

CEMA position paper

How to deliver on the Green Deal with harmonised requirements and respect for the Machinery Regulation as the framework for acceptance of national subsidies systems:

The key lies with international standards!

Introduction

The expectations set out by the Green Deal are high, but they also entail a high number of necessary changes in agricultural practices. The discussions on the distribution between Member States of the burden to reach the 50 % reduction targets on Plant Protection Products (PPP) are a clear demonstration of the high stakes involved. To force the transformation, incentive/subsidy schemes are expected to be set up in many EU countries to encourage the uptake of smarter, more precise application technologies that help enable the reduction of risk and use of PPP. Examples are boom section control or similar technologies that have site specific application (SSA) and/or variable rate application (VRA) capabilities, automatic boom height control or automated sprayer rinsing systems. Many manufacturers have largely invested to develop these innovative technologies over the past 20 years despite a lack of incentives. The potential for take up and further development of these application technologies has significantly increased thanks to the Green Deal discussions and the renewed interest in European and national research.

These novel application technologies are part of the Crop Protection Equipment (CPE) placed on the market as compliant with the Machinery Directive, and in particular with the amending Directive 2009/127/EC which states the specific essential requirements for the protection of the environment. With the implementation of this Directive the CPE could be placed on the market under **self-certification**, speeding up the introduction of new application equipment to the market.

About 50 ISO standards and 10 EN ISO harmonised standards were developed for the wide range of different CPE and application systems over the last 40 years. This was done within what are now well-established multi-stakeholder Working Groups in ISO and CEN. The work was carried out primarily via ISO during the last 25 years thanks to the Vienna Agreement which gave current ISO Working Groups the widest possible knowledge of application technology and techniques available in an open and democratic (in ISO each country has one vote) process. This has greatly contributed to the development of International Standards widely, and in an open and transparent fashion, reflecting the state of the art globally with the benefit for the EU of ensuring a properly working internal market, as well as easy and rapid access of novel technologies to the EU market.

It should be noted that before the inclusion of CPE within the Machinery Directive, there was, in some EU Member States, third-party testing schemes by specially assigned testing laboratories, from research institutes to expert university departments. Many of these are still active within the standardisation work and in the inspection of sprayers in use. However, this number is very limited, and the estimate is that under 5 new sprayers each year have been tested under this process over the last 25 years, i.e. under 5 p.a. Recently, there is renewed interest for national third-party testing as part of national subsidy schemes.

This position paper argues that the introduction of such national testing schemes and possible mainstreaming in the EU would potentially be a huge cost and time barrier to the uptake of the novel application technologies, which is crucial to enable the Green Deal goals.

When it comes to obtaining the necessary harmonised test procedures, it is impossible, even for ISO, to complete all the new Standards and Standards updates required in a very short time span. This is partially due to a lack of funding for pre-normative research (on a general basis CEMA has appealed several times to the European Commission to use research funding for pre-normative research to help speed up standard development and general knowledge transfer regarding performance in practice) – with respect to these novel application technologies. For example, spot application in growing crops (rather than the more established use with pre-emergence herbicides) will require several years of testing in the major crops (at least) to determine performance.

This problem would potentially be aggravated by keeping the knowledge base to a few testing institutions (who have their main focus on the testing side) or, potentially worse, by the rapid development of potentially inappropriate tests to satisfy urgent political demand. This could negatively impact not only the current market but also for the future jeopardise the introduction of the right tools for the right applications by introducing unjustified subsidies.

Problem statement

With a new potential stream of national subsidies often comes an interest from Member States for third-party intervention to check if specific features are present, or if certain performance parameters are met.

The first major problem is that for some of the novel application technologies, although already placed on the market as complying with the Machinery Directive, harmonised requirements on performance parameters to be tested and test methodologies are not yet established. This makes difficult a comparison, but also the assessment of the importance of their inclusion in subsidy programmes and/or the levels of subsidy to be allocated to different application technologies/equipment.

A second problem is that in some Member States the subsidies are not used to check the availability of the right configuration of sprayers or even whether certain performance parameters are met, as the assigned testing bodies do not have any test

methodology yet at their disposal. Instead, the whole sprayer, except for the new technologies to be subsidised, is purely checked for compliance to the Machinery Directive, although for any sprayer placed on the EU market compliance with the Machinery Directive is mandatory by law.

Adding these checks of a type of sprayer under the pretext of compliance/fitting of certain features in exchange for subsidies is equivalent to a hidden retesting of a type of sprayer. Such tests would normally be done for each sprayer (as the subsidies are intended for the farmer who buys the sprayer) but instead are done on arrangement with the manufacturer for a certain batch of sprayers (representation of a type of sprayers). Besides the cost for such tests and significant time delay on introduction of novel application technologies, due to the limited capacities of the testing bodies, it can be questioned whether it does not create problems in the working of the internal market: manufacturers from other countries will suddenly have to engage with a testing body they do not know to enable their customers to access the subsidy schemes.

