

CECIP's vision on making the system of metrological control ready for the future

Changes can make reverifications more efficient and effective

30 March 2023

Metrological control of weighing instruments is essential to protect consumers and to create trust in the system. A legal framework of European and national legislation is in place to ensure that weighing instruments weigh correctly. This framework includes requirements on placing on the market weighing instruments and on reverifications. It further developed in the last decades taking into account developments such as digitalisation and the European Single Market making it only logical if this legal framework continues to develop further.

CECIP is convinced that there are several aspects where the metrological control legal framework needs to change to make it ready for the medium and long term future, particularly in the area of reverifications¹. These changes shall e.g. make the system more efficient and effective by reducing costs, limiting double tests and improving the service level for users. At the same time the legal framework can still guarantee at least the same quality. Potential improvements will be beneficial for the manufacturers, service providers, users and consumers.

This document aims at describing the areas of metrological control where the system may be improved and it gives proposals from the European weighing industry on the best solutions in these areas. CECIP hopes this will contribute to discussion on the future system and encourages Member States to keep these points in mind when making changes to relevant legislation.

Harmonised reverification approach

The European Single Market is one of the success stories of European cooperation. Where the Single Market for placing products on the market is working well with Directive 2014/31/EU on non-automatic weighing instruments (NAWID) and Directive 2014/32/EU on measuring instruments (MID), the market for reverifications is highly fragmented. This results in unnecessary costs for businesses and less choices for owners of weighing instruments. For example, a separate authorisation to carry out reverifications need to be requested in each country where private businesses can carry out reverifications. Since the requirements for these authorisations are similar in most countries, this results in unnecessary costs. A survey amongst CECIP members showed that different reverification rules in the different countries result in approximately 6 million euro of unnecessary administrative costs. Furthermore,

¹ With a reverification is meant a legally prescribed conformity assessment procedure for examining a measuring instrument after its putting into use, in order to demonstrate that this instrument continues to conform to legal metrology requirements applicable to measuring instruments in use.

many companies including the vast majority of SMEs don't provide reverification services abroad due to these administrative barriers to trade. Harmonising the requirements would reduce trade barriers, administrative costs, and increase competition as new players enter different markets. Besides these positive consequences of harmonisation for the weighing industry, it is expected that harmonisation will improve the market for weighing instrument users. Generally, more competition will result in better service and lower costs for the users.

The European weighing industry believes a future system of reverifications should as much as possible be harmonised at EU level. Harmonisation would include many aspects such as reverification tests, seals, the risk based approach used and requirements for authorisations to carry out the reverifications. CECIP is convinced the best option is to work on this harmonisation via a new EU framework that includes the essential requirements for reverification.

However, considering this will, in the short and medium term several actions should be taken already to work towards further harmonisation. First of all, the current possibilities included in the Services Directive 2006/123/EC, together with the already available jurisprudence, could be a way to speed up harmonisations in areas such as mutual recognition. Other examples of potential actions are voluntary agreements by Member States to allow subsequent verification tests specified in OIML Recommendations or a transparent and fast procedures to come to widely accepted common interpretations are essential as well. Furthermore, the evaluation of the current evaluation of the NAWID and MID will provide opportunities to include some aspects of harmonisation in the existing legislation.

Reverifications with partly remote tests

Reverifications are currently always done on-site by putting weights on the weighing instrument and checking the results. Even though it will be very difficult or impossible to replace all on-site activities it will be technically possible to do some tests of a reverification remotely. Especially with connected weighing instruments, instruments that use digital sensors and other instruments that also have an internal weight to adjust the instrument there are possibilities to perform some actions remotely, automatically, or semi-automatically. This can be done with the simple presence of a technician to ensure that there are no external physical impediments to correct the weighing while remotely monitoring the tests. For example, the zero setting of a weighing instruments can be checked remotely. Additionally, by using data of a connected scale there will be new possibilities to identify inaccurate weighing earlier or to have greater confidence that the weighing instrument is weighing correctly. In the end, remote reverifications will reduce costs and can increase confidence as these types of reverifications can be done more often and more easily.

CECIP is of the opinion that a metrological system of the future should allow certain forms of remote reverifications. While it is not necessary to set clear rules for remote reverifications, legislation should be technologically neutral. Consequently, if it is technologically possible to do remote verifications while ensuring the quality this shouldn't be forbidden by restrictive

requirements. Also, harmonisation at European level is essential as remote reverifications will make cross-border reverifications more common. If these framework conditions are set, the European weighing industry will develop the innovative solutions for partly remote reverifications which will make the system more efficient and effective.

Risk based approach of reverifications

In most countries there are today fixed reverification periods depending on the type of weighing instrument. For example, in some countries each retail scale needs to be reverified every two years. However, this doesn't take into account the usage and type of a specific scale, making it a relatively blunt instrument. It doesn't differentiate between a scale that is used only once a week with small loads or one that is used every minute with a load close to its maximum. For the first type of scale the existing reverification period would be sufficient – or could be extended - and for the latter the reverification interval could be reduced if there is a higher risk of noncompliance.

Various risks could be considered while putting the instrument into service or later during operation to determine the suitable reverification period. E.g. the number of weighings per day, usage close to the maximum, environmental conditions and reduced risks by having an agreed services contract with an established company. There are several options to gather the data needed to make the risk assessment such as using a checklist after each reverification to estimate the date of the next one, having connected scales sharing usage data, or having scales connected to the Metrology Cloud. This risk based approach on defining the reverification types and intervals would reduce unnecessary tests for some weighing instruments, while increasing the quality of weighing for others.

