

NATIONAL ACTION PLAN
PLANT PROTECTION PRODUCTS
AUSTRIA

COMPILATION OF THE
LAND ACTION PLANS
OF THE NINE LÄNDER

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INTRODUCTION

Pursuant to Article 4 of Directive 2009/128/EC, Member States must adopt National Action Plans to set up their quantitative objectives, targets, measures and timetables to reduce risks and impacts of pesticide use on human health and the environment and to encourage the development and introduction of integrated pest management and of alternative approaches or techniques in order to reduce dependency on the use of pesticides.

Under the Austrian Federal Constitution, as regards regulation of the use of plant protection products in Austria, the nine Länder are competent for the implementing legislation and enforcement. The adoption of Action Plans regarding the use of plant protection products, including public participation in drawing them up, must accordingly take place under the responsibility of the Länder. The Austrian National Action Plan on Plant Protection Products therefore consists of nine independent Land Action Plans.

Under the Austrian Federal Constitution, the Federal Government is responsible only for the basic legislation as regards the use of plant protection products. This was already adopted in §§ 13 and 14 of the 2011 Plant Protection Product Act (*Pflanzenschutzmittelgesetz 2011*), BGBl. I No 10/2011. According to § 14 of the 2011 Plant Protection Product Act, the Länder have to draw up Land Action Plans in accordance with Article 4 of Directive 2009/128/EC and taking into account § 2(2) of the 2011 Plant Protection Product Act and to forward them to the Federal Ministry of Agriculture, Forestry, Environment and Water Management.

The contents of the Land Action Plans of the Länder are set out below in the order of finalisation by the respective Land. The respective Land authority competent for the Land Action Plan and the corresponding link to the website on which the Land Action Plan is published are shown at the beginning of each Land Action Plan.

Land Action Plan of Lower Austria on the sustainable use of plant protection products 2012 – 2016

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1. Introduction

The implementation of pest management and especially the placing on the market and use of plant protection products are regulated comprehensively in Austria and at a high level of protection for humans, animals, groundwater and the natural balance. On the basis of the provisions on competence of the Austrian Federal Constitution, the Federal Government is competent for the placing on the market of plant protection products and the framework legislation in the field of pest management and plant protection products, whereas it is the responsibility of the Länder to adopt implementing laws for the use of plant protection products.

The comprehensive specific legislation on pest management was established to protect crops against harmful organisms and at the same time to avoid risks potentially arising from the use of plant protection products or from other pest management measures, especially to human and animal health and the natural balance.

The predecessor to the current Directive 2009/128/EC, Directive 91/414/EEC, already referred to the principles of good plant protection practice and provided that, whenever possible, the principles of integrated pest control should be applied. The basic provisions of §§ 13 and 14 of the new 2011 Plant Protection Product Act (*Pflanzenschutzmittelgesetz 2011*), BGBl. I No 10/2011, require the implementing legislation of the Länder, with regard to the measures to implement Directive 2009/128/EC, to regulate in particular the drawing up of Land Action Plans, taking into account the general principles of integrated pest management, the principles of good plant protection practice and the application of the precautionary principle.

The Land of Lower Austria has carried out this task through the amendment of the Act on the use of plant protection products in agriculture (*Gesetz über die Verwendung von Pflanzenschutzmitteln in der Landwirtschaft*), which entered into force on 20 January 2012. Owing to the distribution of competence, this regulated the Land Action Plan for Lower Austria on the sustainable use of plant protection products; the Federal Government is competent (under the UNAPP project = implementation of National Action Plan on Pesticides) for drawing up the National Action Plan on Pesticides (= plant protection products + biocides). Integrated pest management is the umbrella concept worldwide for sustainable pest management in conventional farming. Already in the Code of Conduct

adopted by the Food and Agriculture Organisation of the United Nations in 1985 (FAO Code of Conduct on the Distribution and Use of Pesticides), integrated pest management is named as a key element of sustainable pest management. The Lower Austrian Act on the use of plant protection products in agriculture has referred to this concept since 1991.

Integrated pest management represents an integral plant protection system on the holding, designed for the long-term, and pursues the objective of fulfilling ecological, economic and social requirements in equal measure by limiting the use of chemical plant protection products to the levels that are necessary in favour of non-chemical plant protection procedures. In addition, it requires careful deliberation processes for all decisions and demands high standards regarding the provision and use of technical information.

The 2012-2016 Land Action Plan for Lower Austria deals specifically with risk mitigation and not flat-rate reductions in quantities. Flat-rate reductions in quantities of plant protection products sold do not take into account the properties of the substances and the risks associated with their use. For example, under a quantitative approach of this kind, the use of a higher-risk plant protection product, which is already effective in smaller quantities, would be considered more favourably than the use of a plant protection product with lower risk but having to be applied in larger quantities. The aim of the Land Action Plan for Lower Austria is therefore not prohibition, but sustainable use of plant protection products.

One of the key aims of Directive 2009/128/EC, the Federal Plant Protection Product Act and the Lower Austrian Plant Protection Product Act is improved initial and additional training and technical knowledge for both professional and private users of plant protection products, as well as public information and awareness-raising. This need for information and public participation is met for this Land Action Plan for Lower Austria in so far as, prior to adoption by the Lower Austrian Land Government, it was subject to a public participation procedure pursuant to § 3(9) of the Lower Austrian Plant Protection Product Act, LGBl. 6170-4, during which, beyond the legally binding evaluation procedure when laws are enacted, the appropriate wishes and suggestions of the citizens of Lower Austria were taken into account.

2. Legal bases

1. The European Union has adopted new regulations governing plant protection products through two legal instruments:

- a) Regulation (EC) No 1107/2009 of the European Parliament and of the Council concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC, OJ L 309 of 24 November 2009, p. 1
- b) Directive 2009/128/EC of the European Parliament and of the Council establishing a framework for Community action to achieve the sustainable use of pesticides, OJ L 309 of 24 November 2009, p. 71.

These new regulations create an entirely different legal framework for the implementing laws of the Länder and the Federal Basic Plant Protection Act (*Pflanzenschutz-grundsatzgesetz*) of the Republic of Austria.

2. In response to this, in spring 2010, the Federal Government submitted a draft of an Act amending the Basic Plant Protection Act, BGBl. I No 114/1999, in the version of BGBl. I No 87/2005, for evaluation, which was confined to transposing the broad outlines of Directive 2009/128/EC on the framework for action on the use of pesticides.

3. In parallel to this, the Federal Ministry of Agriculture, Forestry, Environment and Water Management initiated the UNAPP project (= implementation of the National Action Plan on Plant Protection Products) and organised two work packages in this context which involve Land competences:

Work package 2.1 under the UNAPP involved screening the existing Land legislation. The object of work package 2.2 was to draw up text modules for implementing Acts of the Länder under the chairmanship of a staff member of the Federal Ministry of Agriculture, Forestry, Environment and Water Management. The procedure followed for this was that, on the basis of the screened existing Land legislation, the measures needed to transpose the Directive were ascertained and the representatives of the individual Länder provided text

modules for the various fields, which were discussed jointly and summarised by the chairman. The transitional provisions for the use of plant protection products authorised under the old system were contributed by the Federal Ministry of Agriculture, Forestry, Environment and Water Management.

4. In parallel to work package 2.2, the procedure at the Federal Ministry of Agriculture, Forestry, Environment and Water Management was amended so that the concrete provisions are no longer regulated in a separate Basic Act, but the provisions of the Basic Plant Protection Act are divided according to specific subject-matter between a new 2011 Plant Protection Product Act (*Pflanzenschutzmittelgesetz 2011*) and a 2011 Plant Protection Act (*Pflanzenschutzgesetz 2011*).

The new 2011 Plant Protection Product Act, BGBl. I No 10/2011, was passed on 15 February 2011. It contains the following essential basic provisions for the implementing legislation of the Länder in §§ 13 and 14:

‘Use of plant protection products

§ 13 (Basic provision):

(1) The Land legislation shall provide for measures to implement Directive 2009/128/EC, except biocidal products under the Biocidal Products Act (*Biozid-Produkte-Gesetz*), BGBl. I No 105/2000, considering the general principles of integrated pest management, the principles of good plant protection practice and the application of the precautionary principle, in particular with regard to

1. Use of plant protection products and cleaning of plant protection equipment,
2. Restrictions or bans on the use of plant protection products with regard to the risks associated with use under certain conditions or in certain areas,
3. Training for professional users and advisers for the use of plant protection products in connection with the introduction of a certification system including mutual recognition,

4. Public information and awareness-raising, in so far as it is not already provided for in other legislation,
5. Inspection of plant protection equipment already in use in connection with the introduction of a certification system,
6. Reduction in the risks and the quantity of plant protection products used,
7. Development and introduction of integrated pest management and alternative methods or procedures and
8. Indicators for monitoring the use of plant protection products.

(2) The Land legislation shall provide that reports are to be drawn up and forwarded to the Federal Ministry of Agriculture, Forestry, Environment and Water Management, with regard to

1. the implementation of the inspection measures under Article 8 of Directive 2009/128/EC,
2. the integrated pest management under Article 14 of Directive 2009/128/EC,
3. the results of the evaluations under Article 15 of Directive 2009/128/EC and
4. the controls of the use of plant protection products in accordance with the first subparagraph of Article 68 of Regulation (EC) No 1107/2009 by 31 May of the year following that to which the report relates.

(3) The Land legislation shall provide that – considering the grace period and § 3(2), point 2 – only the products entered in the plant protection product register may be applied. The use covers the consumption, application and spreading, as well as the use, storage, keeping in stock and transport within the business premises of plant protection products for the purposes of application.

(4) The Land legislation shall impose penalties for infringements of the provisions established in the Land implementing Acts.

Land Action Plans and National Action Plan on plant protection products

§ 14. (Basic provision)

(1) For the purposes of drawing up and consolidating a National Action Plan on plant protection products at Federal level and its amendments, Land legislation shall provide, in accordance with the specifications under Article 4 of Directive 2009/128/EC and considering § 2(2), that Land Action Plans are drawn up and also amended, where appropriate, in which, to reduce the risks and the effects of plant protection product use on human health and the environment, the baseline situation and the measures already introduced and to be carried out are surveyed and documented and targets are established by means of timetables. The Land Action Plans shall also describe the implementation of the measures listed in § 13(1).

(2) Land legislation shall provide that the Land Action Plans as referred to in paragraph 1 are to be forwarded to the Federal Ministry of Agriculture, Forestry, Environment and Water Management for the first time by 30 April 2012.

(3) Land legislation shall provide that Land Action Plans shall be reviewed and updated at least every five years and that the provisions on public participation in accordance with Article 2 of Directive 2003/35/EC providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation Council Directives 85/337/EEC and 96/61/EC, OJ L 156 of 25 June 2003, page 17, shall apply for drawing up or amending the Land Action Plans.’

5. The Lower Austrian Plant Protection Product Act, LGBl. 6170-4 serves to implement the basic legal provisions of the 2011 Plant Protection Product Act, BGBl. I No 10/2011, (Part 4, § 13) and Directive 2009/128/EC of the European Parliament and of the Council establishing a framework for Community action to achieve the sustainable use of pesticides, OJ L 309 of 24 November 2009, p. 71.

6. Specific contents of the Directive (Articles 6, 9 and 10) have not been included in the Action Plan because they are already covered in full by existing Federal or Land legislation.

3. Objectives of the Land Action Plan of Lower Austria

The aims of the measures defined below are as follows:

1. to maintain the fundamentally environmentally sound, high level in plant protection;
2. to mitigate additional risks arising, especially through the application of chemical plant protection products, to humans, animals and the environment and to reduce the intensity of application of these plant protection products to a reasonable level.
 - The number of applications of chemical plant protection products which exceed the levels that are necessary within the meaning of integrated pest management are to be reduced and
 - where possible, a significant proportion of chemical plant protection measures are to be replaced by non-chemical measures, such as preventive, biological and mechanical plant protection measures;
3. to further mitigate the risk caused by plant protection product residues in agricultural products and thereby to make an additional contribution to precautionary consumer protection;
4. to secure and promote regional production and the supply of the population with high-quality food;
5. to improve the conditions of use (application, storage, compliance with the authorisation requirements) by non-professional users, including by avoiding unnecessary applications of plant protection products;
6. to further mitigate the risk of pollution of soil, groundwater and surface waters by plant protection products and their relevant breakdown products and to support remediation.

During the implementation of the package of measures of this Land Action Plan, it is expected, according to expert evaluation, that risks potentially arising from the application of plant protection products to humans, animals and the environment will already be reduced during the first period or the basis for effective risk mitigation measures will be created. This excludes measures necessary to combat quarantine pests in accordance with Directive 2000/29/EC.

4. Measures under § 13(1) of the 2011 Plant Protection Product Act in conjunction with Articles 5 to 15 of Directive 2009/128/EC

4.1 Use of plant protection products and cleaning of plant protection equipment (Article 13 of the Directive)

4.1.1 Use of plant protection products

Status quo

The regulation of the use of plant protection products is assigned to the Länder under the Austrian Federal Constitution.

In Lower Austria, the 2011 Lower Austrian Plant Protection Product Act contains a large number of detailed provisions covering this field. Inspection of users is undertaken by the Lower Austrian Land Government or by an institution to which this task has been delegated.

In addition, there are currently:

cross-compliance provisions on the use of plant protection products, SVB (Social Insurance Institution for Farmers) and AUVA (General Accident Insurance Institution) brochures for the safe application of plant protection products, ÖAIP (Austrian Working Group for Integrated Plant Protection) brochure ‘*Umweltgerechter Pflanzenschutz nur mit funktionierenden Geräten*’ (environmentally sound pest management only with equipment that works).

Measure

The Land of Lower Austria will work towards devising, in cooperation with the Federal Government, harmonised dosing and spreading systems for the application of plant protection products in various crops (including organic farming).

- Sub-measure in arable farming

The Land of Lower Austria commits to the promotion of low-drift application techniques, e.g. air-assisted nozzles.

- Sub-measure in vertical crops

The Land of Lower Austria commits to the promotion of loss-minimising application, e.g. tunnel spray machines in orchards and vineyards.

Measure

The Land of Lower Austria will work towards ensuring protection of employees and users in floriculture (glasshouse, cold nebulisation).

4.1.2 Filling and cleaning of plant protection equipment

Status quo

As for use, there are regulations in the 2011 Lower Austrian Plant Protection Product Act for proper filling and cleaning.

In addition, there is currently:

the ‘*Handbuch für den Sachkundenachweis*’ (manual for the certificate of competence) issued by the Austrian Working Group for Integrated Plant Protection (ÖAIP), on which, alongside the Federal Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW), the Austrian Agency for Health and Food Safety (AGES), the Land Chambers of Agriculture, plant protection product firms, plant protection equipment manufacturers and farmers are also represented;

cross-compliance provisions on the filling and cleaning of plant protection equipment; Austrian Chamber of Agriculture (LKÖ) information leaflet on the filling and cleaning of plant protection equipment.

Measures

The Land of Lower Austria promotes the retrofitting of hand-washing and clear water tanks to clean the plant protection equipment in the field and recommends the fitment of continuous internal cleaning systems for plant protection equipment already in use. This allows possible impurities for succeeding crops and chemical reactions in the tank to be prevented and localised groundwater pollution by plant protection products to be avoided.

The Land of Lower Austria, in cooperation with the LKÖ, is making the topic of filling and cleaning of plant protection equipment a focal point for advice.

The Land of Lower Austria is considering the targeted promotion of add-on kits for clear water tanks and internal cleaning nozzles to minimise the environmental impact.

4.2 Restrictions or bans on the use of plant protection products with regard to the risks associated with use under certain conditions or in certain areas (Articles 11 and 12 of the Directive)

Status quo

In implementation of § 13 of the 2011 Plant Protection Product Act, the Länder have to provide in their implementing Acts that the Land Government must adopt restrictions or bans (by means of protected area regulations) on the use of plant protection products with regard to the risks associated with use under certain conditions in certain areas. This was undertaken in the latest amendment of the Lower Austrian plant protection product law.

The existing legal framework also includes:

1. Water Act (WRG) – Handling in protected and closed areas, general conditions for the designation of observation areas and areas for prospective measures

Under § 34(1) WRG, to protect water supply systems from pollution or from impairment of their capacity, the water authorities may impose special orders by decision concerning the cultivation or other use of land and corresponding protected areas.

Under § 34(2) WRG, to protect the general water supply, the Governor must provide by regulation that in part of the catchment area, measures which may jeopardise the water

quality, capacity or level are to be notified to the water authority or require authorisation or are permissible only in a certain way. Under § 35 WRG, this is also possible to secure a future drinking water and industrial water supply.

Under § 33f WRG, the Governor, on the basis of the thresholds being exceeded a certain number of times in a body of groundwater, must designate observation areas and, where the legal conditions are met, establish areas for measures to be taken. These instruments take effect only if groundwater pollution has been established.

2. The National Water Management Plan (March 2010) was adopted in implementation of the Water Framework Directive. It includes the inventory (current water status analysis), the summary of the monitoring results and the generally binding programmes of measures to achieve good water status or good potential. These may include measures (remediation measures), measures to avoid deterioration of the existing status (maintenance measures) and precautionary measures.

The topic of plant protection products is also dealt with in the National Water Management Plan. The effects on surface waters and groundwater are described and existing measures, such as, for example, the adaptation of protected and closed areas or the Austrian Programme for Environmentally Sound Agriculture (ÖPUL) are summarised, as well as more far-reaching measures concerning groundwater, such as, for example, the Groundwater Status Monitoring Regulation (*Grundwasserzustandsüberwachungsverordnung* (GZÜV), special measuring programmes or the research project ‘GeoPEARL Austria’ with the aim of supporting the planning of measures to avoid potential pollution of the groundwater by pesticides or their relevant metabolites. Furthermore, it is pointed out that, in implementation of Directive 2009/128/EC, Land legislation on the use of plant protection products can be established on the basis of the Basic Plant Protection Act to protect the aquatic environment and the drinking water supply. These are to serve as flanking measures for the requirements of the Water Framework Directive.

In addition, currently

ÖPUL has existed since 1995. It contains special instructions for the use of plant protection products, for which partial financial compensation is granted to cover the extra cost of their implementation.

Measures

The Land of Lower Austria ensures the necessary coordination with the Federal authorities regarding adaptation of the water legislation for protected and closed areas in the case of threshold values being newly exceeded or other risk situations. All parties concerned should be included in this.

The Land of Lower Austria ensures the necessary coordination with the Federal authorities to check compliance with the water regulations for protected and closed areas.

The Land of Lower Austria adopts temporary, localised and objective restrictions on use where the conditions are met, in implementation of § 13 of the 2011 Plant Protection Product Act and § 9 of the Lower Austrian Plant Protection Product Act.

4.3 Training for professional users and advisers for the use of plant protection products in connection with the introduction of a certification system including mutual recognition (Article 5 of the Directive)

4.3.1 Ensuring user expertise

Status quo

There are regulations in Lower Austria on conditions to achieve expertise in the use of plant protection products. At present, the user can meet the conditions of expertise by means of certain vocational training or courses to obtain the expertise.

Measures

The Land of Lower Austria introduces measures to ensure the expertise, coordinated with the Lower Austrian Land Chamber of Agriculture, other educational establishments and private and official plant protection advisers.

The Land of Lower Austria adapts the curricula of the agricultural technical and vocational colleges and other existing initial and additional training concepts to the requirements of Annex I to Directive 2009/128/EC and develops these further.

The Land of Lower Austria ensures an appropriate supply of training events and thereby enhances the knowledge of users.

