

# **Pesticide application equipment and inspection of equipment in use in Poland**

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# Introduction to obligatory control of spraying equipment - historical overview

- Pesticides are acting correctly only, when they are applied in the proper time and by using technically efficient spraying machines.
- Pesticides application by inefficient spraying machines cause that working liquid is not spread even. To low dose of pesticide decrease the efficacy of the treatment, to high can cause MRL exceeding, what can be threat to human health.
- That was the reason to introduce the obligation for technical control of spraying equipment.



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# Introduction to obligatory control of spraying equipment - historical overview

- Obligatory examinations of sprayers in Poland was introduced in 1999
- The obligation concerned new sprayers and sprayers in use
- For sprayers examination were responsible units authorised by SPHSIS
- According to the law sprayers should have been inspected at least every 2 years and after 2004 every 3 years



## Current legal situations

- Regulation of the European Parliament and of the Council (EC) No 1107/2009 of 21 October 2009 concerning the placing of plant protection products and repealing Directives 79/117/EEC and 91/414/EEC
- Directive of the European Parliament and of the Council 2009/128/EC of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides



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# Harmonisation of the official examination of equipment for pesticides application European Union

- According to art. 8 Directive 2009/128 EC from 21 October 2009 on action for sustainable use of pesticides, all Member Countries are obligated to assure the regular control of the equipment used for pesticides professional application.
- Till November 26-th 2016 Member States have to assure to carry out at list one control of the equipment used for pesticides professional application.



# Harmonisation of the official examination of equipment for pesticides application European Union

- Requirements are define in annex II to the Directive 2009/128 EC.
- In line with annex II the contol of equipment for pestcides application include all aspects important to achive high level of human health and enviroment protection.



## National legal basis

- Act of 18 December 2003 on plant protection (Journal of Laws of 2014, item 621, as amended)
- Act of 8 Marz 2013 on plant protection products (Journal of Laws of 2013, item 455, as amended )
- Regulation of Minister of Agriculture and Rural Development from 18 December 2013 on technical efficiency of equipment designed or application of plant protection products
- Regulation of Minister of Agriculture and Rural Development from 13 December 2013 on the examination of the technical efficiency of the sprayers



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# Organisational structure of SPHSI

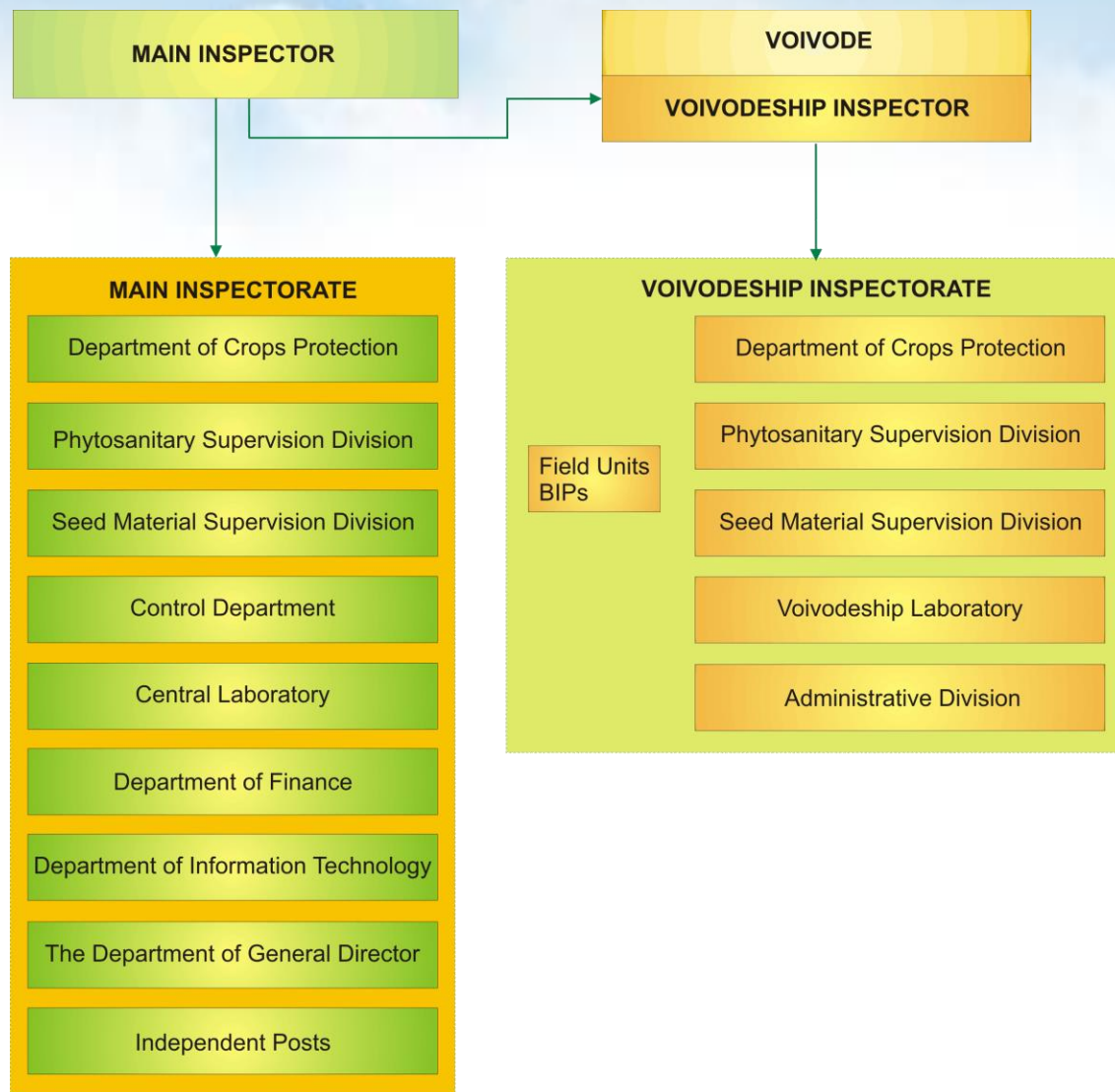
There are 16 voivodship inspectorates in Poland.

