments (MID), applicable to

- water meters,
- gas meters,
- electricity meters,
- heat meters,
- measuring systems for liquids other than water,
- automatic weighing instruments,
- taximeters,
- material measures,
- length measuring instruments and
- exhaust gas analysers;

and also the "old concept" Directives – 71/316/EEC:

- medium accuracy cylindrical weights – 71/317/EEC;
- standard mass per storage volume of grain – 71/347/EEC;
- certain accuracy weights – 74/148/EEC;

- alcohol meters / alcohol hydrometers – 76/765/EEC;
- alcohol tables – 76/766/EEC;
- tyre pressure gauges for motor vehicles – 86/217/EEC.

For pre-packages under the *Eichgesetz* and *Fertigpackungsverordnung* (Prepackaging Order), the European requirements for prepackages are implemented under:

- Directive 76/211/EEC on the making-up by weight or by volume of certain pre-packaged products;
- Directive 2007/45/EC laying down rules on nominal quantities for prepacked products.

Responsibilities and contact partners

The *Bundesministerium für Wirtschaft und Energie* (BMW, Federal Ministry for Economic Affairs and Energy) is responsible for legislation on metrology. It also represents the government as a central contact partner vis-à-vis the EU, in particular for safeguard clause procedures and the distribution of information to the EU and other Member States.

The *Länder* are responsible for the enforcement of legislation in Germany. They establish the competent authorities for market supervision and allocate their resources (staff, technical competence and technical facilities). Market surveillance under the *Eichgesetz* is carried out by the *Länder* calibration authorities¹.

The calibration supervisory authorities of the *Länder* coordinate enforcement with respect to nationwide (i.e. an efficient common structure for) market surveillance, via the "*Arbeitsgemeinschaft Mess- und Eichwesen*" (Working party on measurement and calibration) – AGME (organisation and contact partners– see www.agme.de). This body meets several times a year and, among other things, decides on nationwide priority actions as part of proactive market surveillance. The details can be arranged by subordinate working committees (e.g. the Working Committee on metrological checks). If urgent coordination is necessary, electronic procedures are used.

The current situation and results of market surveillance are exchanged and recorded using shared databases "*Sammelstelle für Auffälligkeiten im gesetzlichen Messwesen*" (SAM, Registry of irregularities in legal metrology) and "*Marktaufsicht*" (market

¹ **The Länder calibration authorities:**

Baden-Württemberg: *Regierungspräsidium Tübingen - Mess- und Eichwesen*

Bavaria: *Bayerisches Landesamt für Maß und Gewicht*

Berlin / Brandenburg: *Landesamt für Mess- und Eichwesen Berlin-Brandenburg*

Bremen: *Landeseichdirektion Bremen*

Hamburg / Schleswig-Holstein / Mecklenburg-Western Pomerania: *Eichdirektion Nord*

Hessen, *Hessische Eichdirektion*

Lower Saxony: *Mess- und Eichwesen Niedersachsen*

North Rhine-Westphalia: *Landesbetrieb Mess- und Eichwesen*

North Rhine-Westphalia, Rhineland-Palatinate: *Landesamt für Mess- und Eichwesen Rheinland-Pfalz*

Saarland: *Landesamt für Umwelt und Arbeitsschutz, Department 4.3 –Legal measuring and calibration*

Saxony: *Staatsbetrieb für Mess- und Eichwesen*

Saxony-Anhalt: *Landeseichamt Sachsen-Anhalt*

Thuringia: *Thüringer Landesamt für Verbraucherschutz, Abteilung – Mess- und Eichwesen*

Beschussamt

supervision). A central assessment is performed by the Working Committee on metrological surveillance.

The central calibration contact is the Chairperson of the AGME, who can be contacted at the AGME office in the *Deutsche Akademie für Metrologie* (www.dam-germany.de).²

A representative of the calibration authorities appointed by the *Länder* also liaises between the German calibration authorities and the surveillance authorities in other EU Member States in the field of legal metrology. This is done through the WELMEC³ Working Group 5 for measuring instruments and Working Group 6 for pre-packages.

