

Policy Department
Economic and Scientific Policy

Workshop Report

**MACHINERY FOR PESTICIDE
APPLICATION**

This study was requested by the European Parliament's committee on Internal Market and Consumer Protection (IMCO).

Only published in English.

Authors: Mr Ian Fraser (European Commission, DG Enterprise)
Mr Pascal Etienne (Chair of the Council Working Party on
Technical Harmonisation ("Machinery"), EU Council
Presidency)
Dr.-Ing. Heinz Ganzelmeier (JKI, Germany)
Mr Jean-Christophe Rousseau (CEN/TC 144)

Administrator: Ms Agneta Sturesson
Policy Department Economy and Science
DG Internal Policies
European Parliament
Rue Wiertz 60 - ATR 00L 046
B-1047 Brussels
Tel: +32-2-2831405
E-mail: agneta.sturesson@europarl.europa.eu

Mr Balazs Mellar
Policy Department Economy and Science
DG Internal Policies
European Parliament
Rue Wiertz 60 - ATR 00L 024
B-1047 Brussels
Tel: +32-2-2832202
E-mail: balazs.mellar@europarl.europa.eu

Manuscript completed in December 2008.

The opinions expressed in this document do not necessarily represent the official position of the European Parliament.

Reproduction and translation for non-commercial purposes are authorised provided the source is acknowledged and the publisher is given prior notice and receives a copy.

✉ Rue Wiertz – B-1047 Bruxelles - ☎ 32/2.284.43.74 Fax: 32/2.284.68.05
✉ Palais de l'Europe – F-67000 Strasbourg - ☎ 33/3.88.17.25.56 Fax:
33/3.88.36.92.14
E-mail: poldep-esc@europarl.europa.eu

Table of Contents

Programme.....i

Summary of Workshop proceedings.....iii

Presentations

Mr Ian Fraser.....1

Mr Pascal Etienne.....7

Dr.-Ing. Heinz Ganzelmeier.....11

Mr Jean-Christophe Rousseau.....19



FINAL PROGRAMME

Workshop and Meeting with Stakeholders

Committee on the Internal Market and Consumer Protection

Machinery for Pesticide Application: "Improving spraying equipment to achieve sustainable use of pesticides"

Thursday, 11 December 2008 from 9:00 to 11:00

European Parliament, Brussels

Room: ASP 1G-1

The aim of the Workshop is to invite policy and scientific experts in order to provide their technical knowledge on the main aspects of the Commission proposal for a Directive on Machinery for Pesticide Applicationⁱ. The Workshop will examine the existing International and European standards applicable on pesticide application machinery, and discuss how the proposed environmental requirements for new machinery can be improved in order to guarantee a high standard of protection while ensuring a level playing field for manufacturers and fair competition in the internal market. The Workshop will be followed by a meeting where stakeholders will express their views on the issue.

9:00-9:15 INTRODUCTION

9:00 - 9:10 Opening remarks: **Mr Leopold Rutowicz**, Rapporteur on the Commission Proposal for a Directive on Machinery for Pesticide Application

9:10 - 9:15 ***Overview of the Proposal for a Directive on Machinery for Pesticide Application***
Presented by Mr Ian Fraser, Machinery Team Leader, DG ENTR, European Commission

9:15-10:30 WORKSHOP

9:15 - 9:25 **Mr Pascal Etienne**, Chair of the Council Working Party on Technical Harmonisation ("Machinery"), EU Council Presidency

The proposed directive on machinery for pesticide application - an opportunity for improving consistency between environmental and health and safety requirements

ⁱ Proposal for a directive on machinery for pesticide application, amending Directive 2006/42/EC on Machinery, COM(2008)535 final
IP/A/IMCO/WS/2008-31

9:25 - 9:40 **Dr.-Ing. Heinz Ganzelmeier**, Head of the Institute for Application Techniques in Plant Protection, Julius Kühn-Institute - Federal Research Centre for Cultivated Plants (JKI - Germany)

International standards, certification of new equipment and their impact on pesticide application

9:40 - 9:55 **Mr Jean-Christophe Rousseau**, Member of the Technical Committee CEN/TC 144 "Tractors and machinery for agriculture and forestry", Project manager for the revision of the European Standard 'EN 12761'ⁱⁱⁱ, European Committee for Standardization (CEN)

European standards on machinery for pesticide application - state of play and possibilities for improvement

9:55 - 10:30 **Discussion / Conclusions**

10:30-11:00 MEETING WITH STAKEHOLDERS

Presentations of 7-8 minutes

- **Mr Peter Oldenkamp**, Chairman of the CEMA Sprayer Groupⁱⁱⁱ
- **Mr Hans Muilerman**, Pesticide Action Network - Europe^{iv}
- **Discussion / Conclusions**

Contact persons:

Balazs MELLAR
Policy Department A: Economic and Scientific Policy
Tel: +32-2-28 32202
E-mail: balazs.mellar@europarl.europa.eu

Agneta STURESSON
Policy Department A: Economic and Scientific Policy
Tel: +32-2-28 31405
E-mail: agneta.sturesson@europarl.europa.eu

Costis YERARIS
Committee on the Internal Market and Consumer Protection - Secretariat
Tel: +32-2-28 32919
E-mail: costis.yeraris@europarl.europa.eu

ⁱⁱ **EN 12761**: Agricultural and forestry machinery - Sprayers and liquid fertilizer distributors - Environmental protection (This European Standard was approved by CEN on 4 February 2001).

