# CZECH REPUBLIC

# 1. Organizational Structure and Background

In the Czech Republic, the **Ministry of Industry and Trade** (henceforth MIT, <u>www.mpo.cz</u>) is the top administrative body in the Government in the area of all the standardization activities inclusive metrology. In the resort administered by MIT 2 bodies with a relation to metrology have been in operation:

- The Czech Office for Standards, Metrology and Testing (henceforth UNMZ, www.unmz.cz) was established by the Czech National Council Act No 20/1993 Coll., on the Organisation of the State Administration in the Field of Standards, Metrology and Testing as the state administration body responsible for such activities. ÚNMZ is a budgetary organization (Government body) subordinated to the Ministry of Industry and Trade. The ÚNMZ's mission is to perform tasks set out in the Czech legislation on technical standardisation, metrology and testing and tasks related to the harmonisation of the Czech technical regulations and standards with the technical regulations of the European Union. The ÚNMZ, among others, authorises so called Authorized Metrology Centres (henceforth AMCs) and Official Measuring Experts according to the Act No 505/1990 Coll., on Metrology, as amended, and is responsible for supervision activities set by the law on metrology.
- The Czech Metrology Institute (henceforth CMI, www.cmi.cz) with headquarters in Brno is the national metrology institute (including fundamental, industrial and legal metrology). CMI was founded on 1 January 1993 by the Ministry of Economy as the successors to the former Czechoslovak Metrology Institute, in 2002 the establishment was transferred to MIT. CMI is an executive-type of body (Government executive agency) – as given by the legislation on Government-owned bodies, since 2002 it operates without any staff or salary limits due to the fact that all the administrative (statutory) activities are concentrated in UNMZ. In the field of legal metrology CMI operates through 15 internal organizational units (IOU, see the organizational chart), out of them 11 regional inspectorates (RI) active partially or mainly in classical legal metrology (the numbers in brackets are used to identify them on the legal metrology markings): RI Prague (numbered 1, 9 or 15), RI České Budějovice (2), RI Plzeň (3), RI Liberec (4), RI Most (13), RI Pardubice (5), RI Jihlava (11), RI Brno (6), RI Kroměříž (12), RI Opava (7), RI Olomouc (14) and Laboratory of Fundamental Metrology Prague (LFM - 8). The reason for the geographical fragmentation is historical – a result of the split of the Czechoslovakia in 1993: before that the national metrology institute had been built in Slovakia.

As far as legal metrology is concerned, the Czech Republic is a member of the Metre Convention (since its foundation in 1875 as a former part of the Austro-Hungarian Empire), OIML, EURAMET eV. and a full member of WELMEC eV. The legislation in metrology is based on Act No 505/1990 Coll., on metrology (Law on Metrology, LoM), as amended, and by corresponding decrees of MIT covering provisions of a horizontal nature. The overview of the metrology legislation see at <a href="Právní předpisy v oblasti metrologie - UNMZ">Právní předpisy v oblasti metrologie - UNMZ</a>. Metrological supervision/inspection for measuring instruments in use is divided between: UNMZ – the administrative part, CMI – execution/fact-finding part in the field.

Instruments-specific technical and metrological requirements are given by the so called Provisions of general nature (the Czech acronym "OOP") which are to be developed, according to the LoM, by CMI, to a maximum extent using international standards inclusive OIML recommendations – they are available here Konečná znění | Český metrologický institut (cmi.cz), only in the Czech language, versions in other EU languages are available, as a result of the notification process, on the EU TRIS database see <a href="https://technical-regulation-information-system.ec.europa.eu/en/search">https://technical-regulation-information-system.ec.europa.eu/en/search</a>. For questions or in difficulties to get an access to them please ask at <a href="mainto:info@cmi.cz">info@cmi.cz</a>.

#### CMI organizational chart:



Conformity assessment activities for the implementation of EU new approach directives are covered by Act No 90/2016 Coll., as amended - on the basis of this act the individual directives are transposed to national legislation through Government Orders.

## 2. Equipment Subject to National Controls with verification periods

The scope of regulation in relation to measuring instruments is given by MIT Decree no. 345/2002 Coll. Legally controlled measuring instruments are generally subject to type approval, initial verification and mandatory subsequent verification (periodic and after repair) unless otherwise stated - the instruments covered by new approach directives or regulations are excluded from the controls stipulated by Law on Metrology associated with putting them on the market and into use (type examination and initial verification). All the categories of measuring instruments under the EU Directive MID are subject to metrology regulation with the exception of MI-010 Exhaust analysers which are subject to mandatory calibrations only by way of the transport legislation. In non-harmonized regulated field, a mutual recognition clause based on the EU legislation is applied regarding these activities. Utility measuring instruments (as given by Decree no. 345/2002 Coll.) can alternatively be verified using a statistical sampling method, instead of reverification.

