

Minister of Economic Affairs and Infrastructure
Regulation No. 65 of 18.12.2018

Mandatory Areas of Application of Metrologically Controlled Measuring Instruments with Exceptions, List of Measuring Instruments Subject to Metrological Control, Requirements for Accuracy, Verification Validity Periods of Measuring Instruments, and Specified Requirements for Metrological Control and Statistical Verification

Annex

(in the wording of Regulation No. 65 of the Minister of Entrepreneurship and Information Technology of 15.11.2021)

List of Measuring Instruments Subject to Mandatory Metrological Control According to their Areas of Application with Exceptions, Requirements for Measuring Instruments and Verification Validity Periods of Measuring Instruments

In the fourth column of the list of measuring instruments, the following abbreviations are used for denoting the type of the required metrological control and the relevant procedures upon placing a measuring instrument on the market or putting said instrument into use:

- 1) V1 – passing the conformity assessment procedures provided for in Directive 2014/32/EU of the European Parliament and of the Council on measuring instruments (OJ L 96, 29.3.2014, pp 149–250) is mandatory;
- 2) V2 – passing the conformity assessment procedures provided for in Directive 2014/31/EU of the European Parliament and of the Council on non-automatic weighing instruments (OJ L 96, 29.3.2014, pp 107–148) is mandatory;
- 3) EC – passing an EC initial verification is mandatory for a measuring instrument with an EC type approval and manufactured on the basis of individual Directives on measuring instruments during the validity period of the type approval, but no later than 30 October 2016;
- 4) ST1 – passing an initial verification is mandatory for a measuring instrument that has a valid national type approval certificate issued before 30 October 2006 during the certificate's validity period, but no later than 30 October 2016;
- 5) ST2 – passing a national initial verification is mandatory for a measuring instrument with a valid national type approval certificate;

| Type of measuring instrument | Area of application | Accuracy requirement ¹ | Type of metrological control and procedure upon placing the measuring instrument on the market or putting said instrument into use | Verification validity period in years |
|---|--|-----------------------------------|--|---------------------------------------|
| <i>1</i> | <i>2</i> | <i>3</i> | <i>4</i> | <i>5</i> |
| 1. INSTRUMENTS FOR MEASURING MASS | | | | |
| 1.1 Non-automatic weighing instruments , fitted with or without a price indicator, with or without a printing device (electronic, electromechanical or mechanical) | 1.1.1 in retail sale and other transactions with consumers or buying-in | class III | V2 | 1 |
| | 1.1.2 for weighing precious metals, articles of precious metals, precious stones or semi-precious stones in retail sale or buying-in | class II | | |
| | 1.1.3 for weighing tea or condiments in retail sale or buying-in | class II or III | | |
| | 1.1.4 for providing postal services | class III | | |
| | 1.1.5 for measuring quantities of goods subject to customs or excise duty | class II or III | | |

| | | | | |
|--|--|-------------------|--|--|
| | 1.1.6 for determining the ethanol content of goods subject to excise duty | class II | | |
| | 1.1.7 for inspecting actual contents in the handling procedures of a packer or importer of prepackages | class II or III | | |
| | 1.1.8 for inspecting or preparing the quantity of a medicinal product in a pharmacy | class II | | |
| | 1.1.9 for weighing the quantity of fish unloaded | class III or IIII | | |
| | 1.1.10 for weighing components and liquids separated from an end-of-life vehicle | class III or IIII | | |
| | 1.1.11 for state supervision of articles of precious metals, where the measuring instrument is used directly as a measuring instrument for inspecting compliance to the requirements laid down in respective legislation | class II | | |
| | 1.1.12 for performing expert assessment in pre-trial proceedings and in extra-judicial proceedings concerning a misdemeanour | class II or III | | |

| | | | | |
|--|---|-------------------|--|--|
| | 1.1.13 for determining product masses during test purchases under the Consumer Protection Act, where the measuring instrument is used directly as a measuring instrument for control in state inspection of compliance with the requirements laid down in respective legislation | class II or III | | |
| | 1.1.14 for weighing vehicles, where the measuring instrument is used directly as a measuring instrument for state inspection of compliance with the requirements laid down in respective legislation | class III | | |
| | 1.1.15 for measuring the wheel/axle load of vehicles and determining the total mass of a vehicle on the basis thereof, where the measuring instrument is used directly as a measuring instrument for state inspection of compliance with the requirements laid down in respective legislation | class III or IIII | | |