ⁱⁱⁱ **CEMA**: European Committee of Associations of Manufacturers of Agricultural Machinery.

^{iv} **PAN-Europe**: A network of grass roots organisations promoting the sustainable use of pesticides. PAN-Europe serves as a focal point for NGO advocacy and public participation in EU pesticide policy.

SUMMARY OF WORKSHOP PROCEEDINGS

Introduction

The Chair of the Workshop, **MEP Leopold Rutowicz** (UEN), welcomed the participants and stressed the importance of the issue at stake. Pesticides play an important role in today's agriculture. Whilst pesticides are vital for protecting crops, there is also a need for greater protection of the environment and human health. Well-designed machinery can help achieve all of these goals. It was also noted that some Member States had their own requirements concerning pesticide machinery which could serve to impede free movement in the internal market. This was felt particularly among small and medium-sized businesses. Mr. Rutowicz therefore welcomed the amendment to the current Machinery Directive (2006/42/EC) aimed at introducing environmental requirements for pesticide application equipment and gave the floor to the Commission to provide an overview of its proposal.

The Commission representative **Ian Fraser** (DG ENTR), noted that the proposal to amend the Machinery Directive to include environmental requirements for pesticide machinery is linked to the Thematic Strategy on the sustainable use of pesticides (COM(2006) 372) and this in turn was the result, among others, of the Commission's recognition of the negative impact of pesticides on human health and the environment. Mr. Fraser outlined briefly the main objectives and content of the proposal (see annex for presentation) and acknowledged that there was a risk that the scope of the environmental requirements could be misinterpreted. Mr Fraser stressed that the Commission aimed to limit the proposed environment protection requirements only to machinery for pesticide application and that this had been made clear in Recitals 3 and 4. It was also noted that the essential health and safety requirements for the protection of operators was already included in the original Machinery Directive, although this protection is not always satisfactory, especially in the case of older equipment. Mr. Fraser concluded his presentation with a short summary of the result of the first meeting of the Council Working Group on Technical Harmonisation where a majority of the Member States had welcomed the ideas behind the proposal since the current technical provisions were neither sufficient nor legally clear. Several Member States had also expressed the wish to clarify the scope of the environmental requirements by including a reference in the text of the Directive itself instead of the Recital as is the case in the current proposal.

Workshop

Pascal Etienne (Council Working Group on Technical Harmonisation) greeted the Commission proposal with approbation. It is, he stated, a good opportunity to come back to the origins of the Machinery Directive. In the past years we have seen a proliferation of Directives covering different requirements (noise emissions, emission of hazardous substances, saving of energy) but with the current proposal the Commission returns to a more integrated approach setting out environmental requirements in one single Directive. Mr. Etienne provided an overview of the situation in Member States concerning the placing of pesticide application equipment on the market. Most Member States apply self-assessment by the manufacturer (e.g. France), in others the manufacturer obtains a label from a public laboratory after checks (e.g. Netherlands), still others use checks by public laboratories (e.g. Hungary, Poland).

Third party conformity assessment conducted by a public body based on a technical file with some checks is applied in Germany.

The utility of the Proposal for the harmonisation of the market was particularly appreciated; however Mr. Etienne believed there was room for improvement in the market surveillance mechanisms employed. It was also stated that a number of Member States had requested that it should be more clearly stated that the environmental protection measures in the proposal apply only to pesticide machinery. The French Presidency has drafted an amended version of the proposal addressing these concerns. Other proposals raised in the Council Working Group concerned the limitation of losses, amendments to take into account the variety of products used (liquid, solid and gaseous pesticides) and the consistency between design and users' requirements (instructions).

Commenting on international standards, certification of new equipment, and their impact on pesticide application, **Dr. Heinz Ganzelmeier** (Institute for Application Techniques in Plant Protection of Julius Kühn Institute) noted that European and international standardisation had made great progress over the last few years. Moreover, these standards are helpful for manufacturers, testing authorities and farmers in order to save resources, and to facilitate mutual recognition of tests. He noted that certification systems for new sprayers are already in force in Germany, Czech Republic and Poland, and that the experiences of these Member States in this area should be taken into account when implementing a European certification procedure. Dr. Ganzelmeier also believed, however, that the proposed Directive did not ensure adequate consistency between the authorization of pesticide, the inspection of equipment already in use, and the certification of new equipment. In addition, it was claimed that extending environmental requirements to apply to all machinery were too much for manufacturers to bear. With regard to the standardisation mandate to be given to CEN (as covered for in the proposed amendment to the Machinery Directive) Mr. Ganzelmeier particularly underlined the need to make sure that requirements for sprayers in use are not higher than for new sprayers. In the case of new equipment he called for self-certification assessed by a notified body.

