

TWG 5

SPISE Advise on main training topics both for
basic and refresher courses

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TWG 5

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- Plus rest of SPISE TWG!

SPISE TWG Process

- Chairmen prepare draft proposals to SPISE TWG
- Discussions, discussions, discussions...
- Agree on approach

- SPISE Advise DRAFT is presented and reviewed by SPISE TWG.
- Chairmen makes changes after comments

- Present to SPISE workshop
- Changes after comments
- Make available on SPISE website. <http://spise.jki.bund.de/>

Work in SPISE TWG 5

- After comments in SPISE V:
- TWG 5 made changes in proposal to be able to give some indications as SPISE ADVISE.
- Based on results of surveys on practises in MS
 - Course length
 - Course content in topics/modules
 - Discussed in SPISE TWG April 2015

Discussions in TWG (BS April 2015)

- Level of inspection varies,
 - Control
 - Control and advise/repairs
 - Types of equipment
 - Varying level of available background competence in MS
 - Proper education for mechanics in Agricultural machinery
 - No special training
- SPISE is not recognised by all MS or COMM ☹️

- Discussions lead to agreement to focus on:

The needed competence of inspectors

How to verify it;

Exam

How to reach it;

Training, based on local conditions

- Elaborate SPISE Advise

Spise Advice

Advice for inspector's training



Compiled by:
SPISE Technical Working Group 5

TWG 5: SPISE ADVISE

- **Structure**
 - Introduction
 - Baseline for inspectors competence
 - Examination content in basic courses
 - Basic course
 - Theory & Practices
 - Course topics/Course modules
 - Additional in case the inspection may be combined with adjustments and calibration
 - Refresher course
 - Course Topics
 - Training material reference

Baseline for inspector knowledge

The inspector shall:

- have participated and be approved in a recognized training course
- have knowledge of the organizational aspects of inspection and testing procedure
- be able to carry out the test safe and without pollution of the environment
- have sufficiently knowledge of the functioning of the sprayer and requirements for an effective and efficient execution of the inspection
- be able to interpret the technical data required for the testing independently and in a correct manner

Baseline for inspector knowledge ctd

- be able to carry out the inspections, function tests and measurement independently and in a correct manner
- be able to operate the necessary testing equipment and to interpret the measured values in the correct manner
- be able to use independently and in the correct manner the valid National approval - and rejecting criteria for the sprayers
- be able to fill in independently the test forms in the obligatory manner
- be able to formulate a correct, clear, objective and well founded recommendation on how the sprayer can fulfill the requirements to the owner of the sprayer

Examination content in basic courses

- To assure that the inspectors have sufficient knowledge an examination of the participants in training courses is necessary.
To verify the level of knowledge.
- **This knowledge can be achieved independently from course length or course content, depending on the local required background education or training.**
- SPISE TWG has identified topics that can be relevant to assure the same level of knowledge between countries.
- An official exam comprising questions from the proposed topics for exam should be arranged.
- Preferable is combined exams, including theoretical questions (oral/written) with practical exercises (complete inspection of at least 1 equipment of relevant type)

The proposed head topics to be considered in examination:

- Environmental-, technical and biological background motives for inspection
- Basic knowledge on PAE
- Health and safety for inspection staff
- General and local legislation and administrative procedures:
 - Training and approval procedure of inspectors
 - Approvals of workshops
 - Bureaucratic procedure for reporting of result of inspection
 - Requirements on inspection site
 - Requirements on test equipment and calibration of test equipment

Examination content in basic courses ctd

- The inspection of PAE:
 - requirements on PAE
 - test methods
 - use of test equipment
- The practical inspection on PAE
- Identifying defects on PAE
- Advise how to repair defects or upgrading of the equipment

Additional in case the inspection may be combined with adjustments and calibration

- Knowledge in use of PAE
 - eg spraying including nozzle choice advising, new technologies + identifying DRT
- Calibration of PAE
 - eg sprayer adjustment, nozzle selection

Basic course

- Course length, course content and the relative size of topics, could vary depending on national or local situation, depending on e.g. dominating crops or types of used equipment.
- Topics, could be called also course modules that may be relevant.
- The content should reflect the needs according to the requirements in the examination.
- Course length and emphasis on different topics is also depending of the background training of the staff.

Basic course ctd

- Proposed topics can be considered as “modules” connected to relevant parts of the training.