| | | | | |
|---|---|---|-----|---|
| | 1.1.16 for inspecting actual contents of prepackages or packages used as measuring containers, where the measuring instrument is used directly as a measuring instrument for the state inspection of compliance with the requirements laid down in respective legislation | class II or III | | |
| | 1.1.17 in medicine, for patient monitoring, diagnosing or treating | class III | | 5 |
| 1.2 Automatic or non-automatic weighing instruments supplied with label printing devices | for pre-packaging goods with uneven content, where the reading of the weighing instrument and its print-out are considered to be the final result of the actual contents of a package in retail sale | class XI, XII, XIII, XIII, Y(I), Y(II), Y(a) or Y(b) | V1 | 1 |
| | | class II or III | V2 | |
| | | according to type approval | ST1 | |
| 1.3 Automatic weighing instruments | 1.3.1 for checking the actual contents of a prepackage or measuring the quantity of goods subject to customs or excise duty or in retail sale | class XI; XII; XIII; XIII; Y(I); Y(II); Y(a); Y(b) (automatic catchweighers); class Ref(x)/X(x) (automatic gravimetric filling instruments); class 0.2; 0.5; 1 or 2 (discontinuous totalisers); class 0.5; 1 or 2 (continuous totalisers) | V1 | 1 |
| | | according to type approval | ST1 | |
| | 1.3.2 for weighing a moving | class 0.5 | V1 | 2 |

| | | | | |
|--|---|--|-----|-----|
| | wagon and/or train in order to measure the quantity of goods subject to customs or excise duty | | ST1 | |
| | 1.3.3 for weighing a road vehicle in motion to measure the amount of goods subject to customs or excise duty | class 0.5 | ST2 | 1 |
| | 1.3.4 for weighing a road vehicle in motion in state supervision | total mass $\pm 1\%$, $\pm 2\%$, $\pm 3\%$, $\pm 5\%$, $\pm 7\%$, $\pm 10\%$; | ST2 | 0.5 |
| | 1.3.5 for weighing the quantity of fish unloaded | class XI; XII; XIII; XIII; Y(I); Y(II); Y(a); Y(b) (automatic catchweighers); class Ref(x)/X(x) (automatic gravimetric filling instruments); class 1 or 2 (discontinuous totalisers); class 1 or 2 (continuous totalisers) | V1 | 1 |
| 2. MEASURING INSTRUMENTS FOR LIQUIDS OTHER THAN WATER | | | | |
| 2.1 Measuring systems intended for the continuous dynamic measurement: incl. fuel dispenser; measuring systems on road tankers; measuring systems | 2.1.1 for measuring the amounts of liquids in retail sale, for measuring the amounts of goods subject to customs or excise duty | class 0.5 | V1 | 1 |
| | | | EC | |
| | | | ST1 | |

| | | | | |
|--|--|--|-----|--|
| for (un)loading ships and rail and road tankers; for aircraft refuelling; measuring systems for milk and other liquid foods | 2.1.2 electronic measurement systems for measuring mass (density and volume readings are unofficial), which have received the national type approval certificate before 30 October 2006 for measuring the quantity of liquids or measuring the quantity of goods subject to customs or excise duty | | ST1 | |
| 2.2 Continuous operation measuring systems on pipelines | for measuring quantities of goods subject to customs or excise duty | class 0.3 | V1 | 1 |
| | | | ST1 | |
| 2.3 Measuring systems for liquefied gas (liquefied gases are under pressure and at a temperature equal to or above -10 °C) and measuring systems under points 2.1 and 2.2 for liquids with their temperature below -10 °C or above 50 °C, their dynamic viscosity higher than 1 000 mPa·s or their maximum volumetric flowrate no more than 20 L/h | for measuring the quantity of goods in retail sale or goods subject to customs or excise duty | class 1.0 | V1 | 1 |
| | | | ST1 | |
| 2.4 Capacity serving measures (capacity measures) | in retail sale and other transactions with consumers | transfer measures: $\pm 2 \text{ ml} / \pm 3\%$ (line) or $+ 4 \text{ ml} / + 6\%$ (brim); serving measures: $\pm 5\% / \pm (5 \text{ ml} + 2.5\%)$ (line) or $+ 10\% / + (10 \text{ ml} + 5\%)$ (brim) | V1 | unlimited or until an event which could impact the geometry of the serving measure |

3. MEASURING INSTRUMENTS FOR QUANTITIES OF GASES

| | | | | |
|-----------------------------------|--|--|-----|-----------|
| 3.1 Gas meters | on the basis of their readings, transactions are concluded between the network operator and the client; for measuring the quantity of goods subject to excise duty | class 1.5 or 1.0; in subsequent verification, twice the maximum permissible error is applied | V1 | unlimited |
| | | $\pm 3\%$ / $\pm 2\%$ diaphragm gas meters; $\pm 2\%$ / $\pm 1\%$ rotary displacement and turbine gas meters; in subsequent verification, twice the maximum permissible error is applied | EC | |
| 3.2 Gas volume conversion devices | on the basis of their readings, transactions are concluded between the network operator and the client; for measuring the quantity of goods subject to excise duty | $\pm 0.5\%$, $\pm 0.7\%$ or $\pm 1.0\%$ | V1 | 8 |
| | | | ST1 | |