Mr. Jean-Christophe Rousseau (European Committee for Standardisation, CEN) commented on the state of play of the current European standards on machinery for pesticide application and considered possibilities for improvement. He believed that there was a need for clarifying the scope of the Directive, particularly in relation to manually operated sprayers. It was his opinion that if manually operated sprayers were to be included this should cover only those with a pressure chamber (the Machinery Directive excludes from its scope equipment where manual effort is applied *directly*, but in the case of pesticide application equipment with pressure chamber the manual force is applied *indirectly*). To this he added that the EN 12 761 standard is available and covers the most commonly used sprayers, but for a number of sprayer types currently no European standards exist. When deciding on the order in which standards should be developed lower priority should be accorded to equipment which causes environmental damage as a result of the user rather than the equipment itself.

Discussion

In the ensuing discussion Mr. Fraser noted that a mandate to develop standards is being prepared and once political agreement is reached on the legislative proposal this mandate will be forwarded to CEN. He made clear that although the vast majority of pesticide is applied in the form of spray, the proposal also covers solid pesticides.

Mr. Fraser reminded participants that if necessary pesticide machinery could be included in the list in Annex IV of the Machinery Directive. This would mean that conformity would be assessed in one of the three ways described in Article 12 point 3 of the Directive (assessment of conformity with internal checks on the manufacture, EC type-examination plus internal checks on the manufacture, full quality assurance).

The importance of depositing the pesticide accurately on the targeted area was raised. This is included in the essential requirements; the technical means to achieve this should be set in the standards.

Mr. Ganzelmeier expressed doubts as to whether the proposal provides a high level of harmonisation. In his view the proposed harmonisation mechanism (self-certification) is the lowest of the three options (self-certification, examination of documents, and examination of sprayers).

Proposal for an amendment to the Machinery Directive 2006/42/EC on machinery for pesticide application



Background

Thematic strategy on the sustainable use of pesticides:

- Minimise risks to health and the environment
- Control use and distribution
- Substitute dangerous pesticides with safer alternatives
- Low-input or pesticide-free cultivation
- System for monitoring progress



Proposal for a framework Directive COM(2006) 373 - (Article 175 EC)

- NAPs to reduce chemical plant protection
- Training for distributors and users of pesticides
- Information for the general public
- **Regular inspection of pesticide application equipment**
- Prohibition of aerial spraying (derogation possible)
- Measures to protect the aquatic environment
- Areas of reduced or zero pesticide use
- Handling, storage and disposal of pesticides
- Standards on Integrated Pest Management (IPM)
- Measuring progress through harmonised indicators
- System of information exchange



Design and construction requirements for pesticide application machinery

- Article 95 EC
- Amendment to Directive 2006/42/EC
- New Approach – harmonised standards
- Pesticide application machinery is subject to the Machinery Directive for other EHSRs
- Existing procedures can be used



Extension of the objectives of the Machinery Directive

Introduction of the objective of protection of the environment:

- New definition of EHSRs - Article 2 (m)
- Market surveillance – Article 4 (1)
- Dangerous machinery – Article 9 (3)
- Safeguard clause – Article 11 (1)

Limit to the extension – Recital 4

“For this purpose, it is also necessary to include a reference to the protection of the environment in the provisions of Directive 2006/42/EC while limiting this objective to the category of machinery and to the risks subject to specific environmental protection requirements.”

Pesticide application machinery concerned

Machinery specifically intended for the application of:

- Plant protection products
- Biocidal products for pest control
- Reference to Community legislation for the placing on the market of these products



Main types of machinery for pesticide application

- Self-propelled machinery
- Towed machinery
- Mounted and semi-mounted machinery
- Airborne machinery
- Stationary machinery
- Motor-powered portable machinery
- Manually-powered portable machinery with a pressure chamber



Equipment not concerned

- Manually-operated pesticide application equipment without a pressure chamber
- Simple pesticide application equipment without moving parts
- Such equipment is not in the scope of the Machinery Directive

New EHSRs – section 2.4

- Definition of machinery for pesticide application
- Control of application
- Limiting application to target areas
- Avoiding leakage and dispersal
- Instructions for use and maintenance
- Reference to the Framework Directive for periodic inspection

PRESENTATION BY PASCAL ETIENNE
AT THE EP WORKSHOP ON MACHINERY FOR PESTICIDE APPLICATION
BRUSSELS, 11 DECEMBER 2008

The proposed directive on machinery for pesticide application: an opportunity for improving the consistency between environmental and health and safety requirements

Introduction

The Commission proposal is a good opportunity for the protection of the environment.

The proposed amendment of the Machinery Directive is useful because it makes possible to come back to the origins of the Machinery Directive and gives more consistency to the Directive, which is useful for the manufacturers and for the various users of the directive.

At the beginning, the machinery Directive was presented as a directive that may allow the design of a safe machinery in every aspect of the machinery.

When we read some of the recitals of the original machinery (89/392/CEE) Directive, we can see that at the end of the 80's the aim of the legislator was to allow the manufacturer to put on the marked safe products and to give the machinery a "passport" for the free circulation in one unique and global regulation: "the Machinery Directive". In this meaning, an information campaign has been launched in France with the motto "machinery without border" at the beginning of the 90's.

A shift in the new approach directives has appeared.

In the context of the "new approach", it could have been possible to complete the Machinery Directive with the requirements concerning the environmental protection: concerning the noise emission, the emission of hazardous substances or the saving of energy.