The Land of Lower Austria transfers the existing regulations on expertise to the new certification system in accordance with Directive 2009/128/EC. The certification system is to be introduced by the Lower Austrian Land Chamber of Agriculture by 26 November 2013 at the latest. From 26 November 2015, only professional users may still purchase and use plant protection products authorised for professional users.

4.3.2 Boosting of plant protection advice

Status quo

There are currently advisers on plant protection in Lower Austria operating on behalf of the Land in the Lower Austrian Chamber of Agriculture. In addition to advice on application and prevention, they are also involved in initial and additional training.

Measures

The Land of Lower Austria provides decisive support for the content of the Land Action Plan by building up and extending the official advice and extending the ‘Advice on gardens and green areas’.

The Land of Lower Austria prepares information materials in cooperation with the BMLFUW, AGES and the other Länder, and ensures efficient dissemination by means of modern media.

The Land of Lower Austria advocates boosting of advice which is independent of economic interests, thereby sustainably ensuring the economic success of agricultural production and the security of supply of high-quality food.

The Land of Lower Austria advocates boosting of advice which is independent of economic interests, ensuring ecological management of public green areas.

The Land of Lower Austria supports the carrying out of plant protection trials to ensure the quality of advice and to establish basic principles for ecological management of green areas in order to reduce the use of plant protection products, to use low-risk plant protection products, to give preference to biological control measures and to develop suitable risk management measures.

The Land of Lower Austria supports the establishment and development of forecasting and warning systems with precise timing and thereby ecological optimisation of plant protection measures.

4.3.3 Additional training events on the use of plant protection products

Status quo

In the Land of Lower Austria, there are ongoing events in this field which relate to specific crops and to the non-agricultural sector (technical meetings).

Measure

The Land of Lower Austria ensures that the educational measures for professional users are also available to all interested parties.

4.4 Public information and awareness-raising, in so far as it is not already provided for in other legislation (Article 7 of the Directive)

4.4.1 Developing an Internet portal for plant protection

Status quo

In Austria, there is a high level of public awareness concerning the use of plant protection products.

Measures

The Land of Lower Austria, in cooperation with the other Länder, supports the establishment and maintenance of an Internet portal for plant protection to promote effective communication in terms of quality and quantity of technical information and generally comprehensible information for ‘non-professional’ users and other groups concerned. This is to be built up on existing, established information sources for individual user groups, such as the homepage of AGES, the ÖAIP, the Agranet of the Chambers of Agriculture, the Infoportal of the SVB, the guidelines for golf courses, community newsletters, magazines of allotment clubs, such as ‘*Kleingärtner*’, and the various ‘*Natur im Garten*’ media.

The Land of Lower Austria supports events to boost understanding of the need for plant protection measures (open days, presentations, etc.).

The Land of Lower Austria ensures that the information is objective and well-founded.

4.4.2 Information and training for ‘non-professional’ users

Status quo

For ‘non-professional’ users too, comprehensive training is an important building block for ecofriendly use of pesticides.

In various Länder (Vienna, Upper Austria), there are already compulsory training measures in the allotment sector. In Lower Austria, there is currently no compulsory training.

However, in Lower Austria, training of this kind is available to the general public (including ‘*Natur im Garten*’).

Measure

The Land of Lower Austria supports the information for ‘non-professional’ users through leaflets, events, such as for example in fruit-grower, winegrower and horticultural associations, in allotment clubs, ‘*Siedlervereinen*’ (named after Dr Siedler), at garden shows, through the action ‘*Natur im Garten*’.

4.5 Inspection of plant protection equipment already in use in connection with the introduction of a certification system (Article 8 of the Directive)

4.5.1 Further development of plant protection equipment and introduction of new technologies in practice

Status quo

At present, for plant protection equipment in use the 2009 ÖAIP guidelines ‘*Nur mit funktionierenden Pflanzenschutzgeräten*’ (Only with plant protection equipment that works), for new plant protection equipment the provisions of the Machinery Directive (2010 Machinery Safety Regulation (*Maschinen-Sicherheitsverordnung 2010*)) and for both categories of equipment the BMLFUW Decree of 2001 on equipment technology to reduce drift are applicable. Under ÖPUL measures, the regular inspection of plant protection equipment in use is mandatory.

Measure

The Land of Lower Austria supports the practical introduction of new plant protection equipment and new technologies, which contribute to reducing loss (drift and dripping losses) and to economic and efficient application of plant protection products. The regular review of trailed, mounted and self-propelled plant protection equipment in use has to take place for the first time by 26 November 2016.

4.6 Reduction in the risks and the quantity of plant protection products used (Article 12 of the Directive)

4.6.1 Reduction in the application of plant protection products

Status quo

The structure of the farming system in Austria, consisting of small farms by European standards, gives a patchwork appearance to the cultivated landscape. A voluntary reduction in plant protection measures has already been brought about since 1995 through ÖPUL measures (organic farming, IP). In the non-agricultural sector, measures have been in

progress since 1999 for the voluntary reduction of plant protection products, through the action ‘*Natur im Garten*’.

Measures

The Land of Lower Austria advocates the establishment of voluntary renunciation of plant protection products posing a high threat to groundwater in existing promotion programmes (ÖPUL, etc.).

The Land supports measures to preserve the high level of near-natural landscaping and ecological maintenance in the sector of gardens and green areas.

The Land of Lower Austria supports the use of plant protection products that spare beneficial organisms in the context of integrated pest management.

The Land of Lower Austria advocates exhausting the saving potential in the non-agricultural sector (e.g. golf courses and sports grounds).

The Land of Lower Austria supports the development of crop-specific strategies to reduce the use of plant protection products or to find alternatives to active substances with high groundwater pollution potential in sensitive areas.

The Land of Lower Austria supports measures for the treatment of partial areas (row treatment or localised control).

4.6.2. Hot Spot Management

Status quo

Invasive plant species, such as ragweed, for example, represent a major problem for allergy sufferers and biodiversity in Lower Austria.

Measure

The Land of Lower Austria supports the drawing up of effective environmentally-compatible control methods.

Status quo

In spite of explicit regulation in the Lower Austrian Plant Protection Product Act, incorrect filling and cleaning of plant protection equipment may lead to localised groundwater pollution.

Measure

The Land of Lower Austria recommends the establishment of suitable handling areas and the development of strategies to avoid localised pollution.

Status quo

Intensive plant protection measures are used on golf courses to maintain the greens.

Measure

The Land of Lower Austria carries out systematic inspections of the plant protection product records at golf courses.

Status quo

The soil is enriched by active substances contained in plant protection products which are largely non-degradable.

Measure

If the legal conditions are met, the Land of Lower Austria limits the regional use of certain plant protection products in accordance with the results of scientific research.

The Land of Lower Austria supports farmers in the choice of suitable crops and crop rotations.

Status quo

The groundwater is enriched by active substances contained in plant protection products and relevant metabolites.

Measure

The Land of Lower Austria supports users in the choice of suitable plant protection products for the location.

The Land of Lower Austria supports farmers in the choice of suitable crops and crop rotations.

If the conditions are met, in implementation of § 13 of the 2011 Plant Protection Product Act and of § 9 of the Lower Austrian Plant Protection Product Act, the Land of Lower Austria adopts temporary, localised and objective restrictions on use.

The Land, in cooperation with the Lower Austrian Land Chamber of Agriculture, promotes official advisory services.

4.7 Development and introduction of integrated pest management and alternative methods or procedures (Article 14 of the Directive)

4.7.1 Promotion of integrated pest management procedures and organic farming under promotion programmes

Status quo

In Austria, the promotion of integrated pest management and organic farming takes place under ÖPUL 2007-2013.

Measures

The Land of Lower Austria advocates the provision of sufficient financial resources for an appropriate environmental programme after 2013 and gives due consideration to integrated pest management procedures and organic farming in promotion and research programmes.

4.7.2 Drawing up of crop and sector-specific guidelines for integrated pest management

Status quo

At present there are the IP guidelines under ÖPUL in Austria which are designed to encourage voluntary participation by professional users. The attempt is made to offset the anticipated reduction in yields or management difficulties by a fixed amount of compensation.

Measures

The Land of Lower Austria advocates the continuation of these programmes, subject to maintaining competitiveness (compensation for reduction in yield).

The Land of Lower Austria, together with the other Länder and the Federal agencies, is continuing the technical development of the current IP guidelines, as defined in Annex III to the Directive, for all crops.

The Land of Lower Austria advocates the development and introduction of alternative pest management methods or procedures for gardens and public green areas.

The Land of Lower Austria supports this through further training and advice for all crops.

4.7.3 Establishment of untreated control areas (spraying windows)

Status quo

No general evaluation of plant protection measures is in progress at present.

Measure

The Land of Lower Austria recommends the establishment of ‘spraying windows’, when harmful organisms occur in certain annual crops, to check the plant protection measure (identification as control area).

The Land of Lower Austria uses the findings obtained from this to optimise advice.

4.8 Indicators for monitoring the use of plant protection products (Article 15 of the Directive)

4.8.1 Collection of statistical data on the use of plant protection products

Status quo

Under IP, records are kept on the use of plant protection products; some Länder already required these records to be kept under their Land Acts. On the basis of Regulation (EC) No 1107/2009, keeping records of plant protection products has been compulsory for professional users since 14 June 2011. The Federal Office for Food Safety (BAES) has at

its disposal the quantities of active substances contained in plant protection products (quantities of registered products) placed on the market in Austria.

Measures

The Land of Lower Austria, in coordination with the other Länder, is developing standardised documentation for the farm records for professional users.

Status quo

The expenditure on plant protection products is also included in the annual raw data collection by the Landwirtschaftliche Buchführungsgesellschaft (LBG) for the preparation of the Green Report.

Measure

On the basis of the data collected, the Land of Lower Austria observes the change in the use of plant protection products in individual crops and organises spot checks where abnormalities arise.

4.8.2 Model calculation for the behaviour of plant protection products in the environment

The Federal Government is competent for this (the GeoPearl project carries out seepage water analyses under treated areas, considering various parameters).

5. Summary

The Land of Lower Austria is concerned to limit the use of chemical plant protection products to the levels that are necessary in favour of non-chemical plant protection procedures under the legislation.

This Action Plan contains measures which commit the Land of Lower Austria itself to making a contribution to the implementation of this project.

The measures are of both a private-sector nature, such as the allocation of aid and the holding of training courses, and a public-sector nature, such as the adoption of regulations.

When formulating the individual measures, the attempt has been made to use generally comprehensible expressions and to keep the comments as brief as possible, which at times has been at the expense of technical clarity.

6. Public participation

According to § 3(8) of the Lower Austrian Plant Protection Product Act, LGBl. 6170-4, on preparation and on each amendment of the Action Plan, with due regard for § 2(2) of the 2011 Plant Protection Product Act, a **public consultation** must be held in accordance with paragraphs 9 and 10. Furthermore, it is necessary to take into account:

1. the health, social, economic and ecological effects of the planned measures,
2. the specific ecological, climate, geological, water management and agricultural conditions in Lower Austria and
3. all relevant interest groups within the meaning of point 1.

According to paragraph 9, the draft of an Action Plan and a comprehensible summary of the main points of the draft are to be made available for public inspection by the Land Government at the Land Government offices during office hours for at least four weeks and are to be published on the Internet. The public disclosure is to be announced in the Official Gazette.

The announcement was made in the Official Gazette of 15 March 2012.

The Action Plan was published on the Internet from 20 March 2012 until 17 April 2012 and was made available for inspection at the Agricultural Law Department at the offices of the Land Government of Lower Austria.

No observations were made within the time limit provided for by law.

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Action plan of the Land of Upper Austria on the sustainable use of plant protection products

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1. Introduction

The implementation of pest management and especially the placing on the market and use of plant protection products are regulated comprehensively in Austria and at a high level of protection for humans, animals, groundwater and the natural balance. On the basis of the provisions on competence of the Austrian Federal Constitution, the Federal Government is competent for the placing on the market of plant protection products and the framework legislation in the field of pest management and plant protection products, whereas it is the responsibility of the Länder to adopt implementing Acts for the use of plant protection products.

The comprehensive specific legislation on pest management was established to protect crops against harmful organisms and at the same time to avoid risks potentially arising from the use of plant protection products or from other pest management measures, especially to human and animal health and the natural balance.

The new and coming challenges for agriculture with regard to security of supply of food and feed and the growing importance of the sustainable raw materials and bioenergy sector necessitate targeted use of plant protection products to stabilise yields.

Directive 91/414/EEC, the predecessor to the current Directive 2009/128/EC, already referred to the principles of good plant protection practice and provided that, whenever possible, the principles of integrated pest control should be applied. The basic provisions of §§ 13 and 14 of the new 2011 Plant Protection Product Act (*Pflanzenschutzmittelgesetz 2011*), BGBl. I No 10/2011, require the implementing legislation of the Länder, with regard to the measures to transpose Directive 2009/128/EC, to regulate in particular the drawing up of Land Action Plans, taking into account the general principles of integrated pest management, the principles of good plant protection practice and the application of the precautionary principle.

The Land of Upper Austria has carried out this task through the 2012 amendment of the Soil Conservation Act (*Bodenschutzgesetznovelle 2012*), LGBl. No 44, which entered into force on 1 June 2012. On the basis of the distribution of competence, this regulated the Land Action Plan for Upper Austria on the sustainable use of plant protection products; the

Federal Government is competent (under the UNAPP project = implementation of National Action Plan on Pesticides) for drawing up the National Action Plan on Pesticides.

Integrated pest management is the umbrella concept worldwide for sustainable pest management in conventional farming. In the Code of Conduct adopted by the Food and Agriculture Organisation of the United Nations in 1985 (FAO Code of Conduct on the Distribution and Use of Pesticides), integrated pest management is already named as a key element of sustainable pest management. The Upper Austrian Soil Conservation Act has referred to this concept since 1991.

Integrated pest management represents an integral plant protection system on the holding, designed for the long-term, and pursues the objective of fulfilling ecological, economic and social requirements in equal measure by limiting the use of chemical plant protection products to the levels that are necessary in favour of non-chemical plant protection procedures. In addition, it requires careful deliberation processes for all decisions and sets high standards regarding the provision and use of technical information.

The Land of Upper Austria has already developed the Upper Austrian pesticides strategy based on plant protection product residues in groundwater and drinking water, which is to lead, through advice and voluntary renunciation of the use of certain active substances, by intensifying water monitoring, by regulations in protected and closed areas and through the encouragement of reassessment of individual substances in the context of authorisation at Federal level, to an improvement and/or remediation of certain areas.

The 2012-2016 Land Action Plan for Upper Austria specifically addresses risk mitigation and not flat-rate reductions in quantities. Flat-rate reductions in quantities of plant protection products sold do not take into account the properties of the substances and the risks associated with their use. For example, under a quantitative approach of this kind, the use of a higher-risk plant protection product, which is already effective in smaller quantities, would be considered more favourably than the use of a plant protection product with lower risk but having to be applied in larger quantities. The aim of the Land Action

Plan for Upper Austria is therefore not prohibition, but a sustainable approach to plant protection products.

One of the key aims of Directive 2009/128/EC, the Federal Plant Protection Product Act and the Upper Austrian Soil Conservation Act is improved initial and additional training and technical knowledge for both professional and private users of plant protection products, as well as public information and awareness-raising. This need for information and public participation was met for this Land Action Plan for Upper Austria in so far as, prior to adoption by the Upper Austrian Land Government, it was subject to a public participation procedure along the lines of § 38(e) of the Upper Austrian Environmental Protection Act (*Oö Umweltschutzgesetz*), during which, beyond the legally binding evaluation procedure when laws are enacted, the relevant wishes and suggestions of the citizens of Upper Austria were taken into account.

In the implementation and evaluation of the Land Action Plan, the Land of Upper Austria avails itself of the services of official experts and institutions of the Land, and especially the *Fachbeirat für Bodenschutz* (technical advisory board for soil conservation), the *Bodenschutzberatung* (soil conservation advisory service) and the *Wasserschutzberatung* (water advisory service).

2. Legal bases

1. The European Union has adopted new regulations governing plant protection products through two legal instruments:

- a) Regulation (EC) No 1107/2009 of the European Parliament and of the Council concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC, OJ L 309 of 24 November 2009, p. 1;
- b) Directive 2009/128/EC of the European Parliament and of the Council establishing a framework for Community action to achieve the sustainable use of pesticides, OJ L 309 of 24 November 2009, p. 71.

These new regulations create an entirely different legal framework for the implementing Acts of the Länder and the Federal Basic Plant Protection Act (*Pflanzenschutz-grundsatzgesetz*) of the Republic of Austria.

2. In response to this, in spring 2010, the Federal Government submitted a draft of an Act amending the Basic Plant Protection Act, BGBl. I No 114/1999, in the version of BGBl. I No 87/2005, for evaluation, which was confined to transposing the broad outlines of Directive 2009/128/EC on the framework for action on the use of pesticides.

3. In parallel to this, the Federal Ministry of Agriculture, Forestry, Environment and Water Management initiated the UNAPP project (= implementation of the National Action Plan on plant protection products) and also established two work packages in this context which involve Land competences:

Work package 2.1 under the UNAPP involved screening the existing Land legislation. The object of work package 2.2 was to draw up text modules for implementing Acts of the Länder under the chairmanship of a staff member of the Federal Ministry of Agriculture, Forestry, Environment and Water Management. The procedure followed for this was that, on the basis of the screened existing Land legislation, the measures needed to transpose the Directive were ascertained and the representatives of the individual Länder provided text modules for the various fields, which were discussed jointly and consolidated by the chairman. The transitional provisions for the use of plant protection products authorised under the old system were contributed by the Federal Ministry of Agriculture, Forestry, Environment and Water Management.

4. In parallel to work package 2.2, the procedure at the Federal Ministry of Agriculture, Forestry, Environment and Water Management was amended so that the concrete provisions are no longer regulated in a separate Basic Act, but the provisions of the Basic Plant Protection Act are divided according to specific subject-matter between a new 2011 Plant Protection Product Act (*Pflanzenschutzmittelgesetz 2011*) and a 2011 Plant Protection Act (*Pflanzenschutzgesetz 2011*).

The new 2011 Plant Protection Product Act, BGBl. I No 10/2011, was passed on 15 February 2011. It contains the following essential basic provisions for the implementing legislation of the Länder in §§ 13 and 14:

‘Use of plant protection products

§ 13. (Basic provision) (1) The Land legislation shall provide for measures to implement Directive 2009/128/EC, except biocidal products under the Biocidal Products Act (*Biozid-Produkte-Gesetz*), BGBl. I No 105/2000, considering the general principles of integrated pest management, the principles of good plant protection practice and the application of the precautionary principle, in particular with regard to

1. Use of plant protection products and cleaning of plant protection equipment,
2. Restrictions or bans on the use of plant protection products with regard to the risks associated with use under certain conditions or in certain areas,
3. Training for professional users and advisers for the use of plant protection products in connection with the introduction of a certification system including mutual recognition,
4. Public information and awareness-raising, in so far as it is not already provided for in other legislation,
5. Inspection of plant protection equipment already in use in connection with the introduction of a certification system,
6. Reduction in the risks and the quantity of plant protection products used,
7. Development and introduction of integrated pest management and alternative methods or procedures and
8. Indicators for monitoring the use of plant protection products.