Neither priority order nor specific details about content,
Only topics and subtopics that may be relevant in a basic courses

Theory & Practices

Total time of the course should include theoretical and practical activities to assure that participants get familiar with the topics, inspection procedure and test equipment.

Theory and practicals



- **Course topics/Course modules:**
- Environmental- technical and biological motives for inspection
 - Risks for pollution of water courses and other surrounding environment
 - Distribution influence on applied dose
 - Used amount of PPP
 - Risks for residues in food
 - Risk for environment
- Basic knowledge on sprayers
 - Basic on machines working principles
 - Influence of different parts on the equipments working mode and results
 - Defects influence on environment and biological results

- **General and local legislation and administrative procedures:**
 - Training and approval procedure of inspectors
 - Approvals of workshops
 - Procedure for reporting of result of inspection
 - Requirements on inspection site
 - Requirements on test equipment and calibration of test equipment
 - National quality control or certification system for the workshops and inspections

- **The inspection of PAE:**
 - requirements on PAE in inspection
 - test methods
 - available test equipment
 - use of test equipment
 - test report and reporting (protocols, stickers, etc)

- **Theory and practice on inspection of different equipment**
 - Emphasis on equipment due to national or local conditions depending on which kind of equipment is mainly used. E.g.:
 - Boom-sprayers
 - Sprayers for bush and tree crops
 - Fixed and semi-mobile sprayers.
 - Seed-treatment equipment
 - Knapsack sprayers
 - Granular spreaders
 - Etc...

- Health and safety for inspection staff
 - Importance of clean working conditions
 - Risks for test operators
 - Relevant personal protective equipment
- Test equipment and calibration of test equipment
 - Relevant available test equipment
- Procedures for regular calibration or official control of test equipment

Additional in case the inspection may be combined with adjustments and calibration

- Knowledge in spraying including:
 - nozzle choice advising,
 - new technologies and
 - identifying drift reducing technique
- Calibration of sprayers, adjustment, nozzle selection

Basic course

- Course length:
 - Totally depending on local conditions
 - 3 – 4 days seems to be a general recommendation

Course Topics

- Inspectors experiences:
 - Reporting, test equipment, test procedures, special problems
- News on regulations, test procedure, test equipment, reporting system
- News on PAE market:
 - Machine types, sprayer models, nozzles
- Refreshing on
 - Regulations
 - Test procedure
 - Test equipment
 - Test protocol
 - Reporting of inspection

When needed. Second day or additional day

- Detailed training for additional PAE depending on local needs or new available methods, e.g.
 - Fixed and semimobile sprayers
 - Granular spreaders
 - Railways sprayers
 - Aerial spraying
 - Seed treatment
- Test methods and requirements
 - Theory and practicals
- System for reporting to authorities

Training materials and course plans

- The detailed content of the course topics/course modules is not further described in SPISE ADVISE.
- SPISE TWG 5 have collected training material and course-plans from a several countries.
- Thank you!!!
- These materials are made available at SPISE website.
- <http://spise.jki.bund.de/>

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Home

Training Material

Lists of authorized
workshops

SPISE ADVICE

6. SPISE-Workshop 16

5. SPISE-Workshop 14

4. SPISE-Workshop 12

3. SPISE-Workshop 09

2. SPISE-Workshop 07

1. SPISE-Workshop 04

Information Package

Publications

Sitemap

Contactform

Imprint

spise.julius-kuehn.de / Training Material

Training Material

In this folder you will find training material regarding the different aspects of inspection of sprayers in use. It derives from several Member States and is available in different languages. The shown collection functions only as overview.

Before the usage of any material it is mandatory to make contact with the certain author of the material to ask for permission and for submission of better suitable material.

The training material is assigned to the following scopes:

- General introduction on inspection of sprayers in use
- Inspection, inspection procedure and inspection site
- Test equipment and calibration of test equipment
- Inspection stations
- General knowledge on sprayers
- Knowledge in spraying including nozzle choice advising
- Examination
- Training programme

-  PDF
-  EMAIL
-  PRINT



TWG 5 plan

Spise Advice

Advice for inspector's training



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SPISE Technical Working Group 5

SPISE ADVISE to be
published on SPISE website

- After the universal introduction of mandatory inspections
- Collect and exchange information
 - processes of examination and training exchange of training material.

Thank you for Your Attention