But it was not the case: for different reasons, the aim of a global Directive hasn't been achieved and several separate directives have been adopted concerning those aspects, which set up requirements for the manufacturers to comply with in different fields, such as:

- the Directive 2000/14/EC, on the noise emission in the environment by equipment for use outdoors ;
- the Directive 2002/95/EC on the restriction of the use of some hazardous substances in electrical and electronic equipment ;
- the Directive 2005/32/EC establishing a framework for the setting of eco-design requirements for energy-using products.

It seems that this approach has raised a number of difficulties: we have heard the concerns of the manufacturers during the debate on the revision of the Machinery Directive. The excessive administrative burden produced by this separate approach and a lack of consistency between the various Directives applicable on the design of machinery have been criticised.

This protest has been taken into account and we see now a kind of come back to the origins of the “new approach”: with the proposal on machinery for pesticide application, the Commission returns to a more integrated approach: the new environmental requirements on machinery for pesticide applications will be set up in one only Machinery Directive, which may be improved if necessary on other aspects.

Set up in this frame, the technical requirements may be more relevant, more proportionate and more applicable.

The present situation concerning the equipments for pesticide application

The amendment of the machinery Directive is also useful to harmonise the present situation concerning the equipments for pesticide application in the internal market of the EU.

Concerning the placing on the market of pesticide application equipments, the situation regarding the conformity assessment procedure varies nowadays in the different member states of the EU.

According to the data gathered by my colleagues of the French Ministry for agriculture, one may state an array of situations. As far as we know, different situations exist:

- 1 The more frequent situation is (like in France) an assessment by the manufacturer itself.
- 2 In some member states, the manufacturer may obtain a label from a public laboratory, after some checks (in Netherland and Belgium);
- 3 In other member states the manufacturer may obtain checks made by a public laboratory (Poland, Hungary). It appears that only a small part of the equipment put on the market are checked according to that procedure.
- 4 In one member state, there is one third party conformity assessment conducted by a public body (based on a technical file and with some checks). That is the case in Germany.

In all the situations, there should be market surveillance activities conducted by the public authorities. In the framework of the regulations on accreditation and market surveillance (from 9th July 2008) in addition to the new machinery directive (2006/42/CE), this market surveillance should be improved.

That is why the Commission proposal could harmonise this situation and set up requirements concerning health safety and environmental protection at a high level.

The requirements of the directive for pesticide application equipments

As we interpret the amendment proposed by the European Commission of the machinery Directive, the consequences of the amendment will be:

- To limit as far as possible the spraying of pesticides ;
- To assure the consistency between the new framework pesticide Directive and the « machinery » Directive as modified by the Commission proposal;
- To improve the health protection for the operators which could stay in the environment of the machinery, taking into account that the essential health and safety requirements for the protection of the operators directly involved in the process are still include in the MD Annex I.

The debates in the Council Working group

The debates reflect the main issues mentioned above.

The meeting of the Council WP on 3 December was positive. All delegations gave general support to the proposal (with several parliamentary scrutiny reservations). The whole of the proposal was examined in detail.

The main issue discussed was how to limit the new objective of protection of the environment to pesticide application machinery and avoid opening a too wide interpretation for other categories of machinery. Many delegations considered that the Commission proposal for this purpose was insufficient.

During the discussion, it was therefore agreed to seek a means of expressing this limitation clearly in the Directive itself. Several drafting techniques were discussed.

In the end, it appeared that the best way to achieve this common objective might be to add a sentence to General Principle 4 in the introduction to Annex I, which is the part of the Directive that explains how the essential health and safety requirements are to be applied. The definition of essential health and safety requirements in Article 2 (m) could then refer to this General Principle.

It was agreed that the French presidency would prepare a new draft, incorporating this proposed solution, to be discussed at the next meeting of the WP. That has been done and an amended proposal has been issued by the French Presidency

It includes a number of drafting improvements that were suggested during the Working Party meeting. The main points of the new draft are:

The general principles, that is to say:

a) in the General Principles, point 4 is replaced by the following:

“4. This Annex is organised in several parts. The first one has a general scope and is applicable to all kinds of machinery. The other parts refer to certain kinds of more specific hazards. Nevertheless, it is essential to examine the whole of this Annex in order to be sure of meeting all the relevant essential requirements. Essential health and safety requirements for the protection of the environment are applicable only to the machinery referred to in section 2.4.”

When machinery is being designed, the requirements of the general part and the requirements of one or more of the other parts shall be taken into account, depending on the results of the risk assessment carried out in accordance with point 1 of these General Principles.”

The other improvements of the essential health and safety requirements concern:

The limitation of losses:

2.4.4. Filling and emptying

Machinery must be designed and constructed to facilitate precise filling with the necessary quantity of pesticide and complete emptying and to prevent any unintentional dispersal of pesticide during these operations.

2.4.5.2. Distribution and deposition

The machinery must be designed and constructed to ensure that pesticide is only deposited on targets and to minimize losses to other areas. Where appropriate, an even distribution and homogeneous deposition must be ensured.”

It has also been taken into account the variety of products that may be applied which are: liquid, solid or gaseous:

2.4.5.1. Cleaning

“The machinery must be designed and constructed to facilitate cleaning, in particular of the tank or container, without contaminating the environment.”