(2) The Land legislation shall provide that reports are to be drawn up and forwarded to the Federal Ministry of Agriculture, Forestry, Environment and Water Management, with regard to

1. the implementation of the inspection measures under Article 8 of Directive 2009/128/EC,
2. the integrated pest management under Article 14 of Directive 2009/128/EC,
3. the results of the evaluations under Article 15 of Directive 2009/128/EC and

4. the controls of the use of plant protection products in accordance with the first subparagraph of Article 68 of Regulation (EC) No 1107/2009 by 31 May of the year following that to which the report relates.

(3) The Land legislation shall provide that – considering the grace period and § 3(2), point 2 – only the products entered in the plant protection product register may be applied. The use covers the consumption, application and spreading, as well as the use, storage, keeping in stock and transport within the business premises of plant protection products for the purposes of application.

(4) The Land legislation shall impose penalties for infringements of the provisions established in the Land implementing Acts.’

‘Land Action Plans and National Action Plan on plant protection products

§ 14. (Basic provision) (1) For the purposes of drawing up and consolidating a National Action Plan on plant protection products at Federal level and its amendments, Land legislation shall provide, in accordance with the specifications under Article 4 of Directive 2009/128/EC and considering § 2(2), that Land Action Plans are drawn up and also amended, where appropriate, in which, to reduce the risks and the effects of plant protection product use on human health and the environment, the baseline situation and the measures already introduced and to be carried out are surveyed and documented and targets are established by means of timetables. The Land Action Plans shall also describe the implementation of the measures listed in § 13(1).

(2) Land legislation shall provide that the Land Action Plans as referred to in paragraph 1 are to be forwarded to the Federal Ministry of Agriculture, Forestry, Environment and Water Management for the first time by 30 April 2012.

(3) Land legislation shall provide that Land Action Plans shall be reviewed and updated at least every five years and that the provisions on public participation in accordance with Article 2 of Directive 2003/35/EC providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation Council Directives 85/337/EEC and 96/61/EC, OJ L 156 of 25 June 2003, page 17, shall apply for drawing up or amending the Land Action Plans.’

5. The 2012 amendment of the Upper Austrian Soil Conservation Act, LGBl. No 44, serves to implement the basic legal provisions of the 2011 Plant Protection Product Act, BGBl. I No 10/2011, (Section 4, § 13) and Directive 2009/128/EC of the European Parliament and of the Council establishing a framework for Community action to achieve the sustainable use of pesticides, OJ L 309 of 24 November 2009, p. 71.

6. The 1991 Upper Austrian Soil Conservation Act, as amended, regulates the use of plant protection products in Section IV.

§ 16

Protective purpose, scope

(1) In accordance with the general principles of food and feed safety and for the protection of water, air, soil, plants and plant products, this Section shall contain the bases for a high level of safety for human and animal life and health, the interests of the environment and consumer interests in connection with the protection of plants against diseases and pests and in particular the use of plant protection products.

(2) This Section shall not be applicable to

1. the measures provided for in the 1975 Forest Act (*Forstgesetz 1975*), BGBl. No 440, as last amended by Federal Act BGBl. I No 55/2007, for the protection of woody vegetation; however, by way of derogation from this, the obligations under this Section shall apply for areas to which the provisions of the 1975 Forest Act apply in principle if such areas are immediately adjacent to areas used for agricultural or horticultural purposes and this is necessary in the interests of pest management;

2. protection against damage to plants by game.

§ 16a

Data communication

(1) In so far as Community legislation provides for the communication of data, and especially data collected as part of the official control, to the European Community or to other States, these shall be disclosed by the Land Government to the Federal Minister for Agriculture, Forestry, Environment and Water Management.

(2) The Land Government shall draw up reports and forward them to the Federal Ministry of Agriculture, Forestry, Environment and Water Management, with regard to

1. the implementation of the inspection measures under Article 8 of Directive 2009/128/EC,
2. the integrated pest management under Article 14 of Directive 2009/128/EC,
3. the results of the evaluations under Article 15 of Directive 2009/128/EC and
4. the controls of the use of plant protection products in accordance with the first subparagraph of Article 68 of Regulation (EC) No 1107/2009 by 31 May of the year following that to which the report relates.

(3) Personal data communicated in implementation of this Land Act may be processed by computer and forwarded to the Federal Office for Food Safety and Agrarmarkt Austria, where these data constitute a prerequisite for the exercise of the duties transferred by law to these institutions.

§ 16b

Provision of information

(1) The authority shall provide information in writing to third parties on the use of plant protection products. These third parties shall be entitled to request relevant information in writing. § 2(2) of the Upper Austrian Act on the obligation to provide information, data protection and the further use of information (*Oö. Auskunftspflicht-, Datenschutz- und Informationsweiterverwendungsgesetz*) shall be applicable.

(2) The authorities' obligation to provide information in writing to third parties shall include all information based on the existing record-keeping requirement on the use of plant protection products in accordance with § 18a. The obligation to provide information does not need to be met if the request for information on the use of plant protection products is obviously made frivolously.

(3) The information requested by third parties shall be provided in writing. In the case of refusal of information, § 5 of the Upper Austrian Act on the obligation to provide information, data protection and the further use of information shall be applicable.

§ 17

Certificate of competence

(1) Apart from in the case of the use of small quantities in the household sector, plant protection products may be used only by competent persons. This shall be demonstrated on request of an agency of the authority. (NB: the second sentence is applicable only from 26 November 2013.)

(2) Persons shall be considered competent within the meaning of paragraph 1 who are demonstrably in possession of the knowledge and skills needed for the proper use of plant protection products (certificate of competence). Proof of the necessary knowledge and skills shall be deemed to be

1. for professional users, use in agriculture and advisers in the use of plant protection products:
 - a) at least five years of practical work in agriculture at 1 January 1992, after completing general compulsory schooling in conjunction with successful completion of an additional training course of the Chamber of Agriculture for Upper Austria lasting at least eight hours,
 - b) successful completion of a training course of the Chamber of Agriculture for Upper Austria lasting at least 20 hours,
 - c) successful completion of other relevant technical training if the Chamber of Agriculture for Upper Austria confirms that this training was suitable to communicate the necessary technical knowledge and skills,
 - d) the successful completion of studies in agriculture or horticulture at an agricultural technical school, vocational training in the field of agriculture or in the fields of horticulture, field vegetables, wine-growing or fruit-growing, relevant industrial vocational training, at a higher education establishment for agriculture and forestry or university study in relevant subjects or
 - e) authorisation to conduct the trade of pest management;

2. for other users:
 - a) evidence of the necessary knowledge and skills in accordance with point 1,
 - b) successful completion of a training course of the Chamber of Agriculture for Upper Austria lasting at least 5 hours, or
 - c) successful completion of other relevant technical training if the Chamber of Agriculture for Upper Austria confirms that this training was suitable to communicate the necessary technical knowledge and skills,
- (3) The Chamber of Agriculture for Upper Austria shall communicate in its initial and additional training courses the content of Annex I to Directive 2009/128/EC.
- (4) A certificate of competence shall be issued by the Chamber of Agriculture for Upper Austria on request if the applicant provides evidence of the necessary knowledge and skills pursuant to paragraph 2, point 1, and no measure effective in law has been ordered against him or her in accordance with § 21(1), point 1.
- (5) The certificate of competence shall contain at least the following information or characteristics:
 1. the designation ‘certificate of competence’;
 2. the issuing body;
 3. name, date of birth and photo of the holder;
 4. date of issue and date of expiry of validity;
 5. the signature of the issuer.

The Land Government shall adopt detailed provisions by regulation, in particular concerning the appearance and characteristics of the certificate of competence.

- (6) Evidence of the necessary knowledge and skills in accordance with paragraph 2, point 1, shall be attached to the application for the issue of a certificate of competence and – in so far as the training necessary for this was completed more than three years before the application – evidence of completion of an additional training course in accordance with paragraph 8, which may not have been completed more than three years before the application.

(7) The certificate of competence shall be issued for a period of six years. It shall be reissued only if evidence is provided of completion of an additional training course in accordance with paragraph 8. This course may not have been completed more than three years before the application.

(8) Additional training courses shall be organised by the Chamber of Agriculture for Upper Austria to the extent necessary and, with a minimum length of five hours, shall communicate especially the essential new knowledge and skills for the use of plant protection products. Furthermore, the Chamber of Agriculture for Upper Austria may recognise additional training courses of other organisers that communicate equivalent information as additional training courses within the meaning of this provision.

(9) The district administrative authorities shall communicate to the Chamber of Agriculture for Upper Austria without delay the names and dates of birth of persons against whom measures effective in law in accordance with § 21(1), point 1, have been ordered. The Chamber of Agriculture for Upper Austria shall inform the locally competent district administrative authority on request of the data concerning holders of a certificate of competence.

(10) In the performance of official duties pursuant to this Land Act, the Chamber of Agriculture for Upper Austria shall act as plant protection organisation in accordance with § 10(2) of the 2002 Upper Austrian Plant Protection Act (*Oö. Pflanzenschutzgesetz 2002*) in the sphere of activity transferred; it shall thereby be bound by the instructions of the Land Government. The proceeds from the administrative fees charged by the Chamber of Agriculture for Upper Austria under the 1974 Upper Austrian Administrative Fees Act (*Oö. Verwaltungsabgabengesetz 1974*) shall be assigned to it as remuneration for its participation in the implementation.

§ 18

Use

(1) Plant protection products – taking into account their grace period – may be used only if they are recorded in the plant protection product register in accordance with § 4(2) of the 2011 Plant Protection Product Act (*Pflanzenschutzmittelgesetz 2011*), BGBl. I No 10. The

grace period for the use of plant protection products pursuant to Article 46 of Regulation (EC) No 1107/2009 shall be one year.

(2) If it is necessary for the protection of human life or health or the environment or to transpose the law of the European Union, the Land Government shall adopt detailed provisions by regulation on the use of plant protection products; in particular on a ban or the temporary, localised, objective or quantitative restriction of the use of plant protection products in areas as defined in Article 12(a) to (c) of Directive 2009/128/EC, taking into account the effects on health, biodiversity or the results of relevant risk assessments. In the case of authorisation of the use of plant protection products in these areas, attention shall be paid to their use being reduced as far as possible, low-risk plant protection products and biological control measures being given priority and suitable risk management measures being taken.

(3) Aerial spraying of plant protection products shall be prohibited.

(4) If on use plant protection products are spilt in a quantity or concentration which is harmful to human life or health or the environment, the party responsible shall immediately take appropriate measures for safe disposal of the plant protection product.

(5) Smoking, eating and drinking shall be prohibited while using plant protection products. If necessary, suitable respiratory protection and suitable protective clothing shall be used. After contact with plant protection products, unprotected skin shall be carefully cleaned.

(6) Adverse effects on neighbouring land shall be avoided when using plant protection products. If such effects nevertheless have manifestly occurred for the user, the owner or authorised user of the neighbouring land shall be notified of this without delay and informed of the relevant circumstances for assessment of the effect.

(7) §§ 25 and 26 shall apply *mutatis mutandis* if it is justifiably to be assumed that through the use of plant protection products the protective purposes under § 16(1) have been impaired.

§ 18a

Records

A spray logbook shall be kept of the consumption, application, spreading and use of plant protection products, apart from in the case of use of small quantities in the household

sector. In accordance with Article 67 of Regulation (EC) No 1107/2009, in any case the name and dose of the plant protection product applied, the time of application, the area and the crop where the plant protection product was used, shall be entered without delay. The spray logbook shall be kept separately for each calendar year and shall be retained for four years. The obligation to keep a spray logbook shall also be fulfilled through records kept on the basis of provisions of the market organisation or participation in environment-related support programmes of the Federal Government or the Land of Upper Austria, provided that these contain all the data listed in the second sentence.

§ 18b

Conservation and storage

(1) Plant protection products shall be conserved and stored in sealed, undamaged sales packaging. If this is not possible, the conservation and storage shall be undertaken in suitable sealed containers in which unintentional spillage of plant protection product and confusion with medicinal products and with food, feed or other innocuous products in everyday use are to be ruled out. The contents of these containers shall be labelled in the same way as the sales packaging; the package inserts shall be stored together with these containers.

(2) Plant protection products shall be stored or conserved in such a way that unauthorised persons, and especially children, cannot obtain access to the plant protection products.

(3) The storage areas for plant protection products which are stored for professional use shall be constructed in such a way in terms of location, size and construction materials as to prevent any unintentional spillage.

§ 18c

Plant protection equipment

(1) During the application of plant protection products, only plant protection equipment may be used which is designed and maintained in such a way that if used properly the plant protection product can be applied only at the level necessary for effective pest control. The maintenance shall also include regular calibrations and technical checks of the plant protection equipment used.

(2) The preparation of spray liquid and the filling of the tanks of plant protection equipment shall be undertaken in such a way that in the case of any spillage of spray liquid, seepage into the soil or release into surface waters or groundwater or in sewer systems is prevented.

(3) Plant protection equipment and equipment and containers used for the preparation and application of plant protection products shall be cleaned carefully after each use; the same shall apply for the necessary protective clothing and protective equipment. The cleaning water used in the process may not be released directly into surface waters or groundwater or allowed to drain into the soil at specific points.

§ 19

Inspection of the plant protection equipment

(1) To protect human life and health, non-harmful living organisms or the environment, the Land Government shall adopt detailed provisions by regulation on the regular inspection of the functioning of plant protection equipment by testing organisations (paragraph 2); in the process, the following in particular shall be regulated:

1. the conditions to be met for a person to be considered suitable to carry out the inspection and – according to the state of the art – the human and technical resources necessary for the inspection;
2. the intervals to be measured, in accordance with Article 8 of Directive 2009/128/EC, within which plant protection equipment in use must be presented for inspection;
3. type and scope of the testing measures to be carried out, including the parts and functions of the equipment to be inspected, especially with regard to compliance with the prescribed doses of application and the even distribution;
4. the minimum content of the written findings to be drawn up by the testing organisation on the inspection carried out and its results (inspection results) and appearance and characteristics of the sticker to be affixed by the testing organisation on the plant protection equipment inspected;

5. the charges to be paid for the inspection, which may not exceed the proportionate costs of the necessary effort plus an appropriate fee for the testing organisation.

(2) The authority shall, on application, appoint persons meeting the prerequisites and resources requirements within the meaning of paragraph 1, point 1, as testing organisations. The appointment shall be revoked by the authority if a deficiency contrary to proper inspection activity is not remedied, in spite of a call to do so, within an appropriate time limit to be set.

(3) A copy of the inspection results (paragraph 1, point 4) shall be transferred to the person presenting the plant protection equipment; a second copy shall be kept by the testing organisation for five years. The sticker (paragraph 1, point 4) may be affixed by the testing organisation only in the case of a positive result within the meaning of § 18c(1).

§ 20

Information obligation

Persons who deliver plants and plant products, which have been treated with plant protection products and which on account of their treatment are not intended for consumption by humans, livestock or pets or game (e.g. treated seed), shall verifiably inform the person accepting them of these circumstances before handing them over.

§ 21

Measures

(1) If there are grounds to suspect that plant protection products have not been used according to the intended purpose or as prescribed or other requirements under this Section or regulations based thereon have not been complied with, the authority – subject to an appropriate time limit to be set at the same time – shall order the necessary measures to remedy the deficiency or to preclude the risk, such as, in particular:

1. the ban or restriction on the use of plant protection products or the withdrawal of a certificate of competence in accordance with § 17;
2. the safe disposal and if necessary decontamination of contaminated plants, plant products or objects or contaminated soil;
3. the cleaning, maintenance and inspection of plant protection equipment;
4. the cleaning of constructions and means of transport;
5. the performance of operational measures, especially regarding use, documentation and self-monitoring;
6. other measures necessary to achieve the objectives as defined in §§ 1 and 16;
7. the immediate reporting obligation on the carrying out of the measures ordered.

(2) The supervisory bodies shall carry out the provisional seizure of plant protection products, including their packaging and labels, if an officially ordered measure in accordance with paragraph 1 is not followed up or not within the time limit set. In the case of provisional seizure, the supervisory bodies shall proceed as defined in § 10 of the 2011 Plant Protection Product Act, BGBl. I No 10.

(3) The supervisory bodies shall notify the provisional seizure to the district administrative authority without delay; within five weeks of the receipt of the notification and if the conditions under paragraph 2 are met, the latter shall order the seizure by administrative decision. Otherwise the provisional seizure shall cease to be in force. In the case of seizure, § 10 of the 2011 Plant Protection Product Act, BGBl. I No 10, shall apply *mutatis mutandis*.

(4) The district administrative authority shall declare the objects it has seized to be forfeit if the conditions provided for in § 16 of the 2011 Plant Protection Product Act, BGBl. I No 10, are met.

§ 21a

Action plan

(1) The Land Government shall adopt an Action Plan on the sustainable use of plant protection products. Considering the general principles of integrated pest management, the

principles of good plant protection practice and the application of the precautionary principle, the Action Plan shall

1. set quantitative objectives, targets, measures and timetables to reduce risks and impacts of plant protection product use on human health and the environment, which limit the use of chemical plant protection products to the minimum absolutely essential level,
2. encourage the development and introduction of integrated pest management and of alternative approaches or techniques, such as organic farming methods, especially the non-chemical measures of plant protection and the use of beneficial organisms in order to reduce dependency on the use of plant protection products, and
3. include the collection of existing and future use and reference data for indicators to monitor the use of plant protection products containing active substances of particular concern, especially if non-chemical alternatives are available.

(2) The targets under paragraph 1, points 1 and 2, shall take into account in particular worker protection, environmental protection, dealing with residues, the use of specific techniques in pest management and the use of plant protection products and techniques for specific crops.

(3) When establishing indicators in accordance with paragraph 1, point 3, particular attention shall be paid to plant protection products containing active substances listed in Annex I to Directive 91/414/EEC concerning the placing of plant protection products on the market, which at the time of renewal of approval in accordance with Article 80 of Regulation (EC) No 1107/2009 concerning the placing of plant protection products on the market, do not fulfil the criteria laid down in Annex II, point 3.6 (Impact on human health), point 3.7 (Fate and behaviour in the environment) and point 3.8 (Ecotoxicology) of Regulation (EC) No 1107/2009.

(4) On the basis of the indicators in accordance with paragraph 1, point 3, timetables and targets for the reduction of use of plant protection products shall be established in the Action Plan, in particular if the reduction of use of plant protection products constitutes an appropriate means to achieve risk reduction with regard to the established trends in the use of plant protection products, and especially those containing active substances or concerning crops, regions or practices requiring particular attention in order to achieve the objectives under paragraph 1, points 1 and 2. In this respect, the baseline situation shall be

described and the targets already achieved on the basis of other measures for the reduction of the risk or the use of plant protection products and proven practices shall be taken into account.

(5) The targets in accordance with paragraph 4 may be set as intermediate or final depending on their suitability to achieve the reduction of the use of chemically synthesised plant protection products or their risk, with all necessary measures to be exhausted to achieve the objectives referred to in paragraph 4.

(6) Furthermore, the Action Plan shall

1. describe which legislation has been adopted to transpose Directive 2009/128/EC and which other measures are to be taken to achieve the objectives referred to in paragraph 1, points 1 and 2,
2. take into account plans under other Union law or Land legislation on the use of plant protection products and
3. pay heed to plans based on Federal legislation, especially in the field of water law.

(7) The Action plan shall be reviewed at least every five years, taking into account the current requirements, and if necessary revised.

(8) On preparation and on each amendment to the Action Plan, a public consultation shall be held in accordance with the provisions of § 38e of the 1996 Upper Austrian Environmental Protection Act (*Oö. Umweltschutzgesetz 1996*). Furthermore, account shall be taken of

1. the health, social, economic and environmental impacts of the measures envisaged,
2. the specific ecological, climatic, geological, water management and agricultural conditions in Upper Austria, and

3. all relevant stakeholders.