The progress made by the European market surveillance authorities in legal metrology towards a common database (ICSMS) is observed through contact with the authorities responsible for this database.

It is one of the responsibilities of the *Physikalisch-Technische Bundesanstalt* (National Metrology Institute, www.ptb.de) to advise and support the market surveillance authorities. This concerns in particular issues relating to matters abroad and coordination in the event of defects in measuring instruments from abroad.

Competence of market surveillance authorities

The *Länder* calibration administrations have the necessary knowhow, including through further training events, the creation of poles of excellence in the *Länder* and through cooperation between the *Länder*. A uniform, high level of training for market surveillance staff is ensured in-house through courses offered by the calibration authorities, and uniform training with a final examination is organised centrally for all of Germany by the *Deutsche Akademie für Metrologie* (DAM, German Academy for Metrology). The training takes up to two years and requires a prior qualification (*Meister* [Master Craftsman] or technical qualification for middle-ranking officials) or a *Fachhochschule* (technical college) degree (senior officials).

Approach to market surveillance

Market surveillance for legal metrology is performed

- on the basis of own findings (proactively) and
- using information from external sources (reactively).

Measures to prevent or correct defects

Both in reactive and proactive market surveillance, the calibration authorities ensure that the economic stakeholders in question take the necessary corrective measures. Restrictive

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³ WELMEC (European cooperation in legal metrology – initially established as **Western European Legal Metrology Cooperation** – www.welmec.org)

measures are generally taken after a hearing. This can be done by the manufacturer, importer or user voluntarily or, failing that, by the imposition of compulsory measures or a penalty in the form of a fine. Measures which can be taken under German law against the user of measuring instruments which are not considered as standardised due to non-compliance often have more lasting consequences for the manufacturer of the products in question because of the way the market works, than would direct measures taken against it.

Any suspicion that an interested party systematically or intentionally fails to meet the essential requirements for the placing on the market of one or more products or that a serious risk exists must, subject to the appropriate legal provision, be reported via the BMWi to the European Commission. Insofar as it appears justified or makes sense in order to prevent the import of a defective device into the internal market, the customs may be contacted directly. For this purpose, § 17 *Eichgesetz* gives the customs authorities the necessary authorisation to provide information.

In the case of a *serious risk*, measures and any corrections made are reported immediately to the Commission by means of an information system.

For preventive reasons, the calibration authorities maintain contact with manufacturers and associations by means of various information media and through various specialised and standards committees, in order to exchange necessary information even in advance with distributors on compliance with legal requirements, discuss problems at an early stage and consider the solutions.

Planning approaches and surveillance of measuring instruments and prepackages

The characteristics of measuring instruments and prepackages can be checked by viewing documents in relevant random samples in an appropriate manner and to a reasonable extent or through physical checks and laboratory testing. When deciding on the random samples, account is taken of the principles of risk assessment, complaints filed and other information.

Where possible, market surveillance takes place in the period between the placing on the market and the putting into operation of the product. Errors identified during the use phase lead to further market surveillance measures within the meaning of Regulation (EC) No 765/2008, where the defects are directly linked to the requirements of the respective harmonisation Directive.

Checking the compliance of prepackages with the regulations of this Directive must be undertaken on a random basis during filling or, if this is unfeasible, on the premises of the importer or its authorised representative based on EU territory.

If a measuring instrument needs be adjusted when being put into operation on site, this has an influence on compliance with the essential requirements set out in the Directive. Results of tests before being put into operation are then only of limited use. Likewise, the results of tests on individual measuring instruments can be applied to other instruments of the same design only to a limited extent. Effective market surveillance is only possible at a later stage in such cases.

Periodical comprehensive checks during use (calibration, recalibration) take account of this particularity of measuring instruments. Therefore, and indirectly through

surveillance by the inspection bodies, the calibration authorities also know where the measuring instruments are. This makes market surveillance considerably easier, in particular as regards the required measurement stability referred to in Directive 2004/22/EC.