The instructions have been improved, mainly, in order to allow the necessary consistency between design and users' requirements :

“2.4.8. Instructions

The instructions must provide the following information:

Identification of the regular checks to be carried out to ensure the correct functioning of the machinery, as foreseen by Directive [...] ¹ and instructions for connecting the necessary measuring instruments.”

Conclusion

The quality of the debates of the Council WG may be mentioned.

A proposal reworded by the French Presidency, according to the debates, has been prepared.

Which is the relevance of the new proposal? We shall see at the next WP meeting that will take place next week, on the 16th December.

Thank you for your attention!

¹ Directive [...] of the European Parliament and of the Council of [...] establishing a framework for Community action to achieve a sustainable use of pesticides - OJ L [...] [...], p.[...].

Workshop
Committee on the Internal Market and Consumer Protection

***Machinery for Pesticide Application:
„Improving spraying equipment to achieve
sustainable use of pesticide“***

Thursday, 11 December 2008 from 9:00 to 11:00
European Parliament, Brussels

***International standards, certification of new equipment
and their impact on pesticide application***

Dr.-Ing. Heinz Ganzelmeier

**Julius Kühn-Institute -
Federal Research Centre for Cultivated Plants (former BBA)**

- ➔ Head office: Quedlinburg (near the Harz mountain)
- ➔ 15 specialized institutes & several service units
Total staff: 1150
- ➔ Our major fields of research are:
 - Plant Genetics, Breeding research
 - Plant Nutrition, Agronomy, Soil Science
 - Plant Protection and Plant Health



- ➔ **Institute for Application Techniques
in Plant Protection, Braunschweig**



International standards, **certification of new equipment** and their impact on pesticide application



International & European standards

Certification of brand new equipment

- ➔ Prerequisite for selling of sprayers in DE, CZ, PL
- ➔ Proposal on the Machinery Directive Amendment

www.jki.bund.de

Spraying equipment ISO & EN standards



General ISO 4287 ISO 4288 ISO 5681 ISO 10627-1/-2 ISO 13441-1/-2 ISO 22368-1/-2/-3	Safety / Environment EN 907 ISO 4254-6 EN ISO 4254-6 EN 12761-1/-2/-3 EN 13790-1/-2	Nozzles / Filters ISO 4102 ISO 5682-1 ISO 6686 ISO 8169 ISO 10625 ISO 10626 ISO 14710 ISO 19732
Distribution / Drift ISO 5682-2 ISO 5682-3 ISO 11783-1/-13 ISO 12057 ISO 22369-1/-2 ISO 22522 ISO 22866	Boom / Blower ISO 9898 ISO 14131 ISO 22763	Tank ISO 9357 ISO 13440 ISO 21278
		Portable equipment ISO 19932-1/-2 Granules applicator ISO 8524

www.jki.bund.de

Benefits resulting from standards



- Standards pre-determine the state of the art which are based on Europe-wide/ international recognition
- Manufacturers / testing authorities include standards in their decision-making process:
 - ➔ compliance with standards is not obligatory
- Authorised standards are referred to in order to put general protection requirements in concrete terms:
 - ➔ compliance with standards is necessary !
- It is easier to market machinery and equipment which meets the EN/ISO standards
- The mutual recognition of examinations in the Member States will be facilitated (ENTAM, Declaration, Inspection etc.)
- Farmers have a wider range of tested machinery/equipment at their disposal
- Savings in resources (test fees, repeated tests, time)
- Development of testing authorities with certain areas of responsibility
- EU certification: The marketing of sprayers is allowed only if the sprayers fulfill the essential environmental requirements specified by mandated EN standards

www.jki.bund.de

Draft mandate addressed to the CEN



CEN is requested to

- **Develop European standards for the inspection of all types of sprayers/PAE used by professionals**
 - in accordance with essential health and safety requirements of annex 2 of FWD
 - some standards already exist for field sprayers and for air assisted bush sprayers which are the main types of sprayers used by professionals
- **Analyse if the technical uncertainties of EN 13 790 could be solved**
 - concern about the 2 methods for the evaluation of the transverse distribution
 - if so, EN 13 790 should be revised

www.jki.bund.de

Draft mandate addressed to the CEN



- **Existing standards should be used**

EN 13 790 and EN 12 761 cover respectively FWD and MD requirements for the most commonly used sprayers

- **Many standards are missing**

But for sprayers or equipment that have in general a much lower scale of use

→ **priorities** should be set

- **Make sure that requirements for sprayers in use are not higher than for new sprayers**

→ **Discussion and advice at the next TC 144 meeting**

www.jki.bund.de

*International standards, **certification of new equipment** and their impact on pesticide application*



International & European standards

Certification of brand new equipment

- ➔ Prerequisite for selling of sprayers in DE, CZ, PL
- ➔ Proposal on the Machinery Directive Amendment

www.jki.bund.de

Declaration procedure: New equipment complies with the legal requirements



JKI - Declaration Procedure, obligatory

General Requirements

Plant protection equipment must comply with following requirements:

1. They must function reliably.
2. They must be able to be used for the intended purpose.
3. They must dose and apply the active substance satisfactorily.
4. When applied properly they must be satisfactorily effective.
5. They must be easily refilled.
6. They must be protected against misuse.
7. The line up to which they are used must be clearly marked.
8. There must be a sufficient quantity of the tanks to be filled.