VIPHSIs comprise 261 field units and 12 border inspection points (BIPs).





# Organisational structure of SPHSI



# Inspection system of pesticide application equipment

- Current inspection system in Poland continues with small differences the obligations which was introduced in 1999.
- There is obligatory examination of pesticide application equipment
- The examination have to be repeated:
  - every 3 years for tractor sprayers and self-propelled field or orchard sprayers
  - every 5 years for spraying equipment on trains and aircraft (to 2020).
- First examination of new equipment is obligatory after a period of five years after purchase. The owner of the equipment is under obligation to keep purchase invoice until the date of first technical inspection. In the case of lack of this document, equipment can not be used until its technical condition is confirmed by examination.



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# Inspection system of pesticide application equipment. Authorising operators.

- Regional Inspector received the right to authorise the units to carry out examination of technical efficiency of equipment designed for use of plant protection products
- In Poland function a register of operators, which is published on SPHISIS website



# Inspection system of pesticide application equipment. The conditions for entrepreneurs performing validation of technical efficiency of equipment

- Entrepreneurs performing technical inspections of equipment are obligated to assure:
  - organisational and technical conditions and provide facilities for correctness of the tests of equipment,
  - that the tests will be done by the proper trained workers,
  - that the tests will be done according to procedures,
  - to prepare and keep documentation of the tests,
  - cooperate with regional inspectors of SPHSIS, to issue, after positive test, the certificate and sign to the owner of the tested equipment.



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# Inspection system of pesticide application equipment. Confirmation of technical performace

- After positive examination, the protocol and special sign are given
- On the sign is stated:
  - „Equipment is technically efficient”
  - number with 8 cipher-  
(it is territorial identification and unique number of control sign)
  - year of test perform





OPRYSKIWACZ Z ATESTEM



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# Inspection system of pesticide application equipment

- Number of authorized operators – 375, including operators inspecting:
  - field and orchard sprayers – 141,
  - field sprayers – 223,
  - orchard sprayers – 11.
- Number of sprayers inspected in 2013 – 64 211,
- From 1999 till 2013 there was done 657 468 sprayers controls in Poland



# Inspection system of pesticide application equipment. Supervision under the system.

For supervision under the system is done by:

- SPHSIS,
- Industrial Institute of Agricultural Engineering authorised by Main Inspector of Plant Health and Seed Inspection to control (as delegated task)
  - It is a state research institute which supports agriculture as regards of mechanisation, including use of equipment for pesticide application
  - Institute is a member of European Network for Testing of Agricultural Machines
- According to guidelines for inspection every operator is controlled by SPHSIS each year
- Additionally about 40 operators are controlled by Industrial Institute of Agricultural Engineering each year





# Inspection system of pesticide application equipment. Guidelines for control

- Orders of Main Inspector of Plant Health and Seed Inspection for inspectors
  - No. 2/2014 of 7th March 2014 laying down plant protection and technique inspection rules.
- Main Inspector of Plant Health and Seed Inspection rules of metrological control for authorised units (IIAE)



## Scope of the control

- Documentary check,
- Compliance with regulations and standards,
- Control of equipment used to confirming technical efficiency.



## Documetary check

- entry to register
- possession of a certificate of training
- record – keeping examined equipment
- record- keeping sign
- possession of evidence of validation and calibration of measuring instruments.
- storing data concerning testing of the equipment to use of pesticides for 3 years



# Compliance with regulations and standards

- knowledge of regulations and standards,
- providing organizational conditions to ensure the proper confirmation of technical performance,
- conducting performance testing of technical equipment comply with the methodology of such studies



# Control of equipment used to confirming technical efficiency

- hand or electronic groove table,
- equipment for simultaneous measurement of the flow rate of the liquid (field and orchard sprayers),
- set of manometers,
- container for liquid used in the test,
- measuring cylinders,
- test stand for manometers control,
- measuring tape, stopper, calculator, numerators, manometer for checking air pressure in speed indicator and air vessel,
- working clothing.



# Number of operators controlled in 2013

No	Voivodeship	Number of SPHSIS controls	Number of IIAE controls
1.	dolnośląskie	65	2
2.	kujawsko-pomorskie	101	6
3.	lubelskie	37	4
4.	lubuskie	21	1
5.	łódzkie	33	3
6.	małopolskie	81	2
7.	mazowieckie	137	6
8.	opolskie	32	2
9.	podkarpackie	40	1
10.	podlaskie	148	3
11.	pomorskie	20	1
12.	śląskie	22	1
13.	świętokrzyskie	25	1
14.	warmińsko-mazurskie	30	1
15.	wielkopolskie	105	5
16.	zachodniopomorskie	12	1
	sum	<b>909</b>	<b>40</b>



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***Thank you***



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