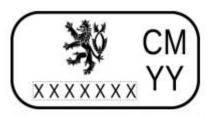
In relation to the harmonized EU legislation, UNMZ is a notifying authority to all the new approach directives and CMI is Notified Body no. 1383 for MDR - Regulation (EU) 2017/745 and for the EU Directives NAWID, MID and RED, covering all the modules of conformity assessment with the exception of modules H, H1. CMI is by no means involved in market surveillance - for all the new approach directives it is a responsibility of the Czech Trade Inspection <a href="https://www.coi.cz">https://www.coi.cz</a>.

Type approval certificates on the national level can be issued only by CMI. CMI is responsible for technical tests and expertise for all the measuring instruments under legal control. It has its own testing facilities but may use other testing laboratories, mainly accredited ones, to subcontract routine type examination tests. CMI maintains a publicly available national database of type approvals <a href="Typover/Database certifikatu typu měřidel (cmi.cz">Typover/Database certifikatu typu měřidel (cmi.cz)</a> and publishes a detailed list of type approval certificates in official periodicals in the Czech language. The database Typover contains also EU type examination certificates issued by CMI as the Notified Body. CMI also carries out metrological control of prepackages under the EU oldapproach directives (Directive 76/211/EEC, Directive 75/107/EEC).

As regards subsequent verification, even before the accession to EU there was a subdivision of work between CMI as a Government-owned body and private bodies as follows: measuring instruments in the area of classical weights&/measures (NAWIs/AWIs, taximeters and fuel dispensers) are verified by CMI only, all the other categories of regulated measuring instruments can be verified by Authorized Metrology Centres – AMCs, mainly private bodies, after a successful demonstration of their technical competence. For subsequent verification the users of regulated measuring instruments have to pay a verification fee, the price list of those verified by CMI is publicly available on the CMI website.

Measuring instruments subject to legal control inclusive their verification procedures are listed in the MIT Decree no. 345/2002 Coll. – for a full account see English version <u>Právní předpisy v oblasti metrologie - UNMZ</u>. In the end of 2023, a revision of the Decree was prepared to include, among others, multidimensional measuring instruments, measuring instruments for calorific value and chemical composition of energy gases and their mixtures, charging stations for electromobility and hydrogen refuelling stations (HRS) with a delayed effectiveness since January 1<sup>st</sup>, 2026. The revised Decree is valid from the first of July 2024.

## 3. Markings used in type approval and verifications











#### Official mark

Official mark with an attached identification code (the so-called official transaction mark)
An official mark with an identification code in the form from 2015, a self-adhesive label is to be marked on each measuring instrument that CMI has verified (if it is technically possible). The label is made with a black print on silvery base with several specific protections elements.

YY.....the last two digits of the year of verification

XXXXXXX.....official label identification code Official signs may only have the following dimensions:

 $(14 \times 10)$  mm,  $(18 \times 11.5)$  mm,  $(34 \times 17.5)$  mm Symbol 15 is the last two digits of the verification year,

the seven-digit number is unique in that year identification number of the "transaction" official mark.

#### Official verification mark of CMI

It is marked with in the form of a self-adhesive label for measuring instruments verified by the CMI. The mark is

printed in black on a red background.

X.....the number of the CMI internal organizational unit

00...the last two digits of the verification year

#### **CMI** orientation mark

An orientation mark in the form of a self-adhesive label

Used in verification of specified measuring instruments that has been verified by the CMI. The mark informs the public about the internal organization to the CMI unit that carried out the verification and official mark placed on the specified measuring instrument that provides contact details. It contains the double digit of the year marked with a piercing, in which the validity period of the verification expires (if it does not expire for another reason).

TCM XXX/YY - ZZZZ

#### Type approval mark

The mark is assigned to the given type of measuring instrument in the type approval certificate and is marked on each specimen of measuring instrument.

The mark is placed on the measuring instrument by the manufacturer (if technically possible) - on some types of measuring instruments the mark of type approval is not indicated (e.g. weight, tap containers, measuring glass, etc.).

XXX - in practice replaced by the three-digit measurement field

YY - the last two digits of the year the certificate was issued

ZZZZ – in practice replaced by the serial number of the certificate







#### Official verification mark of AMC

It could be performed as:

- hanging seal with the official mark on the obverse side and the last two digits of the year of verification on the reverse side
- b) self-adhesive label
- c) stamping, burning, etching, printing, etc.; or
- d) marking in another manner approved by the authority (UNMZ)

X ... the number of the AMC

YY...the last two digits of the verification year

Version as self-adhesive label in practice