Manufacturer:	Date:
Referee: Telephone:	
Declaration before plant protection equipment marketed for the first time Plant Protection Act in connection with § 6 of Regulatory Ordinance	
I/we declare as <input type="checkbox"/> Manufacturer <input type="checkbox"/> Distributor <input type="checkbox"/>	
Designation:	
Equipment design:	

www.jki.bund.de

Declaration procedure: New equipment complies with the legal requirements



JKI - Declaration Procedure, obligatory

Evaluation of documents (JKI)



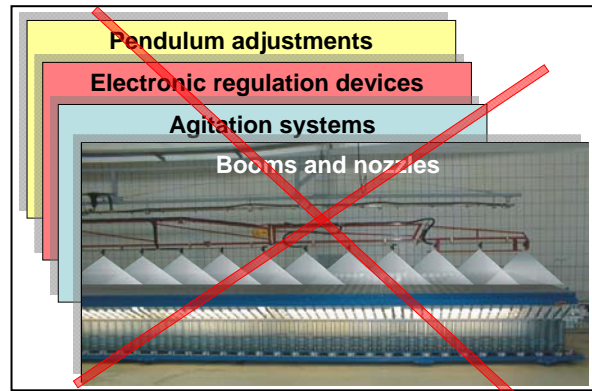
www.jki.bund.de

**Declaration procedure:
New equipment complies with the legal requirements**



JKI - Declaration Procedure, obligatory

**When in doubt:
Technical examination (JKI)**

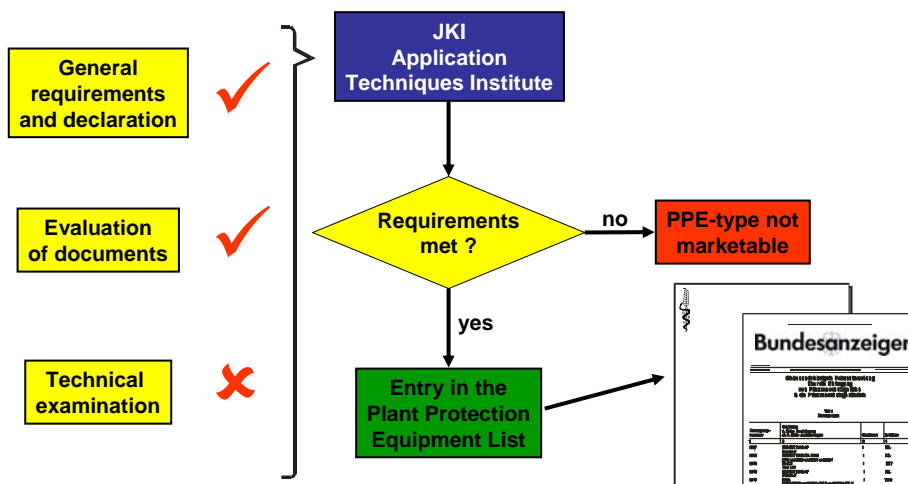


www.jki.bund.de

**Declaration procedure:
New equipment complies with the legal requirements**



JKI - Declaration Procedure, obligatory



www.jki.bund.de

Plant protection equipment

- summary of the declared sprayers in Germany



Sprayers and air-assisted sprayers for field crops						
	3-point hitch	mounted	trailed	self propelled	line spraying	Among all: air-assisted
Total available sprayer types	83 (31%)	26 (10%)	107 (42%)	41 (16%)	6 (1%)	24 (9%)
tank (l)	200 - 1900	300 - 5000	600 - 14000	300 - 5000	100 - 1000	600 - 8000
spray boom (m)	7 - 28	4,5 - 36	6 - 51	4,5 - 45	4 - 12	12 - 36
pump (l/min)	58 - 280	94 - 2x225	94 - 650	138 - 1400	16 - 225	100 - 344
tech. rest volume (% of tank capacity)	1,1 - 2,6	1,7 - 3,0	1,0 - 3,0	0,6 - 3,0	1,2 - 3,0	1,1 - 3,0

www.jki.bund.de

Statistic evaluation: declarations received up to now



kind of equipment	arrived	declarations					
		still not worked on/ still incomplete	Type of equipment registered	(among them: types of equipment produced no longer)	disallowed	cancelled from list	withdrawed/ procedure stopped
Field sprayers	556	10	447	202	4	4	91
Air-assisted sprayers	277	9	205	70	28	8	27
Pedestrian, manual-powered sprayers	81	3	74	6	1	0	3
Pedestrian, motor-powered sprayers	60	4	49	6	0	2	5
Seed dressing equipment	54	0	53	16	1	0	0
Granules applicators	30	0	27	2	0	1	2
Fogging machines	55	1	49	0	0	3	2
Fumigators	5	0	5	0	0	0	0
Wiper	10	0	10	0	0	0	0
Wheelbarrow sprayer	20	0	17	2	0	0	3
Other spraying equipment	36	1	29	11	0	2	4
Other plant protection equipment	4	0	2	1	0	0	2
Supplementary declaration for parts of equipment		0		0	0	0	0
Altogether	1191	28	969	316	34	20	140
Disclaimer							
Number of manufacturers	274						