(9) The Land Government shall communicate the Action Plan to the Federal Minister for Agriculture, Forestry, Environment and Water Management by 30 April 2012 at the latest. Likewise, key amendments as referred to in paragraph 7 shall be communicated without delay to the Federal Minister for Agriculture, Forestry, Environment and Water Management. If standard report formats are made available by the Federal Minister for this purpose, these shall be used as far as possible.

(10) No subjective rights vis-à-vis public authorities shall be founded by the Action Plan.

§ 21b

Information and awareness-raising

The Land, as body responsible for private rights, shall promote public information on the effects arising from the use of plant protection products, in particular regarding the risks and the potential acute and chronic effects arising from their use on human health, non-target organisms and the environment, and on the use of non-chemical alternatives.

7. Specific contents of the Directive (Articles 6, 9 and 10) have not been included in the Action Plan of the Land of Upper Austria on the sustainable use of plant protection products because they are already covered in full by existing Federal or Land legislation.

3. Objectives of the Land Action Plan of Upper Austria on the sustainable use of plant protection products

The aims of the measures defined below are as follows:

1. to secure and promote regional production and the supply of the population with high-quality food and other agricultural products (feed, industrial raw materials, etc.);

2. to maintain the fundamentally environmentally sound, high level in plant protection;
3. to mitigate additional risks, arising especially through the application of chemical plant protection products, to humans, animals and the environment and to reduce the intensity of application of these plant protection products to a reasonable level.
 - The number of applications of chemical plant protection products which exceed the levels that are necessary within the meaning of integrated pest management is to be reduced and
 - where possible, a significant proportion of chemical plant protection measures are to be replaced by non-chemical measures;
4. to further mitigate the risk caused by plant protection product residues in agricultural products and thereby to make an additional contribution to precautionary consumer protection;
5. to improve the conditions of use (application, storage, compliance with the authorisation requirements) by non-professional users, including by avoiding unnecessary applications of plant protection products;
6. to further mitigate the risk of pollution of soil, groundwater and surface waters by plant protection products and their relevant breakdown products and to support remediation.

During the implementation of the package of measures of this Action Plan of the Land of Upper Austria on the sustainable use of plant protection products, it is expected, according to expert evaluation, that risks potentially arising from the application of plant protection products to humans, animals and the environment will already be reduced during the first period or the basis for effective risk mitigation measures will be created. This excludes measures necessary to eradicate quarantine pests in accordance with Directive 2000/29/EC.

4. Measures under § 13(1) of the 2011 Plant Protection Product Act in conjunction with Articles 5 to 15 of Directive 2009/128/EC

4.1 Use of plant protection products and cleaning of plant protection equipment (Article 13 of the Directive)

4.1.1 Use of plant protection products

Status quo

The regulation of the use of plant protection products is assigned to the Länder under the Austrian Federal Constitution. The various Land Acts and regulations contain a large number of detailed provisions covering this field. Inspection of users is undertaken by the Upper Austrian Land authorities and institutions to which this task has been delegated.

In addition, there are currently:

2011 Upper Austrian pesticide strategy;

Leaflet '*Verlustarm Sprühen*' (low-loss spraying) of the Styrian commercial fruit-growers' association

Cross-compliance provisions on the use of plant protection products;

SVB (Social Insurance Institution for Farmers) and AUVA (General Accident Insurance Institution) brochures for the safe application of plant protection products;

ÖAIP (Austrian Working Group for Integrated Plant Protection) brochure '*Umweltgerechter Pflanzenschutz nur mit funktionierenden Geräten*' (environmentally sound pest management only with equipment that works);

Brochure '*Sachgerechtes Befüllen und Reinigen von Pflanzenschutzgeräten*' (proper filling and cleaning of plant protection equipment) of the Chamber of Agriculture for Upper Austria.

Measure

The Land of Upper Austria will work towards devising from 2014 harmonised dosing and application systems for the application of plant protection products in various crops (including organic farming).

- Sub-measure in arable farming

The Land of Upper Austria commits to the promotion of low-drift application techniques, e.g. air-assisted nozzles.

- Sub-measure in vertical crops

The Land of Upper Austria commits to the promotion of loss-minimising application, e.g. 'low-loss spraying' in fruit-growing, tunnel spray machines in vineyards.

Measure

Increase worker and user protection and also consumer protection in floriculture (glasshouse, cold nebulisation).

4.1.2 Filling and cleaning of plant protection equipment

Status quo

As for use, there are detailed regulations in this field in the Land Acts to ensure proper cleaning.

In addition, there is currently:

the '*Handbuch für den Sachkundenachweis*' (manual for the certificate of competence) issued by the Austrian Working Group for Integrated Plant Protection (ÖAIP), on which, alongside the Federal Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW), the Austrian Agency for Health and Food Safety (AGES), the Land Chambers of Agriculture, plant protection product firms, plant protection equipment manufacturers and farmers are also represented;

cross-compliance provisions on the filling and cleaning of plant protection equipment;

Chamber of Agriculture for Upper Austria (LK OÖ) information leaflet on the filling and cleaning of plant protection equipment.

Measures

The Land of Upper Austria recommends the fitting of hand-washing and clear water tanks to clean the plant protection equipment in the field and the fitment of continuous internal cleaning systems for plant protection equipment already in use. This allows possible impurities for succeeding crops and chemical reactions in the tank to be avoided.

The Land of Upper Austria is issuing a directive on proper filling and cleaning of plant protection equipment and is introducing coordinated measures with the Chamber of Agriculture for Upper Austria for information and advice on this subject.

The Land of Upper Austria is considering the targeted promotion of add-on kits for clear water tanks and internal cleaning nozzles to minimise the environmental impact.

4.2 Restrictions or bans on the use of plant protection products with regard to risks associated with use under certain conditions or in certain areas (Articles 11 and 12 of the Directive)

Status quo

In implementation of § 13 of the 2011 Plant Protection Product Act, the Länder have to provide in their implementing Acts that the Land Government must adopt restrictions or bans (by means of protected area regulations) on the use of plant protection products with regard to the risks associated with use under certain conditions in certain areas. This was undertaken in the 2012 amendment of the Upper Austrian Soil Conservation Act. Possible restrictions on use relating to the use in the catchment area of water supply systems can also be considered.

The existing legal framework also includes:

1. Water Act (WRG) – Handling in protected and closed areas, general conditions for the designation of observation areas and areas for prospective measures

Under § 34(1) WRG, to protect water supply systems from pollution or from impairment of their capacity, the water authorities may impose special orders by decision concerning the cultivation or other use of land and corresponding protected areas.

Under § 34(2) WRG, to protect the general water supply, the Governor must provide by regulation that in part of the catchment area, measures which may jeopardise the water quality, capacity or level are to be notified to the water authority or require authorisation or are permissible only in a certain way. Under § 35 WRG, this is also possible to secure a future drinking water and industrial water supply.

Under § 33f WRG, the Governor, if the thresholds are exceeded a certain number of times in a body of groundwater, must designate observation areas and, where the legal conditions are met, establish areas for measures to be taken. These instruments take effect only if groundwater pollution has been established.

2. The technical bases for designating protected and closed areas [*ÖVGW: Richtlinie W72 'Schutz- und Schongebiete; Land Oö: Trinkwasser-Schutzgebiete – Leitlinie für Oberösterreich*] start from proper use of authorised plant protection products. Furthermore, provision has been made for prohibitions of use for plant protection products which according to labelling are prohibited or not recommended in water protection areas and/or result in proven residues of active substances in groundwater. These contents are to be given the concrete form of protection orders in the decision on the designation as a protected area. Protected and closed areas in each case cover only parts of the catchment areas of water supply systems.

3. The National Water Management Plan (March 2010) was adopted in implementation of the Water Framework Directive. It includes the inventory (current water status analysis), the summary of the monitoring results and the generally binding programmes of measures to achieve good water status or good potential. These may include measures (remediation measures), measures to avoid deterioration of the existing status (maintenance measures) and precautionary measures.

The topic of plant protection products is also dealt with in the National Water Management Plan. The effects on surface waters and groundwater are described and existing measures, such as, for example, the adaptation of protected and closed areas or the Austrian Programme for Environmentally Sound Agriculture (ÖPUL) are summarised, as well as more far-reaching measures concerning groundwater, such as, for example, the Groundwater Status Monitoring Regulation (*Grundwasserzustandsüberwachungsverordnung* (GZÜV), special measuring programmes or the research project ‘GeoPEARL Austria’ with the aim of supporting the planning of measures to avoid potential pollution of groundwater by pesticides or their metabolites. Furthermore, it is pointed out that, in implementation of Directive 2009/128/EC, Land legislation on the use of plant protection products is established on the basis of the Basic Plant Protection Act to protect the aquatic environment and the drinking water supply and this serves to support the specifications of the Water Framework Directive.

No further measures for surface waters are provided for in the first National Water Management Plan regarding diffuse sources.

In addition, there are currently:

2011 Upper Austrian pesticide strategy

ÖPUL has existed since 1995. It contains special instructions for the use of plant protection products, for which partial financial compensation is granted to cover the extra cost of their implementation.

Measures

The Land of Upper Austria, by virtue of the pesticide strategy, is currently already adopting bans on use based on water law of the respective problematic plant protection active substances in the catchment area of stressed water supply systems (protected/closed areas).

The Land of Upper Austria adopts temporary, localised and objective restrictions on use where the conditions are met, in implementation of § 13 of the 2011 Plant Protection Product Act and § 18(2) of the Upper Austrian Soil Conservation Act. In concrete terms, the bases for regulation of restrictions on use in the areas known to be under stress of the

groundwater bodies Unterer Ennstal and Traun-Enns-Platte are established and where appropriate implemented in regulations.

The Land of Upper Austria supports *ad hoc* advice by independent experts (e.g. Upper Austrian water and soil conservation advisory service) in areas under stress.

4.3 Training for professional users and advisers for the use of plant protection products in connection with the introduction of a certification system including mutual recognition (Article 5 of the Directive)

4.3.1 Ensuring user expertise

Status quo

There were already regulations in Upper Austria on conditions to achieve expertise in the use of plant protection products. At present, the user can meet the conditions of expertise by means of certain vocational training or competence courses.

Measures

The Land of Upper Austria introduces measures to ensure the expertise, coordinated with the Chamber of Agriculture for Upper Austria, other educational establishments and private and official plant protection advisers.

The Land of Upper Austria supports *ad hoc* advice by independent experts in areas with measuring points under stress and water supply systems under stress.

The Land of Upper Austria adapts the curricula of the agricultural technical and vocational colleges and other existing initial and additional training concepts to the requirements of Annex I to Directive 2009/128/EC and develops these further.

The Land of Upper Austria ensures an increase in the number of training events and thereby enhances the knowledge of users.

The Land of Upper Austria transfers the existing regulations on expertise to the new certification system in accordance with Directive 2009/128/EC. The certification system is to be introduced by 26 November 2013 at the latest. From 26 November 2015, only professional users may still use plant protection products authorised for professional users.

The Land of Upper Austria calls on the Federal Government to transpose the dual authorisation system on time so that non-competent persons no longer have access to hazardous plant protection products.

4.3.2 Boosting of plant protection advice

Status quo

There are currently plant protection advisers in Upper Austria operating on behalf of the Land in the Chamber of Agriculture for Upper Austria. In addition to advice on application and prevention, they are also involved in initial and additional training.

Measures

The Land of Upper Austria provides decisive support for the content of the Land Action Plan by building up and extending the official advice.

The Land of Upper Austria prepares information materials in cooperation with the BMLFUW, AGES and the other Länder, and ensures efficient dissemination by means of modern media.

The Land of Upper Austria advocates boosting of advice which is independent of economic interests, thereby sustainably ensuring the economic success of agricultural production and the security of supply of high-quality food on the one hand and the protection of humans, animals and the environment on the other. In this connection, the Land also orientates advice on soil conservation, the Upper Austrian advice on water conservation (which are combined according to the Upper Austrian reform project) and the current experimental programmes on soil and water conservation towards these objectives.

The Land of Upper Austria supports the establishment and development of forecasting and warning systems with precise timing and thereby ecological optimisation of plant protection measures.

4.3.3 Additional training events on the use of plant protection products

Status quo

In the Land of Upper Austria, there are ongoing events in this field which relate to specific crops (technical meetings).

Measure

The Land of Upper Austria ensures that the educational measures for professional users are also available to all interested parties.

The Land of Upper Austria ensures that advisers, trade and machinery pool are also informed of pest management measures to protect water and especially on the potential risk to groundwater of certain problematic active substances and metabolites.

4.4 Public information and awareness-raising, in so far as it is not already provided for in other legislation (Article 7 of the Directive)

4.4.1 Developing an Internet portal for plant protection

Status quo

In Austria, there is a very high level of public awareness concerning the use of plant protection products.

Measures

The Land of Upper Austria, in cooperation with the other Länder, supports the establishment and maintenance of a plant protection Internet portal for effective communication in terms of quality and quantity of technical information and generally comprehensible information for non-professional users and other interested parties. This is to be built up on existing, established information sources for individual user groups, such as the homepage of AGES, the ÖAIP, the Agranet of the Chambers of Agriculture, the Infoportal of the Sozialversicherungsanstalt der Bauern (Social Insurance Institution for Farmers – SVB), the guidelines for golf courses, community newsletters and magazines of allotment clubs, such as '*Kleingärtner*'.

The Land of Upper Austria supports events to boost understanding of the need for plant protection measures (open days, presentations, etc.).

The Land of Upper Austria ensures that the information is objective and well-founded.

4.4.2 Information and training for non-professional users

Status quo

For non-professional users too, comprehensive training is an important building block for ecofriendly use of pesticides.

In Upper Austria, there were already compulsory training measures in the allotment sector; in all Länder, such training is available to the general public.

Measure

The Land of Upper Austria supports the information for non-professional users through leaflets, events, such as for example in fruit-grower, winegrower and horticultural associations, in allotment clubs, ‘*Siedlervereinen*’, at garden shows and in the sports grounds sector (ÖFB, ASKÖ, UNION, etc.).

4.5 Inspection of plant protection equipment already in use in connection with the introduction of a certification system (Article 8 of the Directive)

4.5.1 Further development of plant protection equipment and introduction of new technologies in practice

Status quo

At present, for plant protection equipment in use the 2009 ÖAIP guidelines ‘*Nur mit funktionierenden Pflanzenschutzgeräten*’ (Only with plant protection equipment that works), for new plant protection equipment the provisions of the Machinery Directive (2010 Machinery Safety Regulation (*Maschinen-Sicherheitsverordnung 2010*)) and for both categories of equipment the BMLFUW Decree of 2001 on equipment technology to reduce drift are applicable. Under ÖPUL measures, the regular inspection of plant protection equipment in use is mandatory.

Measure

The Land of Upper Austria supports the practical introduction of new plant protection equipment and new technologies, which contribute to reducing loss (drift and dripping losses) and to economic and efficient application of plant protection products. The regular inspection of trailed, mounted and self-propelled plant protection equipment in use has to

be implemented by 26 November 2016, with due regard to the technical standards set out in Annex II to Directive 2009/128/EC. There are plans to coordinate the applicable provisions with the other Länder.

4.6 Reduction in the risks and the quantity of plant protection products used (Article 12 of the Directive)

4.6.1 Reduction in the application of plant protection products

Status quo

The structure of the farming system in Austria, consisting of small farms by European standards, gives a patchwork appearance to the cultivated landscape. As a result, optimum adaptation of the concrete plant protection measures is possible.

Measures

The Land of Upper Austria advocates maintaining the differentiated agricultural structures. The Land of Upper Austria supports the use of environmentally-friendly plant protection products that spare beneficial organisms in the context of integrated pest management, as this can lead to a reduction in pest management measures.

The Land of Upper Austria advocates exhausting the saving potential in the non-agricultural sector (e.g. golf courses and sports grounds).

The Land of Upper Austria advocates the establishment of voluntary renunciation of plant protection products posing a high threat to groundwater in existing promotion programmes (ÖPUL, etc.) (Upper Austrian pesticide strategy).

The Land of Upper Austria supports the development of crop-specific strategies to reduce the use of plant protection products and/or to find alternatives to active substances with high groundwater pollution potential, especially bentazone, chloridazon, terbutylazin, metolachlor and metazachlor, since if they are discontinued, the cultivation of oleaginous and protein crops would be jeopardised.

The Land of Upper Austria calls on the Federal Government, on the basis of the current EU legal position (CLP Regulation), to develop practicable approaches in the form of risk

classes allowing the implementation of quantitative reductions of hazardous plant protection products.

The Land of Upper Austria supports measures to reduce plant protection products (especially in areas with bans) and/or on localised eradication.

4.6.2 Hot Spot Management

Status quo

To eradicate the corn root worm in established areas and the neighbouring zones of natural spread, crop rotation must be organised in such a way that maize is cultivated only at most in three years in succession. The sowing of pre-basic seed and basic seed for seed maize production is exempted from this. Improper handling of seed treated with insecticide or improper distribution of the seed may harm bee populations.

Measure

The Land of Upper Austria is intensifying the inspections targeting the cultivation of maize in the area around affected beehives.

The Land commits to and supports measures for a resistance-reducing plant protection product strategy (change in active substance, broad range of plant protection products, appropriate crop rotations and crops). Following pan-Austrian evaluation of the results and/or effects of the 2012 Upper Austrian amendment of the Corn Root Worm Regulation, crop rotation arrangements are to be adapted accordingly.

Status quo

Weeds, such as ragweed, for example, represent a major problem for allergy sufferers not only in Upper Austria. Effective plant protection products against these weeds should not be used in closed areas.

Measure

The Land of Upper Austria has assigned the task to the health and environmental authorities of drawing up effective environmentally-compatible eradication methods for the protection of the population (consumers and producers).

Status quo

In spite of explicit regulation in the § 18c(3) of the Upper Austrian Soil Conservation Act, incorrect filling and cleaning of plant protection equipment may lead to localised groundwater pollution.

2011 Upper Austrian Pesticide strategy.

Measure

The Land of Upper Austria recommends the establishment of suitable handling areas and the development of strategies to avoid localised pollution.

Status quo

Intensive plant protection measures are used on golf courses to maintain the greens.

Measure

The Land of Upper Austria carries out regular inspections of the plant protection product records at golf courses.

Status quo

The groundwater is enriched by active substances contained in plant protection products and relevant metabolites. Indications of the risk potential through the use of plant protection products in specific locations and for specific crops can be inferred from the Geoparl project. When assessing the relevance of metabolites, international research results – especially those from Germany – are taken into account.

Measure

If the conditions are met, in implementation of § 13 of the 2011 Plant Protection Product Act and of § 18(2) of the Upper Austrian Soil Conservation Act, the Land of Upper Austria adopts temporary, localised and objective restrictions on use.

The Land of Upper Austria supports farmers in the choice of suitable crops and crop rotations.

The Land of Upper Austria supports users in the choice of suitable plant protection products for the location.

The Land of Upper Austria advocates minimisation of the use of bentazone through alternative strategies in the cultivation of soya and – in so far as technically possible – through an organic soya offensive.

The Land of Upper Austria is intensifying water monitoring in accordance with § 130 WRG.

The Land of Upper Austria advocates a ban on plant protection products posing a high risk to water in the future ÖPUL.