Therefore, the reverification interval and type of reverification should be based on the risks of the specific weighing instrument in the future according to CECIP.

European weighing instrument database

Member States have different ways of gathering information on the weighing instruments used in their country. In some countries there are databases with all type approvals, in others there are platforms to register all scales and again in others there are paper booklets to keep track of all repairs and calibrations. For both authorities and businesses this creates an unclear situation and makes it difficult to submit and find the information needed for each country. For businesses active in multiple European markets this creates a cumbersome administrative burden for each country separately. Additionally, for weighing instruments used across the border it is not always clear for authorities if they are compliant.

Hence, CECIP would like to see the development of a European-wide weighing instrument database where all this information is collected for each scale. At least when such a database

will have benefits for all parties and not just increase the administrative burden for companies. The information included for each specific scale could be the Declaration of Conformity and type approval information for the market surveillance authority. Potential other information includes the location of the seals and on software which is helpful for service providers. Furthermore, information on the calibrations, repairs and usage could be collected. This would particularly be interesting in combination with the risk based approach for reverifications as this information would be available. According to CECIP such a European database would make the work easier for market surveillance authorities, service providers and organisations carrying out reverifications. Additionally, it will provide more information to the end user thus increasing trust in the system.

To make this a success CECIP thinks that certain requirements need to be met. Data should only be available at a need to know basis, intellectual property should not become easily available for competitors from all over the world and data should also become machine readable and easily accessible to make the system efficient and interoperable. If such a database could be developed, CECIP is convinced this will bring many benefits for authorities, users and industry.

Business models

With the traditional business model of the weighing industry the customer buys a weighing instrument and uses this himself. Although this is sometimes in combination with a service package, generally the user is also the owner and decides on the maintenance and usage. In many industries we've seen already that this system is changing and leasing equipment is much more common now. Moreover, other business models might develop in the future.

These developments may also have an impact on the system of metrological control. For example, the owner of the weighing instrument cannot control the correct use and cannot always guarantee that the weighing instrument is in the right condition since this is controlled by the user who leases the instrument. In such a case it is better to make the user responsible for compliance with the legal metrology legislation and not the owner. According to CECIP these changes in the business models need to be taken into account when making changes to the system of metrological control.

Effective market surveillance

The main purpose of metrological control is consumer protection, fair trade and ensuring there is enough confidence in the weighing results. Even if the rules for placing on the market and reverification are well established, it cannot function without effective market surveillance. This is essential to identify non-compliant products and encourage fair competition.

Therefore, CECIP believes effective market surveillance is a vital pillar of metrological control in the future. Effective market surveillance should not only focus on administrative checks of

weighing instruments and include enough physical checks of metrological requirements as well. Moreover, other market surveillance activities can be initiated to reduce noncompliance such as increasing awareness of legislation amongst users and explain them the risks of using uncompliant scales.

Independent reverifications

At the moment there are roughly two main options when it comes to the organisations that carry out the reverifications. Depending on the national legislation this is a government body or private companies are allowed to do this. Furthermore, there are relatively small differences between countries for each of the two options. The experiences in the EU Member States show that both systems work well and both have their pros and cons. As CECIP we believe each EU Member State can make their own choice for each system. However, if one option is chosen this system should be harmonised at European level. For example, if there is a decision to allow private reverifications, the companies carrying out the reverifications should only ask one authorisation (e.g. based on EN ISO 17020 or EN ISO 17025) and follow the same test in all countries with this system.

Generally, CECIP favours the system of independent reverifications where private companies including manufacturers can carry out reverifications. Experience in countries such as Austria, Belgium, France and Italy shows this system works as the quality is guaranteed via authorisations and users have the choice amongst several service providers. One advantage is that this system makes reverifications more efficient as a weighing instrument is generally reverified after a repair by a manufacturer. If independent reverifications are allowed this avoids a double testing by manufacturer and government body. Secondly, it will give the opportunity for companies to enter the market and with the right framework conditions increasing fair competition. As mentioned before, fair competition generally improves service and reduces the price. Additionally, reverifications by private service providers allow for more digital and remote solutions as already discussed. Some of the innovative reverification methods are not possible without independent reverifications.

For these reasons, CECIP prefers the system where private companies including manufacturers are allowed to carry out reverifications. At the same time, this should remain a choice of the Member States that can make the best decision depending on the situation in their country.

Conclusions

The system of metrological control of weighing instruments changed in the past and will continue to change in the coming decades. According to CECIP, the system of the future should create trust, ensure consumer protection and guarantee free trade. Simultaneously, the system should develop in ways to become more efficient, effective and foster innovation while guaranteeing the quality of weighing.

There are several aspects of the metrological control system, and reverification rules in particular, where the proposed changes described in this document would provide improvements. In this paper CECIP has provided suggestions that can increase confidence in weighing results such as a risk based approach, make it more efficient such as doing certain tests remotely, and improve the competitiveness of the industry by reducing administrative costs via harmonisation. Considering the long times it takes to make these changes in legislation and the NAWID and MID currently being evaluated, CECIP believes discussions on the future system of metrological control should take place now to be prepared for the future. In parallel solutions that can bring benefits in the short term such as using the Services Directive to create more harmonisation should be evaluated as well.

Consequently, CECIP calls on all stakeholders in the weighing sector to join the discussions on changes to the system of metrological control and work together on solutions. Moreover, CECIP invites authorities to take into account the proposals and topics presented in this position paper when making changes to relevant legislation.