CEMA opinion on testing of whole sprayers

The national testing of whole sprayers is put forward as a voluntary action which manufacturers are theoretically free to undertake or not. However, with the amount of subsidies on the line, they are essentially obliged to pay for testing to preserve market share (with past experience showing that subsidies on equipment can badly damage sales of equipment that is not subsidised).

The fact that these tests are completely unrelated to the application technologies targeted by the subsidy schemes, as advised above, undermines the proper working of the internal market and the legal value of the New Legislative Framework principles and CE marking. It also blocks the innovation process as it interferes with, and delays, market access for novel, external players and thus access to these required novel technologies for farmers and contractors.

CEMA proposal for short and long term

For the whole sprayer as certified under the Machinery Directive and following harmonised standards, it should only be required to check if the configuration is as indicated to receiving subsidies. The components/ systems that are part of the condition for the subsidy can be subject to additional checks by a third party, on a voluntary basis, only when there is no harmonised standard for them available either officially in ISO or CEN as New Work Item under revision.

It should also be noted that ISO/TC23/SC6 (the Technical Committee in charge of agricultural machinery and the Sub Committee in charge of Crop Protection Equipment) has very recently conducted an enquiry into the technology gaps requiring the development of new Standards for novel application technologies and/or the inclusion of such technologies in the agreed updating of the complete (harmonised) EN ISO 16119 and 16122 series of Standards on environmental requirements for new sprayers under the Machinery Directive and inspection in use procedures respectively

(to underpin the new Sustainable Use Regulation). ISO/TC23/SC6 is also working on the revision of the relevant parts of EN ISO 4254 to ensure compliance with the new Machinery Regulation. In addition, the work has just been completed on Standards for Closed Transfer Systems that are currently being introduced in Europe and work is ongoing on existing or new Standards for the protection of the operator by the protective function of the cab and on requirements for sprayers mounted on UAVs (drones). For the latter, it is building on the Standards for aerial application equipment. CEMA members have actively participated in these reviews and will be involved in the significant and huge work required for the Standards development and updating that is now being undertaken.

Once such standards are available, have received harmonised status and are used, compliance cannot be questioned - only the configuration can be checked.

The agricultural machinery industry is committed to speeding up the standardisation activities on recently developed application technologies by freeing up additional resources and is prepared to co-operate with all the stakeholders within the CEN and ISO working groups (industry, academics/researchers, NGOs, government/public bodies, etc) as outlined above.

We call for legislators and authorities to consider the need in agriculture for innovative tools and to realise that specific national testing schemes could jeopardise the uptake in the long term. Awareness should be raised on the long tradition and excellent output of standards, and support must be given to speed up the already ongoing initiatives in CEN and ISO on the new innovative systems.

Final remarks

The agricultural machinery industry has always invested significantly in innovative technologies. Currently, many highly sophisticated systems produced in low volumes are developed and then further tested and improved while already placed on the market (whilst complying with the Machinery Directive) with special arrangements with farmers for feedback on practical use/issues and ideas for further development and/or on demonstration farms. Often it is not the performance of the technology as such that is under question, but rather how it affects the overall performance of e.g. treatment of herbicides. Another good example where these 'prototyping' schemes are used is with robotics systems.

The Machinery Directive, as a New Legislative Framework act, grants the necessary freedom to distribute the responsibilities, and administrative requirements fit for small volumes, that enables the introduction of such schemes to the benefit of farmers.

Increasing pressure from the regulatory/legal side to transform agriculture to adopt more sustainable practices and reduce the risks and/or use of PPPs will make these systems more and more important. Subsidy schemes linked to third party involvement are always possible but will only interfere with, and delay, innovation uptake – in

particular, as learned from experience, if subsidy schemes dry up but third party involvement remains.

The innovations in application technology are not at the heart of the problem. What is, is rather the very old sprayer fleet in many parts of Europe (with many simpler sprayers on smaller farms, not updated for many years, and therefore not incorporating the latest application technologies to reduce risks and/or use of PPPs), and the failure to reward farmers properly and adequately for the additional services they need to deliver on sustainability targets related to water and soil, whilst ensuring food security.

At the end good practices and end-results should be rewarded, whilst giving the farmers the freedom of choice on how to achieve them.

ABOUT CEMA

CEMA aisbl is the association representing the European agricultural machinery industry. With 11 national member associations, the CEMA network represents both large multinational companies and numerous European SMEs active in this sector.

The industry comprises about 7,000 manufacturers, producing more than 450 different types of machines with an annual turnover of about €40 billion and 150,000 direct employees. CEMA companies produce a large range of machines that cover any activity in the field from seeding to harvesting, as well as equipment for livestock management.

CEMA aisbl – European Agricultural Machinery Industry Association

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