www.jki.bund.de

Statistic evaluation: declarations received from foreign manufacturers



Country	arrived	declarations				
		still not worked on/ still incomplete	Type of equipment registered	(among them: types of equipment produced no longer)	disallowed	cancelled from list
Belgium:	4	1	1	-	-	2
Denmark:	138	4	74	30	4	1
France:	117	1	87	35	5	1
Great Britain:	10	-	8	2	-	1
Italy:	192	1	169	42	11	3
Japan:	2	-	2	-	-	-
New Zealand:	3	1	2	-	-	-
The Netherlands:	113	1	106	40	1	-
Austria:	19	-	19	9	-	-
Poland:	18	4	12	-	-	-
Sweden:	4	-	4	3	-	-
Switzerland:	24	-	18	2	1	1
Slovakia:	1	-	1	-	-	-
Slovenia:	7	1	4	-	-	-
Spain:	2	-	2	-	-	-
Czech Republic:	3	-	2	-	-	-
Hungary:	4	-	3	-	-	1
USA:	679	-	524	2	1	2
altogether:		14		165	23	12
foreign manufacturers:	126					

www.jki.bund.de

Draft proposal for a
DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
amending Directive 2006/42/EC on pesticide application equipment



Machinery Directive Amendment (MDA)

Certification of new Pesticide Application Equipment (PAE)

- MDA introduces **environmental** protection requirements for the **placing** on the market and /or putting into service of new machinery for pesticide application
- MDA includes **machinery** for pesticides application in terms of «machinery » both for professional & consumer use and does not include manually-operated, handheld equipment and parts / components e.g. nozzles
- The conformity assessment is made by **self-certification** of manufacturers (modul A) without any contribution of external authority
- The self-certification shall ensure that PAE fulfill the **requirements** specified in Annex I/copied from EN 12761)
- MDA coming into force by Dec. 2009

www.jki.bund.de



Machinery Directive Amendment (MDA)

- Statements of SPISE Working Group -

SPISE position regarding MDA

Implementation of EU-regulation for new pesticide application equipment (PAE) is welcomed
Close linkage between pesticide and equipment is required


Shortcomings of the MDA

- Consistency between
 - Authorization of pesticide (Directive 91/414 EWG),
 - Certification of new equipment (MDA) and
 - Inspection of equipment already in use (FWD) does not exist
- Requirements for environment apply to machines (not only to PAE)
- Self-certification according environment requirements is too much for manufacturers

These facts will result in

- Legal certainty cannot be guaranteed (experiences with the German certification procedure)
- Protection level is decreasing

SPISE recommend to improve the MDA to meet these demands,
➔ see SPISE proposal (in accordance with the New Approach)



www.jki.bund.de

**Directive 2006/42/EC of the European Parliament and of the Council
of 17 May 2006 on machinery, and amending Directive 95/16/EC (recast)
(Text with EEA relevance) - **SPISE proposal****



- Article 1: Scope
- Article 2: **Definitions** (MDA)
- Article 3: Specific Directives
- Article 4: **Market surveillance**..... (MDA)
- Article 5: Placing on the market and putting into service
 - 1. Before placing machinery on the market
 - 2. Before placing machinery for pesticide application on the market**
 - 3. Before placing partly completed machinery on the market,
- Article 6: Freedom of movement
- Article 7: Presumption of conformity and harmonised standards
- Article 8: Specific measures
- Article 9: **Specific measures to deal with potentially hazardous machinery**....(MDA)
- Article 10: Procedure for disputing a harmonised standard
- Article 11: **Safeguard clause**.....(MDA)

www.jki.bund.de

**Directive 2006/42/EC of the European Parliament and of the Council
of 17 May 2006 on machinery, and amending Directive 95/16/EC (recast)
(Text with EEA relevance) - **SPISE proposal****



- Article 12: **Procedures for assessing the conformity of machinery**
- Article 13: Procedure for partly completed machinery
- Article 14: Notified bodies
- Article 15: Installation and use of machinery
- Article 16: CE marking
- Article 17: Non-conformity of marking
- Article 18: Confidentiality
- Article 19: Cooperation between Member States
- Article 20: Legal remedies
- Article 21: Dissemination of information
- Article 22: Committee
- Article 23: Penalties

www.jki.bund.de

Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery, and amending Directive 95/16/EC (recast) (Text with EEA relevance) - SPISE proposal



Article 24: Amendment of Directive 95/16/EC

Article 25: Repeal

Article 26: Transposition

Article 27: Derogation

Article 28: Entry into force

Article 29: Addressees

ANNEX I: Essential health and safety requirements relating to the the design...(MDA)

ANNEX II: **Declarations (to be defined)**

ANNEX III: CE marking

ANNEX IV: Categories of machinery to which one of the procedures referred to ...