Proactive market surveillance

In order to prevent non-compliant measuring instruments from being placed on the market, proactive market surveillance can be undertaken preferably already on the manufacturer's premises or when the product is put into operation *in situ*. If this is not possible and a defect is detected during calibration which is obviously due to an individual production error, i.e. a defect when placed on the market, the necessary measures are taken immediately to correct it.

If a defect is detected which can be linked to an error when the product was placed on the market, or if general problems are noted in a type of measurement instrument during recalibration, these are also recorded in statistics and assessed separately. The degree of seriousness of the defects, the frequency of occurrence and in particular the effects on consumer protection and fair competition are taken into consideration here. Analysis of these data forms the basis and sets the order of priority for problems to be specifically monitored in the future as part of special actions.

Additional information sources in planning and the assessment of specific actions are experiences from previous market surveillance actions or indications e.g. from users and manufacturers, as well as market analyses.

The calibration authorities coordinate these actions as described above, in order to tackle problems in a targeted manner, with division of the tasks involved, and to avoid the unnecessary duplication of testing and of financial burdens. The results are recorded and assessed in the common "SAM" and "market supervision" databases.

In the proactive market surveillance of measuring instruments, which were placed on the market in accordance with the "old concept" Directives (see above), the surveillance of devices is already ensured under the prescribed EEC initial verification.

Reactive market surveillance

Reactive measures are taken in particular after the submission of complaints or notifications, information from third parties, press publications or requests for administrative and enforcement assistance.

The mechanisms in proactive market surveillance are used to check whether a defect exists. Defects are corrected in accordance with the above-mentioned procedures.

The information found by individual calibration authorities or received from other bodies concerning defects or suspicions is exchanged via the common databases, in order to check any existing defects without delay.

Public information

The calibration supervisory authorities of the *Länder* and the AGME report on their Homepages on past market surveillance activities and, where necessary, on any anomalies. AGME brochures on specific measuring instrument types and on the placing

on the market of measuring instruments under the new concept have been prepared for preventive purposes. Suitable measures are also taken to alert the users of measuring instruments and prepackages to dangers.

Cross-border cooperation and the exchange of information

Information platforms are used for cross-border cooperation and information between European market surveillance authorities in the field of statutory metrology, and also for the Commission or the WELMEC as recipients. Progress towards a common database (ICSMS) will continue to be observed.

Cooperation with other national authorities/organisations, in particular the customs authorities

Where there is a reason to prevent the import of a defective instrument into the internal market, the customs authorities can be contacted directly. For this purpose, pursuant to § 17 *Eichgesetz*, the customs authorities have the necessary right to disclose information. The measures to be taken in cooperation with customs must take account of whether a measuring instrument or a prepackage (simply) does not meet Community harmonisation requirements, or whether a serious risk exists.

Fields of action / focal points for proactive market surveillance for the period 2014

A Overall considerations for a proactive market surveillance programme

Efficient market surveillance involves information on the distribution and type of use of specific measuring instruments. In the framework of metrological surveillance under German verification law, inspections, follow-up tests and official verification can produce the findings needed for efficient market surveillance and at the same time the necessary efficiency of market surveillance can be achieved using these enforcement instruments. The same applies for prepackages.

This concerns in particular surveillance *in situ* (where appropriate in "inspection tours") for

- weighing scales (in particular those in Class III);
- service stations (in particular petrol pumps);
- chemists (in particular weighing scales in Classes I and II);
- workshops (in particular exhaust fume analysers),

and the activities involved in surveillance State-approved inspection bodies (for measuring instruments for electricity, power, gas, water and heat).

Additional information is established on the basis of special inspection and priority actions for

- metering equipment in road tankers;

- vehicle scales;
- taximeters and
- other measuring instruments referred to in Directives 2004/22/EC and 2009/23/EC.