The Land of Upper Austria calls on the Federal Government, in the context of its competence, to check the approvals of active substances bentazone, chloridazon, terbutylazin, metolachlor, metazachlor and glyphosphate and/or the neonicotinoid group of active substances for improvement of the risk-reducing measures and/or in the case of the existence of new scientific findings, to pronounce possible restrictions or even bans.

4.7 Development and introduction of integrated pest management and alternative methods or procedures (Article 14 of the Directive)

4.7.1 Promotion of integrated pest management procedures and organic farming under promotion programmes

Status quo

According to § 21a(1), point 2, of the 1991 Upper Austrian Soil Conservation Act, the development and introduction of integrated pest management and of alternative approaches or techniques, such as organic farming methods, especially non-chemical pest management measures and the use of beneficial organisms, are to be promoted in order to reduce dependency on the use of plant protection products.

In Austria, the promotion of integrated pest management and organic farming takes place under ÖPUL 2007-2013. In Upper Austria, soil tillage equipment especially for soil-conserving tillage and mechanical weed control equipment can be purchased new with agricultural investment credits.

Measures

The Land of Upper Austria advocates the provision of sufficient financial resources for the new programme 2014-2020 and gives due consideration to integrated pest management procedures and organic farming in promotion and research programmes.

4.7.2 Drawing up of crop and sector-specific guidelines for integrated pest management

Status quo

At present there are the IP guidelines under ÖPUL in Austria, which are designed to encourage voluntary participation by professional users. The attempt is made to offset the anticipated reduced yields or management difficulties by a fixed compensatory payment.

Measures

The Land of Upper Austria advocates the continuation of these programmes, subject to maintaining competitiveness (compensation for lower yields) and supports this through further training and advice.

The Land of Upper Austria, together with the other Länder and the Federal agencies, is continuing the technical development of the current IP guidelines, as defined in Annex III to the Directive, for all crops and in this connection ensures, for specific types of crops, an inventory and update of the number and type of Federal Government-approved plant protection products per 'target organism', the optimum forms of application and alternatives without use of plant protection products. The aim is to achieve a risk-based ranking of the forms of application of plant protection products as a basis for integrated pest management in order to achieve the most environmentally sound use possible.

4.7.3 Establishment of untreated control areas (spraying windows)

Status quo

No general evaluation of plant protection measures is in progress at present.

Measure

The Land of Upper Austria recommends the establishment of ‘spraying windows’, when harmful organisms occur in certain crops, to check the plant protection measure (identification as control area).

The Land of Upper Austria uses the findings obtained from this to optimise advice.

4.8 Indicators for monitoring the use of plant protection products (Article 15 of the Directive)

4.8.1 Collection of statistical data on the use of plant protection products

Status quo

Under Regulation (EC) No 1185/2009 concerning statistics on pesticides, data on both placing on the market and use of pesticides are to be collected and detailed up to the level of the active substances, but no corresponding Federal implementing regulation has yet been adopted.

On the basis of Regulation (EC) No 1107/2009, keeping records of plant protection products is compulsory for professional users. These must in any case contain the name of the plant protection product, the time and the dose of application, the area and the crop where the plant protection product was used.

Provision is also made for such records to be kept in § 18a of the 2012 amendment of the Upper Austrian Soil Conservation Act. In addition, records were already to be kept under IP on the application of plant protection products.

Furthermore, according to the Plant Product Statistics Regulation (*Verordnung Statistik der pflanzlichen Erzeugnisse*), BGBl. II No 83/2012, surveys on crops on arable land, for permanent crops and utilised agricultural areas, are necessary, such as for example, for arable land, harvested area, harvest size, yield.

Measures

The Land of Upper Austria, in coordination with the other Länder, is developing standardised documentation (records according to crops, field size, treated area, quantity applied/concentration, plant protection product, time of application), which is routinely

requested during inspections by the authorities and ensures their systematic recording, analysis and availability for management authorities, advisers and the public.

The Land of Upper Austria carries out representative surveys at regular intervals according to agreed specifications (main/subsidiary business, ratio between types of crops, size of holding, livestock) of the pest management measures taken and interprets the results.

The Land of Upper Austria ascertains from the Federal Office for Food Safety (BAES) the quantities of active substances contained in plant protection products (quantities of registered products) placed on the market in Austria and the quantities of plant protection products returned which may no longer be placed on the market, for proper disposal as defined in § 3(3) of the 2011 Plant Protection Product Act (for example because no longer authorised or grace period has expired). The Land of Upper Austria will work towards it also being possible to analyse these data in concrete terms for Upper Austria.

The Land of Upper Austria ascertains from the Chamber of Agriculture for Upper Austria, as competent authority pursuant to § 17(4) and (5) of the Upper Austrian Soil Conservation Act, the number of persons who on a specific reference date demonstrably possess the knowledge and skills necessary for the proper use of plant protection products (certificate of competence), the number or proportion of expiring certificates of competence on a specific reference date and the number of other users with certificate of competence on a specific reference date.

The Land of Upper Austria ascertains the percentage areas under organic cultivation in Upper Austria, the number of ÖPUL participants (with sustainable use of plant protection products) in relation to non-participants and the percentages assigned to each of these two groups of the utilised agricultural areas in Upper Austria as a trend over the years.

After the entry into force of the regulation on the regular inspection of the functioning of plant protection equipment to be adopted in accordance with § 19(1) of the Upper Austrian Soil Conservation Act, the Land of Upper Austria will ascertain the number of new plant protection equipment and add-on kits purchased per year and the number of plant protection equipment subject to regular calibrations and technical checks per year.

Status quo

The expenditure on plant protection products is also included in the annual raw data collection by the Landwirtschaftliche Buchführungsgesellschaft (LBG) for the preparation of the Green Report.

Measure

On the basis of the data collected, the Land of Upper Austria observes the change in the use of plant protection products in individual crops and organises spot checks where abnormalities arise.

4.8.2 Monitoring of plant protection products in the environment

Status quo

The Land took part in the ‘Melissa’ research project carried out by the AGES in 2009-2011 (investigations into the occurrence of bee mortality in areas in Austria where maize and oilseed rape are cultivated and possible links with bee diseases and the use of plant protection products). On the basis of the findings from this, bee mortality through plant protection products could be reduced considerably and the proportion of treated seed for grain maize reduced from 22% in 2009 to 5% in 2012.

The Land of Upper Austria ensures the protection and remediation of surface waters and the comprehensive protection of groundwater as drinking water.

Measure

Following the end of the ‘Melissa’ research project, the monitoring continued by AGES ‘Bee protection 2012’ is very much welcomed by the Land of Upper Austria, which also makes a corresponding contribution to the costs.

As an indicator for the effects of the use of plant protection products on water as a protected resource, the Land of Upper Austria uses the results of the measuring programme of the Water Status Monitoring Regulation (*Gewässerzustandsüberwachungsverordnung*) (GZÜV, covers surface water and groundwater and is adapted rapidly to new problem substances in the case of new scientific findings), of surveys of domestic wells and drinking water and also the number and type of derogations for plant protection products at drinking water supply systems.

The Land of Upper Austria ascertains any cases of contamination of food from Upper Austria with residues of plant protection products from the Food Safety and Veterinary Department or the AGES.

Furthermore, the Land of Upper Austria uses as indicators results of water monitoring and other supervisory activities.

The Land of Upper Austria uses as indicators the nature conservation database, the nature conservation book, the natural area mapping (with the mapping of biotopes and habitats) by way of the **Geografische Naturschutz Informationssystem – GENISYS** and, as soon as available, the high nature value farmland indicator pursuant to Regulation (EC) No 1698/2005 in order to be able to take into account the protected areas and the habitats recorded in planning and advice.

5. Public participation

According to § 21a(8), on preparation and on each amendment of the Action Plan, a public consultation must be held in accordance with the provisions of § 38e of the 1996 Upper Austrian Environmental Protection Act. Accordingly, drafts are to be made available to the public by the Land Government and made generally accessible by electronic media. The public disclosure is to be announced in two daily newspapers with wide circulation and in electronic form. The public is to be given the opportunity to make written comments within six weeks of public disclosure. The comments are to be examined collectively. Documentation is to be drawn up on the consideration of these comments and made available to the public. The announcement must state the place, time of the disclosure (disclosure period) and the office hours during which the documents can be inspected, the publication reference in electronic media and the indication that any person is at liberty to submit comments in writing to the authority within the disclosure period. The authority must keep the Action Plan ready for public inspection and enable dissemination via electronic media. This information is to be presented clearly and comprehensibly through accompanying summary presentations of the key points. No subjective rights are founded vis-à-vis public authorities through the disclosure procedure.

6. Summary

The Land of Upper Austria is concerned to limit the use of chemical plant protection products to the minimum levels that are necessary under the legislation in favour of non-chemical plant protection procedures.

This Action Plan contains measures which commit the Land of Upper Austria itself to making a contribution to the implementation of this project.

There are measures of both a private-sector nature, such as the granting of aid and the holding of training courses, and a public-sector nature, such as the adoption of regulations.

When formulating the individual measures, the attempt has been made to use generally comprehensible expressions and to keep the comments as brief as possible, which at times has been at the expense of technical precision.

Burgenland Land Action Plan 2012

on the sustainable use of plant protection products

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1. Introduction

The present Burgenland Land Action Plan represents a declaration of intent and formulates objectives for the sustainable use of pesticides (= plant protection products + biocides) within a period of 5 years. On expiry of this period, an evaluation will take place and if necessary an adaptation to the current level of knowledge. No legal claim to financial support of projects of any kind by the Land of Burgenland can be inferred from this.

The implementation of pest management and the placing on the market and use of plant protection products are regulated comprehensively in Austria and at a high level of protection for humans, animals and the environment. On the basis of the provisions on competence of the Austrian Federal Constitution, the Federal Government is competent for the placing on the market of plant protection products and the framework legislation in the field of pest management and plant protection products, whereas it is the responsibility of the Länder to adopt implementing Acts for the use of plant protection products.

The comprehensive specific legislation on pest management was established in order to protect crops against harmful organisms and at the same time to avoid risks potentially arising from the use of plant protection products or from other pest management measures, to human and animal health and the environment.

Directive 91/414/EEC, the predecessor to the current Directive 2009/128/EC, already referred to the principles of good plant protection practice and provided that, whenever possible, the principles of integrated pest control should be applied. The basic provisions of §§ 13 and 14 of the new 2011 Plant Protection Product Act (*Pflanzenschutzmittelgesetz 2011*), BGBl. I No 10/2011, require the implementing legislation of the Länder, with regard to the measures to transpose Directive 2009/128/EC, in particular when drawing up Land Action Plans, to take into account the general principles of integrated pest management, the principles of good plant protection practice and the application of the precautionary principle.

The Land of Burgenland has carried out this task through the 2012 Burgenland Plant Protection Product Act (*Burgenländisches Pflanzenschutzmittelgesetz 2012*), LGBl. No 46/2012. On the basis of the distribution of competence, the Land Action Plan for

Burgenland on the sustainable use of plant protection products could thereby be drafted. The Federal Government is competent for drawing up the National Action Plan on Pesticides (= plant protection products + biocides).

Integrated pest management is the umbrella concept worldwide for sustainable use of plant protection products in agriculture. Already in the Code of Conduct adopted by the Food and Agriculture Organisation of the United Nations in 1985 (FAO Code of Conduct on the Distribution and Use of Pesticides), integrated pest management is named as a key element of sustainable use of plant protection products.

In 1995, the Burgenland Plant Protection Product Act too already referred to this concept. Integrated pest management represents an integral plant protection system on the holding, designed for the long-term, and pursues the objective of fulfilling ecological, economic and social requirements in equal measure by limiting the use of chemical plant protection products to the levels that are necessary in favour of non-chemical plant protection procedures. In addition, it requires careful deliberation processes for all decisions and sets high standards regarding the provision and use of technical information.

The 2012-2016 Land Action Plan for Burgenland specifically addresses risk mitigation and not non-specific reductions in quantities. Flat-rate reductions in quantities of plant protection products sold do not take into account the properties of the substances and the risks associated with their use. For example, under a quantitative approach of this kind, the use of a higher-risk plant protection product, which already has a negative effect in smaller quantities, would be considered more favourably than the use of a plant protection product with lower risk but having to be applied in larger quantities. The aim of the Land Action Plan for Burgenland is therefore not prohibition, but a sustainable approach to plant protection products.

One of the key aims of Directive 2009/128/EC, the Federal Plant Protection Product Act and the 2012 Burgenland Plant Protection Product Act is improved initial and additional training and technical knowledge for both professional and private users of plant protection products, as well as public information and awareness-raising. This need for information and public participation is met by the Land Action Plan for Burgenland in so far as it was subject to a public participation procedure pursuant to § 15(8) of the 2012 Burgenland

Plant Protection Product Act (Bgld. PSMG 2012), during which the relevant wishes and suggestions of the citizens of Burgenland were taken into account.

2. Legal bases

1. The European Union has adopted new regulations governing plant protection products through two legal instruments:

- a) Regulation (EC) No 1107/2009 of the European Parliament and of the Council concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC, OJ L 309 of 24 November 2009, p. 1
- b) Directive 2009/128/EC of the European Parliament and of the Council establishing a framework for Community action to achieve the sustainable use of pesticides, OJ L 309 of 24 November 2009, p. 71.

These new regulations create an entirely different legal framework for the implementing Acts of the Länder and the Federal Basic Plant Protection Act (*Pflanzenschutzgrundsatzgesetz*).

2. In response to this, the Federal Government adopted the 2010 Agricultural Law Amendment Act (*Agrarrechtsänderungsgesetz*), BGBl. I No 10/2011, which is confined to transposing, *inter alia*, the broad outlines of Directive 2009/128/EC on the framework for action on the use of pesticides. At the same time, this Act combines provisions of the Basic Plant Protection Act and the Plant Protection Product Act (*Pflanzenschutzmittelgesetz*) in one Act.

3. Furthermore, the Federal Ministry of Agriculture, Forestry, Environment and Water Management initiated the UNAPP project (= implementation of the National Action Plan on plant protection products) and also established two work packages in this context which involve Land competences:

Work package 2.1 under the UNAPP involved screening the existing Land legislation. The object of work package 2.2 was to draw up text modules for implementing Acts of the Länder under the chairmanship of a staff member of the Federal Ministry of Agriculture, Forestry, Environment and Water Management. The procedure followed for this was that, on the basis of the screened existing Land legislation, the measures needed to transpose the

Directive were ascertained and the representatives of the individual Länder drew up text modules for the various fields.

4. The new 2011 Plant Protection Product Act, BGBl. I No 10/2011, was passed on 15 February 2011. It contains the following essential basic provisions for the implementing legislation of the Länder in §§ 13 and 14:

‘Use of plant protection products § 13. (Basic provision)

(1) The Land legislation shall provide for measures to implement Directive 2009/128/EC, except biocidal products under the Biocidal Products Act (*Biozid-Produkte-Gesetz*), BGBl. I No 105/2000, considering the general principles of integrated pest management, the principles of good plant protection practice and the application of the precautionary principle, in particular with regard to

1. Use of plant protection products and cleaning of plant protection equipment,
2. Restrictions or bans on the use of plant protection products with regard to the risks associated with use under certain conditions or in certain areas,
3. Training for professional users and advisers for the use of plant protection products in connection with the introduction of a certification system including mutual recognition,
4. Public information and awareness-raising, in so far as it is not already provided for in other legislation,
5. Inspection of plant protection equipment already in use in connection with the introduction of a certification system,
6. Reduction in the risks and the quantity of plant protection products used,
7. Development and introduction of integrated pest management and alternative methods or procedures and
8. Indicators for monitoring the use of plant protection products.

(2) The Land legislation shall provide that reports are to be drawn up and forwarded to the Federal Ministry of Agriculture, Forestry, Environment and Water Management, with regard to

1. the implementation of the inspection measures under Article 8 of Directive 2009/128/EC,
2. the integrated pest management under Article 14 of Directive 2009/128/EC,

3. the results of the evaluations under Article 15 of Directive 2009/128/EC and
 4. the controls of the use of plant protection products in accordance with the first subparagraph of Article 68 of Regulation (EC) No 1107/2009 by 31 May of the year following that to which the report relates.
- (3) The Land legislation shall provide that – considering the grace period and § 3(2), point 2 – only the products entered in the plant protection product register may be applied. The use covers the consumption, application and spreading, as well as the use, storage, keeping in stock and transport within the business premises of plant protection products for the purposes of application.
- (4) The Land legislation shall impose penalties for infringements of the provisions established in the Land implementing Acts.

Land Action Plans and National Action Plan on plant protection products § 14. (Basic provision)

(1) For the purposes of drawing up and consolidating a National Action Plan on plant protection products at Federal level and its amendments, Land legislation shall provide, in accordance with the specifications under Article 4 of Directive 2009/128/EC and considering § 2(2), that Land Action Plans are drawn up and also amended, where appropriate, in which, to reduce the risks and the effects of plant protection product use on human health and the environment, the baseline situation and the measures already introduced and to be carried out are surveyed and documented and targets are established by means of timetables. The Land Action Plans shall also describe the implementation of the measures listed in § 13(1).

(2) Land legislation shall provide that the Land Action Plans as referred to in paragraph 1 are to be forwarded to the Federal Ministry of Agriculture, Forestry, Environment and Water Management for the first time by 30 April 2012.

(3) Land legislation shall provide that Land Action Plans shall be reviewed and updated at least every five years and that the provisions on public participation in accordance with Article 2 of Directive 2003/35/EC providing for public participation in respect of the

drawing up of certain plans and programmes relating to the environment and amending with regard to public participation Council Directives 85/337/EEC and 96/61/EC, OJ L 156 of 25 June 2003, page 17, shall apply for drawing up or amending the Land Action Plans.’

5. The Bgld. PSMG 2012 serves to implement the basic legal provisions of the 2011 Plant Protection Product Act, BGBl. I No 10/2011, (Section 4, § 13), and Directive 2009/128/EC of the European Parliament and of the Council establishing a framework for Community action to achieve the sustainable use of pesticides, OJ L 309 of 24 November 2009, p. 71.

3. Objectives of the Burgenland Land Action Plan

The aims of the measures defined below are as follows:

1. to maintain the environmentally sound, high level in plant protection;
2. to mitigate additional risks, arising especially through the application of chemical plant protection products, to humans, animals and the environment and to reduce the intensity of application of these plant protection products to a reasonable level.
 - The number of applications of chemical plant protection products which exceed the levels that are necessary within the meaning of integrated pest management is to be reduced and
 - if possible, a significant proportion of chemical plant protection measures are to be replaced by non-chemical measures, such as preventive, biological and mechanical plant protection measures;
3. to further mitigate the risk caused by plant protection product residues in agricultural products and thereby to make an additional contribution to precautionary consumer protection;
4. to secure and promote regional production and the supply of the population with high-quality food in sufficient quantity;
5. to improve the conditions of use by non-professional users through ongoing information;

6. to further mitigate the risk of pollution of soil, groundwater and surface waters by plant protection products and their relevant breakdown products and to support remediation.

During the implementation of the package of measures of this Land Action Plan, it is expected, according to expert evaluation, that risks potentially arising from the application of plant protection products to humans, animals and the environment will already be reduced during the first period and/or the basis for effective risk mitigation measures will be created. Measures necessary to eradicate quarantine pests in accordance with Directive 2000/29/EC may however render more intensive control necessary in individual cases

4. Measures under § 13(1) of the 2011 Plant Protection Product Act in conjunction with Articles 5 to 15 of Directive 2009/128/EC

4.1 Use of plant protection products and cleaning of plant protection equipment (Article 13 of the Directive)

4.1.1 Use of plant protection products

Status quo

The regulation of the use of plant protection products, and especially their application, is assigned to the Länder under the Austrian Federal Constitution.