4. WATER AND HEAT METERS

| | | | | |
|-------------------------------|---|--|----|---|
| 4.1 Water meters ² | for measuring clean water, on the basis of their readings, transactions are concluded between the water undertaking and the client, DN < 300 mm; when water is abstracted by measuring the quantity according to an environmental permit where a water meter is | 5% / $\pm 2\%$ (at water temperature $\leq 30\text{ }^{\circ}\text{C}$) or $\pm 5\%$ / $\pm 3\%$ (at water temperature $> 30\text{ }^{\circ}\text{C}$); in subsequent verification, twice the maximum permissible error is applied | V1 | 5 |
| | | class A, B or C; in subsequent verification, twice the maximum permissible error is applied | EC | |

| | | | | |
|--|--|--|-----|----|
| | used, DN < 300 | class A, B or C; class 1 or 2; in subsequent verification, twice the maximum permissible error is applied | ST1 | |
| | when water is abstracted by measuring the quantity according to an environmental permit where a water meter is used, DN < 300 and permanent flow rate < 900 m ³ /h | 5% / ± 2% (at water temperature ≤ 30 °C) or ± 5% / ± 3% (at water temperature > 30 °C); in subsequent verification, twice the maximum permissible error is applied | V1 | 10 |
| | | class A, B or C; in subsequent verification, twice the maximum permissible error is applied | EC | |
| | | class A, B or C; class 1 or 2; in subsequent verification, twice the maximum permissible error is applied | ST1 | |
| 4.2 Heat meters and the sub-assemblies thereof | for measuring the quantity of heat energy, on the basis of their readings, transactions are concluded between the network operator and the client; with a flow sensor of DN < 300 mm | class 2 or 3 | V1 | 5 |
| | | according to type approval | ST1 | |
| 5. ALTERNATING CURRENT ELECTRICAL ENERGY METERS | | | | |
| 5.1 Static active energy meters | on the basis of their readings, transactions are concluded between the network operator and the client; for measuring the quantity of goods subject to excise duty | class A, B or C | V1 | 12 |
| | | according to type approval | EC | |
| | | class 1, 2, 0.2S or 0.5S | ST1 | |

| | | | | |
|--|--|--------------------------|-----|--|
| 5.2 Electromechanical active energy meters | on the basis of their readings, transactions are concluded between the network operator and the client; for measuring the quantity of goods subject to excise duty | class A, B or C | V1 | 16 |
| | | class A, B, 1 or 2 | ST1 | |
| 6. DIMENSIONAL MEASURING INSTRUMENTS | | | | |
| 6.1 Material measures of length (tape of length and rigid or semi-rigid measures) | in retail sale or when pre-packaging goods; for measuring goods subject to customs or excise duty; for calculation of the fee for providing postal services; in state supervision and upon conducting an inspection of a vehicle's compliance with the technical requirements at an inspection facility where length is measured with a tape measure | class I, II, III, D or S | V1 | unlimited, unless preceded by an event which may impact the geometry of the measure of length 4 measures of length – classes D, S, and dipping tapes |
| | | class I, II or III | EC | |
| | | | ST1 | |
| 6.2 Automatic level gauges for stationary tanks | for measuring quantities of goods subject to customs or excise duty | class II | ST2 | 2 |
| 6.3 Length measuring instruments | for measuring quantity in retail sale or when pre-packaging goods | class I, II or III | V1 | 3 |
| | | | ST1 | |
| 6.4 Measuring wheels | in traffic supervision where length is measured with measuring wheels | class I, II or III | ST2 | 3 |

| | | | | |
|--|--|--|-----|----|
| 6.5 Multi-dimensional measuring instruments | for determining the dimensions of a package when providing postal or storage services | maximum permissible error $\pm 1d$, where d is the scale value | V1 | 10 |
| 7. OTHER MEASURING INSTRUMENTS | | | | |
| 7.1 Taximeters | in the provision of taxi services where the fare is calculated not only through an information society service | in laboratory conditions: $\pm 0.1\%$ of the signals denoting duration and $\pm 0.2\%$ of those denoting distance, $\pm 0.1\%$ maximum permissible error upon fare calculation | V1 | 2 |
| | | | ST1 | |
| 7.2 Speed measuring instruments | in traffic supervision | maximum permissible error upon verification in laboratory conditions using the indirect method: at a velocity of up to 100 km/h ± 1 km/h and at a velocity above 100 km/h $\pm 1\%$ of the reading of the measuring instrument | ST2 | 1 |
| 7.3 Motor vehicle exhaust gas analysers | in traffic supervision and upon conducting an inspection of a vehicle's compliance with the technical requirements at an inspection facility | class 0 or I | V1 | 1 |
| | | | ST1 | |

| | | | | |
|------------------------------------|----------------------|---|-----|-----|
| 7.4 Evidential breathalyser | in state supervision | ± 0.020 mg/l at values up to 0.4 mg/l, ± 5% at values 0.4 mg/l to 2 mg/l, ± 20% at values exceeding 2 mg/l; in subsequent verification ± 0.032 mg/l at values up to 0.4 mg/l; ± 8% at values 0.4 mg/l to 2 mg/l, ± 30% at values exceeding 2 mg/l | ST2 | 0.5 |
|------------------------------------|----------------------|---|-----|-----|

Notes:

¹ The accuracy requirement arises from a relevant European Union Directive, international standard and/or technical normative document laying down the respective requirements. Measuring instruments with higher accuracy requirements may be verified and used.

² Apartment associations may use water meters verified for measuring pure water for internal billing purposes.