This information includes:

- place of installation and owner;
- category of instrument (in particular manufacturer, type, manufacturer's number, year of construction, measuring range);
- outer defects (in particular labelling, composition/environment class);
- defects in composition (other hardware/software requirements);
- defects in the metrological characteristics (if testable using the available testing methods *in situ*);
- time of occurrence (before/during placing on the market or when in use).

The basic market surveillance programme covers all measuring instruments referred to in Directives 2004/22/EC and 2009/23/EC and guarantees the required surveillance of measuring instruments placed on the market for the first time.

The number of instruments to be checked is established using the statistics obtained from metrological surveillance. The specific features and defects of measurement instruments are also covered in the common "SAM" database.

B Separate proactive market surveillance programme

On the basis of an instrument-specific analysis (for procedure, see the section entitled "Proactive market surveillance"), non-automatic and automatic scales, volume measuring instruments, measuring instruments for road traffic and supply meters as well as certain prepackages were specifically selected in 2014 for special proactive market surveillance. The essential selection criterion is the extent to which the protection objectives of the relevant Directive and of Regulation (EC) No 765/2008 are threatened, taking account of the findings from the basic programme (see Section A).

1. Non-automatic and automatic scales

Explanation: these measuring instruments are widely distributed and goods turnover is very high. Specific errors therefore lead to significant hazard potential. After evaluating and assessing the relevant databanks of the calibration authorities, there still appears to be considerable need for action here. Due to the increasing importance of waste as a resource, one surveillance focal point will be the "weighing of waste".

Aim:

- to identify fault-prone models or elements of scales and critical procedures;
- to correct faults (or have them corrected);
- to prevent or intercept the placing on the market/use of non-compliant instruments.

2. Measuring instruments for liquids

Explanation: these measuring instruments are widely distributed. Due to the complexity of the installations and the high turnover of these measuring instruments, the risk potential in this field is very high. After assessing and evaluating the relevant databases of the calibration authorities and taking consumer complaints into consideration, there continues to be a considerable need for action here.

Likewise, various manipulation possibilities have been discovered in the past in specific areas.

Aim:

- to identify fault-prone models or parts of measuring instruments (which can be tampered with) and critical procedures;
- to correct faults (or have them corrected);
- to prevent or intercept the placing on the market/use of non-compliant instruments, also in order to create preconditions for the correct use of these instruments.

3. Supply meters

Explanation: the use of these measuring instruments is widespread. A new meter generation (SmartMetering) is about to be introduced under the *Energiewirtschaftsgesetz* (Energy Industry Act). Furthermore, due to constantly increasing energy and supply prices, these measuring instruments serve the public interest (a comparatively high number of consumer complaints). The pressure in terms of competition and cost linked to the production of such instruments is enormous. The evaluation of enforcement data (e.g. proneness to faults of individual meters) reveals an increased need for action in the field of market surveillance.

Aim:

- to identify fault-prone models so that, as far as possible, they are not built into the network at all;
- to correct faults (or have them corrected);
- to prevent or intercept the placing on the market/use of non-compliant instruments;
- to provide constructive support for innovation.

4. Placing on the market

Explanation:

Modified framework conditions are provided for in the currently planned amendment to the European Directives (Decision No 768/2008/EC) as regards placing on the market by the manufacturer. This affects the operation of a wide range of measuring instruments. As part of market surveillance, the calibration authorities provide constructive support for this process in order to continue to ensure correct measurements.

Aim:

- targeted surveillance in order to rule out incorrect interpretations at an early stage and avoid later rectifications.

5. Prepackages**Explanation:**

The surveillance approach for prepackages is based on specific findings established following complaints and on the basis of prepackaging statistics, and is subject to ongoing verification in the Working Committee on Prepackages of the calibration authorities.

Benchmarks for manufacturers and prepackages to be checked as a priority in 2014 include product properties (easy or difficult to fill), the frequency or relevance of a product on the market (distribution or local value), market value (qualitative and quantitative) and also consumer and competition complaints.

Aim:

- Important product groups from the liquid or non-liquid food sector should be checked yearly in manufacturing companies and any products of particular significance to consumers should also be systematically double-checked by means of priority actions once placed on the market.