In Burgenland, the Bgld. PSMG 2012 contains a large number of detailed provisions regulating this field. Inspection is undertaken by the Burgenland Land Government or by an institution to which it has delegated this task.

In addition, there are information materials, such as:

cross-compliance provisions on the use of plant protection products,

SVB (Social Insurance Institution for Farmers) and AUVA (General Accident Insurance Institution) brochures for the safe application of plant protection products,

brochure ‘*Umweltgerechter Pflanzenschutz nur mit funktionierenden Geräten*’ (environmentally sound pest management only with equipment that works), issued by the Austrian Working Group for Integrated Plant Protection (ÖAIP).

Measure

The Land of Burgenland will work towards devising, in cooperation with the Federal Government, harmonised dosing and application systems for the application of plant protection products in various crops (including organic farming).

- Sub-measure in arable farming

The Land of Burgenland commits to low-drift application techniques, e.g. air-assisted nozzles.

- Sub-measure in vertical crops

The Land of Burgenland commits to loss-minimising application techniques, e.g. tunnel spray machines in orchards and vineyards.

The Land of Burgenland will work towards further development of the provisions on user protection.

Aim

The measures described are to increase the use of low-drift application techniques or loss-minimising plant protection equipment in Burgenland to 30% of the equipment in use. In the field of user protection, the knowledge of users of plant protection products is to be increased through training and information materials in all fields of the use of plant protection products.

4.1.2 Filling and cleaning of plant protection equipment

Status quo

There are regulations in the Bgld. PSMG 2012 for proper filling and cleaning of plant protection equipment.

In addition, there are information materials, such as:

the '*Handbuch für den Sachkundenachweis*' (manual for the certificate of competence) issued by the Austrian Working Group for Integrated Plant Protection (ÖAIP); cross-compliance provisions on the filling and cleaning of plant protection equipment; Burgenland Chamber of Agriculture (LWK) information leaflet on the filling and cleaning of plant protection equipment.

Measure

The Land of Burgenland promotes the retrofitting of hand-washing and clear water tanks to clean the plant protection equipment in the field and recommends the fitment of continuous internal cleaning systems for plant protection equipment already in use. This allows possible impurities for succeeding crops and chemical reactions in the tank to be avoided and localised groundwater pollution by plant protection products to be prevented.

Aim

80% of plant protection equipment in use is to be retrofitted with hand-washing and clear water tanks and 30% with continuous internal cleaning systems.

4.2 Restrictions or bans on the use of plant protection products with regard to the risks associated with use under certain conditions or in certain areas (Articles 11 and 12 of the Directive)

Status quo

In implementation of § 13 of the 2011 Plant Protection Product Act, the Land of Burgenland has to provide that the Land Government adopts restrictions or bans on the use of plant protection products with regard to the risks associated with their use under certain conditions in certain areas.

This was undertaken through the adoption of the Bgld. PSMG 2012.

Furthermore, there is currently

ÖPUL (Austrian programme for environmentally sound agriculture) has existed since 1995. It contains special instructions for the use of plant protection products for which partial financial compensation is granted to cover the extra cost of their implementation.

The Water Framework Directive regulates the use of plant protection products in areas relevant for the supply of drinking water.

Measure

The Land of Burgenland ensures the necessary coordination with the Federal authorities and regulates all necessary fields to minimise the risk from the application of plant protection products in the following areas:

a) areas used by the general public or by vulnerable groups as defined in Article 3 of Regulation (EC) No 1107/2009, such as public parks and gardens, sports and recreation grounds, school grounds and children's playgrounds and areas in the close vicinity of healthcare facilities;

(b) protected areas as defined in Directive 2000/60/EC or other areas identified for the purposes of establishing the necessary conservation measures in accordance with the provisions of Directives 79/409/EEC and 92/43/EEC and protected and closed areas under water law;

(c) recently treated areas used by or accessible to agricultural workers.

The Land of Burgenland adopts temporary, localised and objective restrictions on use where the conditions are met, in implementation of § 13 of the 2011 Plant Protection Product Act and § 14 Bgld. PSMG 2012.

Aim

The Land of Burgenland will adopt a regulation on the use of plant protection products in areas within the meaning of Article 12(a) to (c) of Directive 2009/128/EC by September 2013.

4.3 Training for professional users and advisers for the use of plant protection products in connection with the introduction of a certification system including mutual recognition (Article 5 of the Directive)

4.3.1 Ensuring user expertise

Status quo

There are regulations in Burgenland on conditions to achieve expertise in the use of plant protection products. At present, professional users can meet the conditions of expertise by means of certain vocational training or through training courses.

Measure

The Land of Burgenland coordinates the training courses to ensure the expertise with the Burgenland Chamber of Agriculture.

The Land of Burgenland adapts the curricula of the agricultural technical and vocational colleges and other existing initial and additional training concepts to the requirements of Annex I to Directive 2009/128/EC and develops these further.

The Land of Burgenland ensures the recognition of other relevant technical training.

The Land of Burgenland fulfils all the conditions to comply with the certification system pursuant to Directive 2009/128/EC. From 26 November 2015, only professional users may still purchase and use authorised plant protection products. For the use of plant protection products in the garden and hobby sector, registrations will be introduced from 26 November 2015 so that low-risk plant protection products will be authorised for non-professional users by the Federal Ministry of Agriculture, Forestry, Environment and Water Management, as competent authority.

Aim

The Land of Burgenland will establish the facilities for applications for certificates of training at the district administrative authorities by January 2015.

4.3.2 Boosting of plant protection advice

Status quo

There are currently two plant protection advisers in Burgenland providing official advice on behalf of the Land. In addition to advice on application and prevention, they are also involved in initial and additional training.

Measures

The Land of Burgenland provides decisive support for the content of the Land Action Plan by building up and extending the official advice.

The Land of Burgenland prepares information materials in cooperation with the BMLFUW, AGES and the other Länder, and ensures efficient dissemination by means of modern media.

The Land of Burgenland advocates boosting of advice which is independent of economic interests, thereby sustainably ensuring the economic success of agricultural production and the security of supply of high-quality food.

The Land of Burgenland supports the carrying out of plant protection trials to ensure the quality of advice in order to optimise the use of plant protection products, to use low-risk plant protection products, to give priority to biological control measures and to develop suitable risk management measures.

The Land of Burgenland supports the establishment and development of forecasting and warning systems with precise timing of plant protection measures.

Aim

The Land of Burgenland will ensure that 2 plant protection advisers provide official advice on behalf of the Land.

The Land of Burgenland will ensure that the usability of warning systems currently existing is state of the art.

4.3.3 Additional training events on the use of plant protection products

Status quo

In the Land of Burgenland, there are ongoing events on the application of plant protection products in specific crops and in non-agricultural sectors.

Measure

The Land of Burgenland ensures that the educational measures for professional users are also available to other interested parties.

Aim

The Land of Burgenland, in coordination with the Burgenland Chamber of Agriculture, will organise additional training opportunities from 26 November 2015 for professional users.

The Land of Burgenland will ensure that information materials are available for the use of plant protection products in the garden and hobby sector and that additional training events are held.

4.4 Public information and awareness-raising, in so far as it is not already provided for in other legislation (Article 7 of the Directive)

4.4.1 Developing an Internet portal for plant protection

Status quo

In Austria, there is a high level of public awareness concerning the use of plant protection products.

Measures

The Land of Burgenland, in cooperation with the Federal Government and the other Länder, supports the establishment and maintenance of a plant protection Internet portal for effective communication in terms of quality and quantity of technical information and generally comprehensible information for all users and other interested parties. This is to be built up on existing, established information sources, such as the homepage of AGES, the ÖAIP, the Agronet of the Chambers of Agriculture, the Infoportal of the SVB, the guidelines for golf courses and relevant technical media.

The Land of Burgenland ensures that the information is objective and well-founded.

Aim

The Land of Burgenland will ensure the development of a plant protection Internet portal by December 2014.

4.4.2 Information and training for non-professional users

Status quo

In Burgenland, information and training are possible for all non-professional users through the free access to additional training events of the Burgenland Chamber of Agriculture or other educational establishments.

Measure

The Land of Burgenland continues to support all information events and strives for their accessibility to the public.

Aim

The aim is to raise the level of knowledge concerning the use of plant protection products in the garden and hobby sector.

4.5 Inspection of plant protection equipment already in use in connection with the introduction of a certification system (Article 8 of the Directive)

4.5.1 Further development of plant protection equipment and introduction of new technologies in practice

Status quo

At present, there is no legislation in force for plant protection equipment in use. Information on this subject is provided by:

the brochure '*Umweltgerechter Pflanzenschutz nur mit funktionierenden Geräten*' (Environmentally sound plant protection only with equipment that works), issued by the Austrian Working Group for Integrated Plant Protection (ÖAIP).

Under ÖPUL measures, the regular inspection of plant protection equipment in use is mandatory.

Measure

The Land of Burgenland supports the practical introduction of new plant protection equipment technologies.

To ensure that it works properly, provision has been made for regular technical inspection of equipment in use in order to minimise the adverse effects of plant protection products on human health and the environment caused by such equipment. The Land Government is adopting detailed provisions on this subject in a regulation.

By 26 November 2016, all trailed, mounted and self-propelled plant protection equipment must have been inspected for the first time.

Handheld application equipment and knapsack sprayers and application equipment with low-scale use are exempted from this inspection obligation. These include in particular herbicide application equipment in vertical crops or other fields of application with a boom sprayer of less than three metres.

Aim

The Land of Burgenland will adopt a regulation on the inspection of plant protection equipment in use by September 2013.

4.6 Reduction in the risks and the quantity of plant protection products used (Article 12 of the Directive)

4.6.1 Reduction in the application of plant protection products

Status quo

The structure of the farming system in Burgenland, consisting of small farms by European standards, gives a patchwork appearance to the cultivated landscape. A voluntary reduction in plant protection measures has already been brought about since 1995 through ÖPUL measures (organic farming, IP).

Measure

The Land of Burgenland advocates the establishment of voluntary abandonment of plant protection products posing a high threat to groundwater in existing support programmes (ÖPUL, etc.).

The Land of Burgenland supports the use of plant protection products that spare beneficial organisms in the context of integrated pest management.

The Land of Burgenland advocates exhausting the saving potential in the non-agricultural sector.

The Land of Burgenland supports the development of crop-specific strategies to reduce the use of plant protection products or to find alternatives to active substances with high groundwater pollution potential in sensitive areas.

Aim

The Land of Burgenland aims for participation in ÖPUL programmes from 2014 by 80% of agricultural holdings.

4.6.2 Hot Spot Management

Status quo

In spite of explicit regulation in the Bgld. PSMG 2012, intensive application of plant protection products, enrichment of existing active substances and incorrect filling and cleaning of plant protection equipment may lead to localised groundwater pollution.

In addition to possible localised pollution by plant protection products in the environment, invasive plant species, such as ragweed, for example, can represent a major problem for allergy sufferers and biodiversity in Burgenland.

The Land of Burgenland is currently assigning the task each year to a technically experienced undertaking of carrying out checks by random sampling of the application of plant protection products at 30 holdings.

Measure

The Land of Burgenland limits the regional use of certain plant protection products in accordance with the results of scientific research.

The Land of Burgenland supports users of plant protection products in the choice of suitable plant protection products for the location.

The Land of Burgenland recommends the establishment of suitable handling areas and the development of strategies to avoid localised pollution.

The Land of Burgenland supports the drawing up of effective, environmentally sound control methods.

The Land of Burgenland supports farmers in the choice of suitable crops and crop rotations.

Aim

The Land of Burgenland will assign the task each year to a technically experienced undertaking of carrying out checks by random sampling of the application of plant protection products at a further 30 holdings.

4.7 Development and introduction of integrated pest management and alternative methods or procedures (Article 14 of the Directive)

4.7.1 Promotion of integrated pest management procedures and organic farming under promotion programmes

Status quo

In Burgenland, the promotion of integrated pest management and organic farming takes place under ÖPUL 2007-2013.

Measures

The Land of Burgenland advocates the provision of sufficient financial resources for an appropriate environmental programme after 2013 and gives due consideration to integrated pest management procedures and organic farming in promotion and research programmes.

Aim

Farmers will receive compensation for voluntary restrictions in the application of plant protection products from 2014.

4.7.2 Drawing up of crop and sector-specific guidelines for integrated pest management

Status quo

At present there are the IP guidelines under ÖPUL in Austria which are designed to encourage voluntary participation by professional users.

Measures

The Land of Burgenland, together with the other Länder and the Federal agencies, is continuing the technical development of the current IP guidelines, as defined in Annex III to the Directive, for all crops.

The Land of Burgenland advocates the development and introduction of alternative pest management methods or procedures.

Aim

The Land of Burgenland will draw up crop-specific guidelines by December 2014.

4.7.3 Establishment of untreated control areas (spraying windows)

Status quo

No general evaluation of plant protection measures is in progress at present.

Measure

The Land of Burgenland recommends the establishment of ‘spraying windows’, when harmful organisms occur in farm crops, to check the plant protection measure.

The Land of Burgenland uses the findings obtained from this to optimise advice.

Aim

The Burgenland farmers will leave a spraying window until December 2016 to check the effectiveness of plant protection products on 20% of the areas treated with plant protection products.

4.8 Indicators for monitoring the use of plant protection products (Article 15 of the Directive)

4.8.1 Collection of statistical data on the use of plant protection products

Status quo

Under integrated production, records are kept on the use of plant protection products. On the basis of Regulation (EC) No 1107/2009, keeping records of plant protection products has been compulsory for professional users since 14 June 2011. The expenditure on plant protection products is also included in the annual raw data collection by the Landwirtschaftliche Buchführungsgesellschaft (LBG) for the preparation of the Green Report.

Measure

The Land of Burgenland, in coordination with the other Länder, is developing standardised documentation for professional users for farm records for the application of plant protection products.

On the basis of the data collected, the Land of Burgenland observes the change in the use of plant protection products in individual crops and organises spot checks where abnormalities arise.

Aim

The Land of Burgenland will develop the record sheets together with the Burgenland Chamber of Agriculture by December 2013.

The Land of Burgenland will use the data collected of the Landwirtschaftliche Buchführungsgesellschaft (LBG) from December 2014 to evaluate the application of plant protection products.

4.8.2 Model calculation for the behaviour of plant protection products in the environment

The Federal Government is competent for this under the GeoPearl project and carries out seepage water analyses under treated areas, considering various parameters.

5. Summary

According to § 15 Bgld. PSMG 2012, the Land of Burgenland has to draw up an Action Plan on the sustainable use of pesticides. The Land of Burgenland is concerned

to limit the use of chemical plant protection products to the levels that are necessary under the legislation in favour of non-chemical plant protection procedures.

When formulating the individual measures, the attempt has been made to use generally comprehensible expressions and to keep the comments as brief as possible.

6. Public participation:

According to § 15(8) of the Bgld. PSMG 2012, on preparation and on each amendment of the Action Plan, with due regard for § 2(2) of the 2011 Plant Protection Product Act, a **public consultation** must be held in accordance with paragraphs 9 and 10. Furthermore, it is necessary to take into account:

1. the health, social, economic and environmental impacts of the planned measures,
2. the specific ecological, climate, geological, water management and agricultural conditions in Burgenland.

According to paragraph 9, the draft of an Action Plan and a comprehensible summary of the main points of the draft are to be made available for public inspection by the Land Government at the Land Government offices during office hours for at least four weeks and are to be published on the Internet. The public disclosure is to be announced in the Official Gazette.

The announcement was made in the Official Gazette of 1 June 2012.

The disclosure period started on 1 June 2012

and ended on 29 June 2012.

During the disclosure period, anyone could submit written comments on the draft to the Land Government at the address: Amt der Burgenländischen Landesregierung, Abteilung 4a – Agrar- und Veterinärwesen, 7000 Eisenstadt, Europaplatz 1, (e-mail: post.abteilung-4a@bgld.gv.at; fax 02682/600/2920).

The Amt der Burgenländischen Landesregierung received no comments by the end of the disclosure period.

**Action Plan of the Land of Styria
on the sustainable use of
plant protection products
2012 - 2016**

Responsible for content:

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1. Introduction

The implementation of pest management and especially the placing on the market and use of plant protection products (below: PPPs) are regulated comprehensively in Austria and at a high level of protection for humans, animals and the environment. On the basis of the provisions on competence of the Austrian Federal Constitution, the Federal Government is competent for the placing on the market of plant protection products and the framework legislation in the field of pest management and PPPs, whereas it is the responsibility of the Länder to adopt implementing Acts for the use of PPPs and for on-the-spot pest management.

The comprehensive specific legislation on pest management was established to curb the occurrence and dissemination of harmful organisms, to protect crops against harmful organisms and at the same time to avoid risks potentially arising from the use of PPPs or from other pest management measures, especially to human and animal health and the environment.

Directive 91/414/EEC, the predecessor to the current Directive 2009/128/EC, already referred to the principles of good plant protection practice and provided that, whenever possible, the principles of integrated pest control should be applied. The basic provisions of §§ 13 and 14 of the new 2011 Plant Protection Product Act (*Pflanzenschutzmittelgesetz 2011*), BGBl. I No 10/2011, require the implementing legislation of the Länder to provide for measures to transpose Directive 2009/128/EC, taking into account the general principles of integrated pest management, the principles of good plant protection practice and the application of the precautionary principle, as well as the drawing up of Land Action Plans.

The Land of Styria has carried out this task through the 2012 Styrian Plant Protection Product Act (*Steiermärkisches Pflanzenschutzmittelgesetz*), LGBl. No 87/2012, which entered into force on 11 September 2012. On the basis of the distribution of competence, this regulated in law the Action Plan for the Land of Styria on the sustainable use of PPPs. The Federal Government is competent (under the UNAPP project = implementation of

National Action Plan on PPPs) for drawing up the National Action Plan on plant protection products.

Integrated pest management is the umbrella concept worldwide for sustainable pest management in conventional farming. Already in the Code of Conduct adopted by the Food and Agriculture Organisation of the United Nations in 1985 (FAO Code of Conduct on the Distribution and Use of Pesticides), integrated pest management is named as a key element of sustainable pest management. Styrian law on plant protection products has referred to this concept since 1989 (Styrian Agricultural Chemicals Act (*Steiermärkisches landwirtschaftliches Chemikaliengesetz*), Styrian Plant Protection Product Act (*Steiermärkisches Pflanzenschutzmittelgesetz*)).

Integrated pest management represents an integral plant protection system on the holding, designed for the long-term, and pursues the objective of fulfilling ecological, economic and social requirements in equal measure by limiting the use of chemical PPPs to the levels that are necessary in favour of non-chemical plant protection procedures. This requires careful deliberation processes for decisions and sets high standards regarding the provision and use of technical information.

The 2012-2016 Land Action Plan for Styria aims for risk mitigation and not flat-rate reductions in quantities in the use of plant protection products. Flat-rate reductions in quantities of plant protection products sold do not take into account the properties of the substances and the risks associated with their use. For example, under a quantitative approach of this kind, the use of a higher-risk PPP, which is already effective in smaller quantities, would be considered more favourably than the use of a PPP with lower risk but having to be applied in larger quantities. The aim of the Land Action Plan for Styria is therefore not prohibition of PPPs, but a sustainable approach to them.