ANNEX V: Indicative list of the safety components referred to in Article 2(c)

ANNEX VI: Assembly instructions for partly completed machinery

www.jki.bund.de

Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery, and amending Directive 95/16/EC (recast) (Text with EEA relevance) - SPISE proposal



ANNEX VII:

A. Technical file for machinery

B. Relevant technical documentation for partly completed machinery

C. **Relevant technical documentation for machinery for pesticide application (to be defined)**

ANNEX VIII: Assessment of conformity with internal checks on manufacture of machinery

ANNEX IX: EC type-examination

ANNEX X: Full quality assurance

ANNEX XI: Minimum criteria to be taken into account by MS for notification of bodies

ANNEX XII: **Assessment of conformity for machinery for pesticide application.**

ANNEX XIII: **Essential requirements for machinery for pesticide application**

www.jki.bund.de

Conclusions (1)

- The European and international standardisation made great progress in the last years.
- Numerous ISO-standards for sprayers are available already.
- EN-standards for boom sprayers and air-assisted sprayers are published but still mandated versions are required
- The standards are helpful for manufacturers, testing authorities and farmers in order to save resources, facilitate mutual recognitions of tests and to make a wider range of tested machinery/equipment available.

Conclusions (2)

- Certification systems for new sprayers are still in force in Germany, Czech Republic and Poland.
- Important experiences have been gathered in these MS and should be taken into account for implementing an European certification procedure.
- The proposed directive does
 - not ensure a consistency between
 - the authorization of pesticide,
 - the inspection of equipment already in use and
 - the certification of new equipment
 - apply requirements for environment to machines (not only to PAE)
 - implement a self-certification according environment requirements which is too much for manufacturers



Conclusions (3)

- The SPISE working Group provides improvements for MDA in order to
 - guarantee a high standard of protection
 - ensure legal certainty
 - apply requirements for environment only to PAE
 - realize a close link between pesticide and equipment
 - assist the self-certification by notified bodies
 - be in accordance with the “New Approach”

Many thanks for your attention

www.jki.bund.de

European standards on machinery for pesticide application

European Parliament workshop
11 December 2008

Jean-Christophe Rousseau
Member of CEN TC 144
Chairman of ISO TC 23/SC6 « Crop protection equipment »

BERTHOUD

1

Machinery directive amendment

- Scope
- European available standards
- State of play in developing new European standards
- Essential requirements for pesticide application machinery

BERTHOUD

2

Scope

Recall of the scope

Definition according to document COM(2008) 535 final (5.9.2008) - Section 2.4 - Annex 1

- **Machinery intended for pesticide application both for professional and consumer use**
 - self-propelled machinery
 - towed vehicle-mounted and semi mounted machinery
 - airborne machinery
 - stationary machinery
- **It also includes**
 - powered portable and handheld machinery
 - manually-operated portable and handheld machinery **with** a pressure chamber
- **It does not include**
 - manually-operated portable and handheld machinery **without** a pressure chamber
 - simple application equipment without moving parts

BERTHOUD®

3

Scope

Comments

- **Most commonly used sprayers are in the scope**

Self-propelled, trailed and mounted sprayers are the most commonly used sprayers
- **Knapsack sprayers**
 - In the case of knapsack sprayers, the impact on the environment is mostly due to the user and not to the design of the machine.
 - Should manually operated sprayers be in the scope?

Definition of a machinery according to the Machinery Directive 2006/42/EC of 17 May 2006

= assembly fitted with or intended to be fitted with a drive system other than directly applied human or animal effort...

 - If manually operated sprayers should be included

Manually operated sprayers without a pressure chamber but with maintained pressure should be included

BERTHOUD®

4

Scope

Hand operated sprayers without pressurized tank



Should be in the scope



Should not be in the scope

BERTHOUD

5

Available standards

- **Mounted, semi-mounted or trailed sprayers and self-propelled sprayers**
 - = the most commonly used sprayers
 - EN 12 761 September 2001
 - Sprayers and liquid fertilizer distributors- Environmental protection
 - Part 1: General
 - Part 2: Field crop sprayers
 - Part 3: Air assisted sprayers for bush and tree crops
- **Aircraft and train sprayers**
 - No standard available

BERTHOUD

6

Available standards

- **Handheld or portable sprayers with integrated engine**
No standard available
- **Hand operated sprayers with or without pressurized tank**
 - No European standard
 - ISO standard available (ISO 19 9332)
- **Other types of pesticide application equipment (granule applicators, dusters...)**
No standard available

BERTHOUD

7

New European standards

State of play

- **Revision of EN 12 761**
Mounted, semi-mounted or trailed sprayers and self-propelled sprayers
 - New project started (preliminary stage)
 - Decision taken at the last TC 144 meeting in November 2008
 - This project will be conducted in parallel with the revision of EN 13 790 - inspection of sprayers in use (Framework directive on sustainable use of pesticides)
- **Other types of equipment**
 - Complementary standards or extension of EN 12 761 scope
 - To be discussed when the CEN gets a mandate from the Commission
 - Lower priority to be given to the equipments that have an impact on the environment mostly due to the user

BERTHOUD

8

Essential requirements

Section 2.4 – Annex 1

- **Essential requirements in line with the EN 12 761 Part 1**
Sprayers and liquid fertilizer distributors- Environmental protection
Part 1: General

Conclusion

- **Scope**
 - covers the most commonly used types sprayers (self propelled, trailed and mounted sprayers)
 - need for clarification on manually operated sprayers
- **European available standards**
 - EN 12 761 for self propelled, trailed and mounted sprayers
 - No European standard available for the other types of sprayers
- **New European standards**
 - Revision of EN 12 761 already decided
 - New standards to be developed for the other types of pesticide application equipment, which might need a lot of work
- **Essential requirements**
In line with EN 12 761 Part 1