One of the key aims of Directive 2009/128/EC, the 2011 Federal Plant Protection Product Act and also the 2012 Styrian Plant Protection Product Act is improved initial and additional training and technical knowledge for both professional and private users of

PPPs, as well as public information and awareness-raising. The need for information and public participation is already met when drawing up this Land Action Plan in so far as its draft is subject to a public consultation; relevant comments can be submitted by the citizens of Styria and are to be assessed in the further preparation.

2. Legal bases

1. The European Union has adopted new regulations governing plant protection products through two legal instruments:

- a) Regulation (EC) No 1107/2009 of the European Parliament and of the Council concerning the placing of PPPs on the market and repealing Council Directives 79/117/EEC and 91/414/EEC, OJ L 309 of 24 November 2009, p. 1
- b) Directive 2009/128/EC of the European Parliament and of the Council establishing a framework for Community action to achieve the sustainable use of pesticides, OJ L 309 of 24 November 2009, p. 71.

These new regulations create an entirely different legal framework for the Federal Plant Protection Product Act (Republic of Austria) – and especially its basic provisions – and for the implementing Acts of the Länder.

2. In response to this, in spring 2010, the Federal Government submitted a draft of an Act amending the Basic Plant Protection Act, BGBl. I No 114/1999, in the version of BGBl. I No 87/2005, for evaluation, which was confined to transposing the broad outlines of Directive 2009/128/EC on the framework for action on the use of pesticides.

3. In parallel to this, the Federal Ministry of Agriculture, Forestry, Environment and Water Management initiated the UNAPP project (= implementation of the National Action Plan on PPPs) and also established two work packages in this context which involve Land competences:

Work package 2.1 under the UNAPP involved screening the existing Land legislation. Work package 2.2 involved drawing up text modules for implementing Acts of the Länder. The procedure followed for this was that, on the basis of the existing Land legislation, the measures needed to transpose the Directive were ascertained and the text modules for the various fields provided by representatives of the individual Länder were discussed jointly and consolidated. The transitional provisions for the use of PPPs authorised under the 1997 Plant Protection Product Act were drawn up by the Federal Ministry of Agriculture, Forestry, Environment and Water Management.

4. In parallel to work package 2.2, the procedure at the Federal Ministry of Agriculture, Forestry, Environment and Water Management was amended so that the basic legal provisions are no longer regulated in a separate Basic Act, but the provisions of the Basic Plant Protection Act are divided according to specific subject-matter between a new 2011 Plant Protection Product Act (*Pflanzenschutzmittelgesetz 2011*) and a new 2011 Plant Protection Act (*Pflanzenschutzgesetz 2011*).

The 2011 Plant Protection Product Act, BGBl. I No 10/2011, was passed on 15 February 2011. It contains the following essential basic provisions for the implementing legislation of the Länder in §§ 13 and 14:

‘Use of PPPs

§ 13. (Basic provision)

(1) The Land legislation shall provide for measures to implement Directive 2009/128/EC, except biocidal products under the Biocidal Products Act (*Biozid-Produkte-Gesetz*), BGBl. I No 105/2000, considering the general principles of integrated pest management, the principles of good plant protection practice and the application of the precautionary principle, in particular with regard to

1. Use of PPPs and cleaning of plant protection equipment,
2. Restrictions or bans on the use of PPPs with regard to the risks associated with use under certain conditions or in certain areas,

3. Training for professional users and advisers for the use of PPPs in connection with the introduction of a certification system including mutual recognition,
4. Public information and awareness-raising, in so far as it is not already provided for in other legislation,
5. Inspection of plant protection equipment already in use in connection with the introduction of a certification system,
6. Reduction in the risks and the quantity of PPPs used,
7. Development and introduction of integrated pest management and alternative methods or procedures and
8. Indicators for monitoring the use of PPPs.

(2) The Land legislation shall provide that reports are to be drawn up and forwarded to the Federal Ministry of Agriculture, Forestry, Environment and Water Management, with regard to

1. the implementation of the inspection measures under Article 8 of Directive 2009/128/EC,
2. the integrated pest management under Article 14 of Directive 2009/128/EC,
3. the results of the evaluations under Article 15 of Directive 2009/128/EC and
4. the controls of the use of PPPs in accordance with the first subparagraph of Article 68 of Regulation (EC) No 1107/2009 by 31 May of the year following that to which the report relates.

(3) The Land legislation shall provide that – considering the grace period and § 3(2), point 2 – only the products entered in the plant protection product register may be applied. The use covers the consumption, application and spreading, as well as the use, storage, keeping in stock and transport within the business premises of PPPs for the purposes of application.

(4) The Land legislation shall impose penalties for infringements of the provisions established in the Land implementing Acts.’

‘Land Action Plans and National Action Plan on PPPs

§ 14. (Basic provision)

(1) For the purposes of drawing up and consolidating a National Action Plan on PPPs at Federal level and its amendments, Land legislation shall provide, in accordance with the specifications under Article 4 of Directive 2009/128/EC and considering § 2(2), that Land Action Plans are drawn up and also amended, where appropriate, in which, to reduce the risks and the effects of PPP use on human health and the environment, the baseline situation and the measures already introduced and to be carried out are surveyed and documented and targets are established by means of timetables. The Land Action Plans shall also describe the implementation of the measures listed in § 13(1).

(2) Land legislation shall provide that the Land Action Plans as referred to in paragraph 1 are to be forwarded to the Federal Ministry of Agriculture, Forestry, Environment and Water Management for the first time by 30 April 2012.

(3) Land legislation shall provide that Land Action Plans shall be reviewed and updated at least every five years and that the provisions on public participation in accordance with Article 2 of Directive 2003/35/EC providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation Council Directives 85/337/EEC and 96/61/EC, OJ L 156 of 25 June 2003, page 17, shall apply for drawing up or amending the Land Action Plans.’

5. The 2012 Styrian Plant Protection Product Act, LGBL 87/2012, serves to implement the basic legal provisions of the 2011 Plant Protection Product Act, BGBl. I No 10/2011, (§§ 13 and 14) and Directive 2009/128/EC of the European Parliament and of the Council establishing a framework for Community action to achieve the sustainable use of pesticides, OJ L 309 of 24 November 2009, p. 71.

6. This Act contains the following key innovations:

- The scope of the Plant Protection Product Act is no longer confined to use in agriculture, but also covers PPP use in public areas, commercial and industrial business premises, areas for sports and leisure activities, transport infrastructure areas, gardens and allotments, etc.
- A distinction is drawn between professional and non-professional users: professional users are all persons who use PPPs in the course of their professional activities,

especially the users, technicians, employers and the self-employed in agriculture and other sectors. From 26 November 2015, they require a training certificate for the use of PPPs. Under the 2011 Federal Plant Protection Product Regulation (*Pflanzenschutzmittelverordnung 2011*), a training certificate is also necessary from that time for the acquisition of PPPs which have been authorised for professional use. Non-professional users require no training certificate for the purchase and use of PPPs for the garden and allotment sector.

- From 1 March 2013, a system will be introduced for the issue of training certificates in Styria. Technical prerequisites for the training certificate are relevant agricultural training (from school/college to university) or the completion of a training course at the Chamber of Agriculture and additional training.
- The population is to be informed by the Land of Styria about the use and risks of PPPs.
- Provision is made for powers to issue regulations for detailed provisions concerning the restriction or prohibition of the use of PPPs, the verification of plant protection equipment and the initial and additional training.

7. Specific contents of the Directive (Articles 6, 9 and 10) are not considered in the Action Plan because they are already covered in full by existing Federal or Land legislation.

3. Objectives of the Land Action Plan

The aims of the measures defined below are as follows:

1. to maintain the fundamentally environmentally sound, high level in plant protection;
2. to mitigate additional risks, arising especially through the application of chemical PPPs, to humans, animals and the environment and to reduce the application of these PPPs to a reasonable level.

- a. The number of applications of chemical PPPs is to be reduced to the levels that are necessary within the meaning of integrated pest management and
 - b. where possible, a significant proportion of chemical plant protection measures are to be replaced by non-chemical measures, such as preventive, biological and mechanical plant protection measures;
3. to further mitigate the risk caused by plant protection product residues in agricultural products and thereby to make an additional contribution to precautionary consumer protection;
4. to secure and promote regional production and the supply of the population with high-quality food;
5. to improve the conditions of use (application, storage, compliance with the authorisation requirements) by professional and non-professional users, including by limiting applications of PPPs to the levels that are necessary within the meaning of integrated pest management;
6. to further mitigate the risk of pollution of soil, groundwater and surface waters by PPPs and their relevant breakdown products, and to support remediation.

During the implementation of the package of measures of this Land Action Plan on the sustainable use of PPPs, it is expected, according to expert evaluation, that risks potentially arising from the application of PPPs to humans, animals and the environment will be reduced. This excludes measures necessary to eradicate quarantine pests in accordance with Directive 2000/29/EC.

4. Measures under the 2012 Styrian Plant Protection Product Act in conjunction with Articles 5 to 15 of Directive 2009/128/EC

4.1 Use of PPPs and cleaning of plant protection equipment (Article 13 of the Directive)

4.1.1 Use of PPPs

Status quo

The regulation of the use of PPPs is assigned to the Länder under the Austrian Federal Constitution. The 2012 Styrian Plant Protection Product Act therefore contains a large number of regulations on this subject. Detailed provisions in regulations still to be issued will provide supplementary coverage of this field.

Inspection of users is undertaken by the district administrative authorities.

In addition, there are currently, *inter alia*:

- The leaflet ‘*Verlustarm Sprühen*’ (low-loss spraying) of the *Steirischer Erwerbsobstbauernverband* (Styrian commercial fruit growers’ association),
- The ‘*Handbuch für den Sachkundenachweis im Pflanzenschutz*’ (manual for certificate of competence in pest management) and the brochure ‘*Umweltgerechter Pflanzenschutz nur mit funktionierenden Geräten*’ (environmentally sound pest management only with equipment that works) of the Österreichische Arbeitsgemeinschaft für integrierten Pflanzenschutz (Austrian Working Group for Integrated Plant Protection – ÖAIP).

The Federal Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW), the Österreichische Agentur für Gesundheit und Ernährungssicherheit (Austrian Agency for Health and Food Safety – AGES), the Chambers of Agriculture, plant protection product firms, plant protection equipment manufacturers and farmers are represented on the ÖAIP,

- Various brochures including of the Sozialversicherungsanstalt der Bauern (Social Insurance Institution for Farmers) and Allgemeine Unfallversicherungsanstalt (General Accident Insurance Institution) for the safe application of PPPs,
- Guidelines under the ÖPUL for integrated production (IP) in fruit, wine, vegetables, potatoes, oil pumpkins and sugar beet.

Measure

The Land of Styria will work towards the optimisation of dosing and application systems for the application of PPPs in various crops from 2014.

- Sub-measure in arable farming

The Land of Styria provides information on the advantages of low-drift application techniques, e.g. air-assisted application systems, low-drift nozzles.

- Sub-measure in vertical crops

The Land of Styria supports the development and improvement of loss-minimising dosing and application systems, e.g. ‘low-loss spraying’ in fruit-growing, tunnel spray machines in vineyards.

Measure

Improved training and reinforced inspection to promote protection of workers and users, as well as consumer protection in floriculture.

4.1.2 Filling and cleaning of plant protection equipment

Status quo

There are also regulations in this field in the 2012 Styrian Plant Protection Product Act.

In addition, there is currently:

- the ‘*Handbuch für den Sachkundenachweis*’ (manual for the certificate of competence) issued by the Austrian Working Group for Integrated Plant Protection (ÖAIP),
- the leaflet ‘*Sachgerechtes Befüllen und Reinigen von Pflanzenschutzgeräten*’ (Proper filling and cleaning of plant protection equipment) (Austrian Chamber of Agriculture (LKÖ), ÖAIP, Fachverband der chemischen Industrie Österreichs (Association of the Austrian Chemical Industry) – Plant Protection Industry Group, Industrieverband Agrar e.V.).

Measures

The Land of Styria recommends that plant protection equipment already in use should be retrofitted with hand-washing and clear water tanks to clean the plant protection equipment in the field and for new and used equipment the fitment of continuous internal cleaning systems. This allows possible impurities for succeeding crops and chemical reactions in the tank to be avoided and the risk of localised soil and water pollution to be reduced.

The Land of Styria, in cooperation with the LKÖ, is making the filling and cleaning of plant protection equipment a focal point for advice.

The Land also supports information on proper filling and cleaning of plant protection equipment.

4.2 Restrictions or bans on the use of PPPs with regard to the risks associated with use under certain conditions or in certain areas (Articles 11 and 12 of the Directive)

Status quo

1. According to § 4 of the 2012 Styrian Plant Protection Product Act, the Land Government has to adopt, by regulation, detailed provisions on restrictions of the use of PPPs and on the promotion of non-chemical methods where necessary to protect human life and health or the environment or biodiversity or to implement the provisions of Union law.

The restrictions on use include, taking into account the effects on human health and biodiversity or the results of relevant risk assessments, a ban or temporary, localised, objective or quantitative restriction on the use of PPPs in the following areas:

- a. areas used by the general public or by vulnerable groups as defined in Article 3 of Regulation (EC) No 1107/2009 (public parks, sports grounds, school grounds, etc.),
- b. areas where the Birds Directive and the Flora and Fauna Habitats Directive apply, and
- c. protected areas as defined in the Water Framework Directive.

In these areas, the use of PPPs is to be kept as low as possible, priority is to be given to low-risk PPPs and biological control measures and suitable risk management measures are to be taken.

2. Further legal framework conditions

2.1 Water Act (*Wasserrechtsgesetz* – WRG) – Establishment of protected and closed areas, adoption of regional programmes and designation of observation areas and areas for prospective measures:

Under § 34(1) WRG, to protect water supply systems from pollution or from impairment of their capacity, the water authorities may impose special orders by decision concerning the cultivation or other use of land and corresponding protected areas.

Under § 34(2) WRG, to protect the general water supply, the Governor must provide by regulation that in part of the catchment area, measures which may jeopardise the water quality, capacity or level are to be notified to the water authority or require authorisation or are permissible only in a certain way. In Styria, since the beginning of the 1990s, there has been a series of regulations on groundwater conservation areas, which in some cases also prohibit or restrict the application of certain PPPs. Under § 35 WRG, this is also possible to secure a future drinking water and industrial water supply.

Under § 55g WRG, the Governor also has the possibility to adopt regional water management programmes (including for the protection of groundwater bodies).

Under § 33f WRG, the Governor, if the thresholds are exceeded a certain number of times in a body of groundwater, must designate observation areas and, where the legal conditions are met, establish areas for measures to be taken. These instruments take effect only if groundwater pollution has been established.

2.2. The National Water Management Plan (NWMP) was adopted in March 2010 in implementation of the Water Framework Directive. It includes the inventory (current water status analysis), the summary of the monitoring results and the generally binding programme of measures to achieve good water status or good potential. These may include measures for remediation (remediation measures), measures to avoid deterioration of the existing status (maintenance measures) and precautionary measures.

The topic of PPPs is also dealt with in the NWMP. The effects on surface waters and groundwater are described and existing measures, such as, for example, the adaptation of protected and closed areas or the Austrian Programme for Environmentally Sound Agriculture (ÖPUL) are summarised, as well as more far-reaching measures concerning groundwater, such as, for example, the Groundwater Status Monitoring Regulation

(*Grundwasserzustandsüberwachungsverordnung (GZÜV)*), special measuring programmes or the research project ‘GeoPEARL Austria’ with the aim of supporting the planning of measures to avoid potential pollution of the groundwater by pesticides or their relevant metabolites. Furthermore, it is pointed out that, in implementation of Directive 2009/128/EC, Land legislation on the use of PPPs can be established on the basis of the basic plant protection provisions to protect the aquatic environment and the drinking water supply. These are to serve to support the specifications of the Water Framework Directive.

The designation of protected areas as defined in Directive 2000/60/EC (Water Framework Directive) falls within the Federal Government responsibilities with regard to water law and measures are therefore to be established by the water authorities.

Establishing possible restrictions ranging as far as bans concerning the use of plant protection products to protect the aquatic environment in a regulation under § 4 of the 2012 Styrian Plant Protection Product Act therefore requires careful consideration and will only be contemplated in support of the provisions of Directive 2000/60/EC which cannot be implemented (or not adequately) with measures based on water law.

Measures

The Land of Styria ensures the necessary coordination with the Federal authorities regarding adaptation of the water legislation for protected and closed areas in the case of threshold values being newly exceeded or other risk situations.

The Land of Styria ensures the necessary coordination with the Federal authorities to check compliance with the water regulations on protected and closed areas.

The Land of Styria adopts temporary, localised and objective restrictions on use where the conditions are met, in accordance with § 4 of the 2012 Styrian Plant Protection Product Act.

Beyond the existing bans and restrictions on the use of specific PPPs and active substances in protected and closed water areas, a contribution is made by the pest management advice activities of the Chamber of Agriculture and the Landwirtschaftliche Umweltberatung

Steiermark (farming and environmental advisory service of Styria) to avoid PPP residues in groundwater and drinking water.

4.3 Training for professional users and advisers for the use of PPPs in connection with the introduction of a certification system including mutual recognition (Article 5 of the Directive)

4.3.1 Ensuring user expertise

Status quo

There have been regulations in Styria since 1989 on conditions to achieve expertise in the use of PPPs. At present, the user can acquire or meet the conditions of expertise by means of certain vocational training or competence courses.

Measures

The Land of Styria introduces measures to ensure the expertise, coordinated with the Land Chamber of Agriculture and Forestry of Styria and the Styrian Chamber of Agricultural Workers.

The Land of Styria adapts the curricula of the agricultural technical and vocational colleges and other existing initial and additional training concepts to the requirements of Annex I to Directive 2009/128/EC and develops these further.

The Land of Styria ensures a sufficient number of initial and additional training events and thereby enhances the knowledge of users.

The Land of Styria transfers the existing regulations on expertise to the new certification system in accordance with Directive 2009/128/EC. The certification system is to be introduced by 26 November 2013 at the latest. From 26 November 2015, only professional users may still use PPPs authorised for professional users.

The Land of Styria is adopting a regulation on the training certification by December 2012.

4.3.2 Ensuring independent plant protection advice

Status quo

There are currently plant protection advisers and production advisers of the Land Chamber of Agriculture and Forestry of Styria providing independent plant protection advice on behalf of the Land. In addition to advice on application and prevention, they are also involved in initial and additional training.

Measures

The Land of Styria provides decisive support for the content of the Land Action Plan by cofinancing the official advice.

The Land of Styria prepares information materials in cooperation with the BMLFUW, AGES and the other Länder, and ensures efficient dissemination by means of modern media.

The Land of Styria advocates boosting independent advice, thereby also sustainably ensuring the economic success of agricultural production and the security of supply of high-quality food.

The Land of Styria supports the carrying out of plant protection trials to ensure the quality of advice and to create the basis for the authorisation of suitable PPPs.

The Land of Styria supports the establishment and development of forecasting and warning systems with precise timing and thereby ecological optimisation of plant protection measures.

4.3.3 Additional training events on the use of PPPs

Status quo

In Styria, there are ongoing additional training courses and events regarding the application of plant protection products and information relating to specific crops (e.g. plant protection days, maize cultivation days, fruit-growing days, wine-growing days, etc.) and in some cases also to the non-agricultural sector.

Measure

The Land of Styria ensures that the educational measures for professional users are also on offer to other interested parties.

4.4 Public information and awareness-raising, in so far as it is not already provided for in other legislation (Article 7 of the Directive)

4.4.1 Developing an Internet portal for plant protection

Status quo

In Austria, there is a high level of public awareness concerning the use of plant protection products. The purported risks to life and the environment are however sometimes viewed very critically.

Measures

The Land of Styria, in cooperation with the other Länder, supports the establishment and maintenance of a plant protection Internet portal for the communication of technical information and with generally comprehensible information for non-professional users and other interested parties. This is to be built up on existing, established information sources for individual user groups, such as, for example, the homepage of AGES, the ÖAIP, the Agronet of the LKÖ, the Infoportal of the SVB, the guidelines for golf courses, community newsletters and magazines of allotment clubs, such as '*Kleingärtner*'.

The Land of Styria supports events to boost understanding of the need for plant protection measures (open days, presentations, etc.).

The Land of Styria, in cooperation with the other Länder, ensures that the information is objective and well-founded.

4.4.2 Information and training for non-professional users

Status quo

In various Länder (Vienna, Upper Austria), there are compulsory training measures in the allotment sector. In Styria, there is currently no compulsory training, but training on the use of PPPs is available to the general public (e.g. LFI courses).

Measure

The Land of Styria supports the information for non-professional users through leaflets, events, such as for example in fruit-grower, winegrower and horticultural associations, in allotment clubs, ‘*Siedlervereinen*’ (named after Dr Siedler) and at garden shows.

The Land of Styria ensures that the training measures for professional users are also open to non-professional users.

4.5 Inspection of plant protection equipment already in use in connection with the introduction of a certification system (Article 8 of the Directive)

4.5.1 Further development of plant protection equipment and introduction of new technologies in practice

Status quo

Plant protection equipment must be designed, maintained and cleaned in such a way that if used properly, adverse effects on human life and health and the environment are avoided. As a complement to this, reference is made to the 2009 ÖAIP guidelines ‘*Umweltgerechter Pflanzenschutz nur mit funktionierenden Pflanzenschutzgeräten*’ (Environmentally sound plant protection only with plant protection equipment that works).

Under ÖPUL measures, the regular inspection of plant protection equipment in use is mandatory.

For new plant protection equipment the provisions of Machinery Directive 2006/42/EC and Directive 2009/127/EC are applicable. These Directives are transposed nationally by the 2010 Machinery Safety Regulation (*Maschinen-Sicherheitsverordnung 2010*).

Measure

The Land of Styria supports the practical introduction of new plant protection equipment and new technologies, which contribute to reducing loss (reduction of drift and dripping losses, e.g. by optimisation of the blower air flow) and to economic and efficient application of PPPs. The regular inspection of plant protection equipment in use has to take place for the first time by 26 November 2016. The Land of Styria will adopt a regulation with details on the inspection of plant protection equipment in use by the end of 2013.

4.6 Reduction in the risks and the quantity of PPPs used (Article 12 of the Directive)

4.6.1 Reduction in the application of PPPs

Status quo

The structure of the farming system in Styria, consisting of small farms by European standards, gives a patchwork appearance to the cultivated landscape. A voluntary reduction in the use of plant protection products has already been supported and brought about since 1995 through ÖPUL measures (e.g. organic farming, IP, renunciation of input products).

Measures

The Land of Styria advocates maintaining the variety of agricultural structures.

The Land of Styria advocates the establishment of voluntary renunciation of PPPs posing a high threat to groundwater in existing support programmes (e.g. ÖPUL).

The Land of Styria supports the use of environmentally-friendly PPPs that spare beneficial organisms in the context of integrated pest management.

The Land of Styria advocates exhausting the saving potential in the non-agricultural sector (e.g. golf courses and sports grounds).

The Land of Styria supports the development of crop-specific strategies to reduce the use of plant protection products or to find alternatives to active substances with high groundwater pollution potential in sensitive areas.

4.6.2 Hot Spot Management

Status quo

Where no crop rotation is possible, seed treated with insecticide is currently used to eradicate the corn root worm. Incorrect handling of the seed and incorrect distribution of the seed may harm bee populations. The proper use of treated oil pumpkin and maize seed is regulated in the Sowing Machinery Regulation (*Säegeräteverordnung*).

Measure

The Land of Styria carries out *ad hoc* inspections in maize cultivation in the area around affected beehives.

Status quo

Invasive plant species (such as ragweed, for example) represent a major problem for biodiversity, agriculture and at times allergy sufferers in Styria. Effective PPPs against these neophytes may not be used at times in closed areas.

Measure

The Land of Styria supports the drawing up of effective, environmentally-compatible control methods.

Status quo

In spite of explicit regulation in the 2012 Styrian Plant Protection Product Act, incorrect filling and cleaning of plant protection equipment may lead to localised groundwater pollution.

Measure

The Land of Styria recommends the establishment of suitable handling areas and supports the development of strategies to avoid localised pollution.

Status quo

Intensive plant protection measures are sometimes used on sports and leisure grounds to maintain the green areas.

Measure

The Land of Styria carries out inspections of the plant protection product application at sports and leisure grounds.

Status quo

The groundwater is enriched here and there by active substances contained in plant protection products and relevant metabolites.

Measure

The Land of Styria supports users in the choice of suitable PPPs for the location.

The Land of Styria supports farmers in the choice of suitable crops and crop rotations.

4.7 Development and introduction of integrated pest management and alternative methods or procedures (Article 14 of the Directive)

4.7.1 Promotion of integrated pest management procedures and organic farming under promotion programmes

Status quo

In Austria, the promotion of integrated pest management and organic farming takes place under ÖPUL 2007-2013.

Measures

The Land of Styria advocates the provision of sufficient financial resources for an appropriate environmental programme after 2013 and gives due consideration to integrated pest management procedures and organic farming in promotion and research programmes.

4.7.2 Drawing up of crop and sector-specific guidelines for integrated pest management

Status quo

At present there are the IP guidelines under ÖPUL in Austria which are designed to encourage voluntary participation by professional users. The attempt is made to offset the anticipated lower yields or management difficulties by a fixed compensatory payment.

Measures

The Land of Styria advocates the continuation of these programmes, with due regard to the competitiveness of IP (compensation for lower yields).

The Land of Styria, together with the other Länder and the Federal agencies, is continuing the technical development of the current IP guidelines, as defined in Annex III to the Directive, for all crops.

The Land of Styria supports this through further training and advice.

The Land of Styria supports the development and introduction of alternative pest management approaches or techniques.

4.7.3 Establishment of untreated control areas (spraying windows)

Status quo

No general evaluation of plant protection measures is in progress at present.

Measure

The Land of Styria recommends the establishment of ‘spraying windows’, when harmful organisms occur in certain annual crops, to check the plant protection measure (identification as control area).

The Land of Styria uses the findings obtained from this to optimise advice.

4.8 Indicators for monitoring the use of PPPs (Article 15 of the Directive)

4.8.1 Collection of statistical data on the use of PPPs

Status quo

In Styria, it has been compulsory to keep records of the use of PPPs (spray logbook) since the entry into force of the Styrian Plant Protection Product Act, LGBl. No 78/2007. Furthermore, under IP, records have been kept for years on the use of plant protection products.

On the basis of Regulation (EC) No 1107/2009, keeping records of plant protection products is compulsory for professional users throughout the EU.

The Federal Office for Food Safety (BAES) has at its disposal data regarding the quantities of PPPs and active substances of registered products placed on the market in Austria.

Measures

The Land of Styria, in coordination with the other Länder, is updating standardised documentation for the farm records of the use of plant protection products for professional users.

The Land of Styria carries out inspections of the use of plant protection products at regular intervals.

The Land of Styria ascertains from BAES the quantities of PPPs and active substances of registered products placed on the market in Austria.

Status quo

The expenditure on PPPs is also included in the annual raw data collection by the Landwirtschaftliche Buchführungsgesellschaft (LBG) for the preparation of the Federal Green Report.

Measure

On the basis of the data collected, the Land of Styria observes the change in the expenditure on the use of plant protection products in individual crops and takes steps to investigate where abnormalities arise.

4.8.2 Model calculation for the behaviour of plant protection products in the environment

The Federal Government is competent for this (e.g. in the GeoPearl project, in which seepage water analyses are carried out under treated areas, considering various parameters).

5. Summary

The Land of Styria is concerned to limit the use of chemical PPPs to the levels that are necessary under the legislation in favour of non-chemical plant protection procedures. This Action Plan contains measures which commit the Land of Styria itself to making a contribution to the implementation of this project.

There are measures of both a private-sector nature, such as the granting of aid and the holding of training courses, and a public-sector nature, such as the adoption of regulations.

When formulating the individual measures, the attempt has been made to use generally comprehensible expressions and to keep the comments as brief as possible, which at times has been at the expense of technical precision.

6. Public participation

According to § 9(8) of the 2012 Styrian Plant Protection Product Act, on preparation and on each amendment of the Action Plan, a public consultation must be held in accordance with paragraphs 9 and 10. Furthermore, it is necessary to take into account:

1. the health, social, economic and environmental impacts of the planned measures,
2. the specific ecological, climate, geological, water management and agricultural conditions in Styria and
3. all relevant stakeholder groups within the meaning of point 1.

According to paragraph 9, the draft of an Action Plan and a comprehensible summary of the main points of the draft are to be made available for public inspection by the Land Government at the Land Government offices during office hours for at least four weeks and are to be published on the Internet. The public disclosure is to be announced in the *Grazer Zeitung*.

The announcement was made in the *Grazer Zeitung* of 6 July 2012.

The disclosure period started on 6 July 2012
and ended on 10 August 2012.

No observations were submitted on the draft during the disclosure period.

Land Action Plan of the Tyrol on the sustainable use of plant protection products 2012 - 2016

Responsible for content:

Amt der Tiroler Landesregierung

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**[www.tirol.gv.at/fileadmin/www.tirol.gv.at/themen/laendlicherraum/
agrar/zahlen-datenagrarberichte/
downloads/PflanzenschutzTirol_2012-2016.PDF](http://www.tirol.gv.at/fileadmin/www.tirol.gv.at/themen/laendlicherraum/agrar/zahlen-datenagrarberichte/downloads/PflanzenschutzTirol_2012-2016.PDF)**

1. Introduction

The implementation of pest management and especially the placing on the market and use of plant protection products are regulated comprehensively in Austria and at a high level of protection for humans, animals, groundwater and the natural balance. On the basis of the provisions on competence of the Austrian Federal Constitution, the Federal Government is competent for the placing on the market of plant protection products and the framework legislation in the field of pest management and plant protection products, whereas it is the responsibility of the Länder to adopt implementing Acts for the use of plant protection products.

The comprehensive specific legislation on pest management was adopted to protect crops against harmful organisms and at the same time to avoid risks potentially arising from the use of plant protection products or from other pest management measures, especially to human and animal health and the natural balance.

Directive 91/414/EEC, the predecessor to the current Directive 2009/128/EC, already referred to the principles of good plant protection practice and provided that, whenever possible, the principles of integrated pest control should be applied. The basic provisions of §§ 13 and 14 of the new 2011 Plant Protection Product Act (*Pflanzenschutzmittelgesetz 2011*), BGBl. I No 10/2011, require the implementing legislation of the Länder, with regard to the measures to transpose Directive 2009/128/EC, to regulate in particular the drawing up of Land Action Plans, taking into account the general principles of integrated pest management, the principles of good plant protection practice and the application of the precautionary principle.

The Land of the Tyrol has carried out this task through the 2012 Tyrol Plant Protection Product Act (*Tiroler Pflanzenschutzmittelgesetz 2012*), LGBl. No 56/2012, which entered into force on 15 June 2012. On the basis of the distribution of competence, this regulated the Land Action Plan for the Tyrol on the sustainable use of plant protection products; the Federal Government is competent (under the UNAPP project = implementation of National Action Plan on Pesticides) for drawing up the National Action Plan on Pesticides (= plant protection products + biocides).

Integrated pest management is the umbrella concept worldwide for sustainable pest management in conventional farming. Already in the Code of Conduct adopted by the Food and Agriculture Organisation of the United Nations in 1985 (FAO Code of Conduct on the Distribution and Use of Pesticides), integrated pest management is named as a key element of sustainable pest management. The Tyrol Land legislation has referred to this concept since 2006.

Integrated pest management represents an integral plant protection system on the holding, designed for the long-term, and pursues the objective of fulfilling ecological, economic and social requirements in equal measure by limiting the use of chemical plant protection products to the levels that are necessary in favour of non-chemical plant protection procedures. In addition, it requires careful deliberation processes for all decisions and sets high standards regarding the provision and use of technical information.

The 2012-2016 Land Action Plan for the Tyrol specifically addresses risk mitigation and not flat-rate reductions in quantities. Flat-rate reductions in quantities of plant protection products sold do not take into account the properties of the substances and the risks associated with their use. For example, under a quantitative approach of this kind, the use of a higher-risk plant protection product, which is already effective in smaller quantities, would be considered more favourably than the use of a plant protection product with lower risk but having to be applied in larger quantities. The aim of the Land Action Plan for the Tyrol is therefore not prohibition of plant protection products, but a sustainable approach to plant protection products.

One of the key aims of Directive 2009/128/EC, the Federal Plant Protection Product Act and also the 2012 Tyrol Plant Protection Product Act is improved initial and additional training and technical knowledge for both professional and private users of plant protection products, as well as public information and awareness-raising. This need for information and public participation is met for this Land Action Plan for the Tyrol in so far as, prior to adoption by the Tyrol Land Government pursuant to § 3(8) of the 2012 Tyrol Plant Protection Product Act, public participation is provided for in application *mutatis mutandis* of § 6 of the Tyrol Environmental Assessment Act (*Umweltprüfungsgesetz*), LGBI. No 34/2005, which enables all relevant stakeholders to be heard.

2. Legal bases

1. The European Union has adopted new regulations governing plant protection products through two legal instruments:

a) Regulation (EC) No 1107/2009 of the European Parliament and of the Council concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC, OJ L 309 of 24 November 2009, p. 1

b) Directive 2009/128/EC of the European Parliament and of the Council establishing a framework for Community action to achieve the sustainable use of pesticides, OJ L 309 of 24 November 2009, p. 71.

These new regulations create an entirely different legal framework for the implementing Acts of the Länder and the Federal Basic Plant Protection Act (*Pflanzenschutzgrundsatzgesetz*) of the Republic of Austria.

2. In response to this, in spring 2010, the Federal Government submitted a draft of an Act amending the Basic Plant Protection Act, BGBl. I No 114/1999, in the version of BGBl. I No 87/2005, for evaluation, which was confined to transposing the broad outlines of Directive 2009/128/EC on the framework for action on the use of pesticides.

3. In parallel to this, the Federal Ministry of Agriculture, Forestry, Environment and Water Management initiated the UNAPP project (= implementation of the National Action Plan on plant protection products) and also established two work packages in this context which involve Land competences:

Work package 2.1 under the UNAPP involved screening the existing Land legislation. The object of work package 2.2 was to draw up text modules for implementing Acts of the Länder under the chairmanship of a staff member of the Federal Ministry of Agriculture, Forestry, Environment and Water Management. The procedure followed for this was that, on the basis of the screened existing Land legislation, the measures needed to transpose the

Directive were ascertained and the representatives of the individual Länder provided text modules for the various fields, which were discussed jointly and consolidated by the chairman. The transitional provisions for the use of plant protection products authorised under the old system were contributed by the Federal Ministry of Agriculture, Forestry, Environment and Water Management.

4. In parallel to work package 2.2, the procedure at the Federal Ministry of Agriculture, Forestry, Environment and Water Management was amended so that the concrete provisions are no longer regulated in a separate Basic Act, but the provisions of the Basic Plant Protection Act are divided according to specific subject-matter between a new 2011 Plant Protection Product Act (*Pflanzenschutzmittelgesetz 2011*) and a 2011 Plant Protection Act (*Pflanzenschutzgesetz 2011*).

The new 2011 Plant Protection Product Act, BGBl. I No 10/2011, was passed on 15 February 2011. It contains the following essential basic provisions for the implementing legislation of the Länder in §§ 13 and 14:

‘Use of plant protection products

§ 13. (Basic provision)

(1) The Land legislation shall provide for measures to implement Directive 2009/128/EC, except biocidal products under the Biocidal Products Act (*Biozid-Produkte-Gesetz*), BGBl. I No 105/2000, considering the general principles of integrated pest management, the principles of good plant protection practice and the application of the precautionary principle, in particular with regard to

1. Use of plant protection products and cleaning of plant protection equipment,
2. Restrictions or bans on the use of plant protection products with regard to the risks associated with use under certain conditions or in certain areas,
3. Training for professional users and advisers for the use of plant protection products in connection with the introduction of a certification system including mutual recognition,

4. Public information and awareness-raising, in so far as it is not already provided for in other legislation,
5. Inspection of plant protection equipment already in use in connection with the introduction of a certification system,
6. Reduction in the risks and the quantity of plant protection products used,
7. Development and introduction of integrated pest management and alternative methods or procedures and
8. Indicators for monitoring the use of plant protection products.

(2) The Land legislation shall provide that reports are to be drawn up and forwarded to the Federal Ministry of Agriculture, Forestry, Environment and Water Management, with regard to

1. the implementation of the inspection measures under Article 8 of Directive 2009/128/EC,
2. the integrated pest management under Article 14 of Directive 2009/128/EC,
3. the results of the evaluations under Article 15 of Directive 2009/128/EC and
4. the controls of the use of plant protection products in accordance with the first subparagraph of Article 68 of Regulation (EC) No 1107/2009 by 31 May of the year following that to which the report relates.

(3) The Land legislation shall provide that – considering the grace period and § 3(2), point 2 – only the products entered in the plant protection product register may be applied. The use covers the consumption, application and spreading, as well as the use, storage, keeping in stock and transport within the business premises of plant protection products for the purposes of application.

(4) The Land legislation shall impose penalties for infringements of the provisions established in the Land implementing Acts.

Land Action Plans and National Action Plan on plant protection products

§ 14. (Basic provision)

(1) For the purposes of drawing up and consolidating a National Action Plan on plant protection products at Federal level and its amendments, Land legislation shall provide, in accordance with the specifications under Article 4 of Directive 2009/128/EC and considering § 2(2), that Land Action Plans are drawn up and also amended, where appropriate, in which, to reduce the risks and the effects of plant protection product use on human health and the environment, the baseline situation and the measures already introduced and to be carried out are surveyed and documented and targets are established by means of timetables. The Land Action Plans shall also describe the implementation of the measures listed in § 13(1).

(2) Land legislation shall provide that the Land Action Plans as referred to in paragraph 1 are to be forwarded to the Federal Ministry of Agriculture, Forestry, Environment and Water Management for the first time by 30 April 2012.

(3) Land legislation shall provide that Land Action Plans shall be reviewed and updated at least every five years and that the provisions on public participation in accordance with Article 2 of Directive 2003/35/EC providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation Council Directives 85/337/EEC and 96/61/EC, OJ L 156 of 25 June 2003, page 17, shall apply for drawing up or amending the Land Action Plans.’

5. The 2012 Tyrol Plant Protection Product Act, LGBI. 56/2012, serves to implement the basic legal provisions of the 2011 Plant Protection Product Act, BGBl. I No 10/2011, (Section 4, § 13) and Directive 2009/128/EC of the European Parliament and of the Council establishing a framework for Community action to achieve the sustainable use of pesticides, OJ L 309 of 24 November 2009, p. 71.

6. Specific contents of the Directive (Articles 6, 9 and 10) have not been included in the Action Plan because they are already covered in full by existing Federal or Land legislation.

3. Objectives of the Land Action Plan of the Tyrol

The aims of the measures defined below are as follows:

1. to maintain the fundamentally environmentally sound, high level in plant protection;
2. to mitigate additional risks, arising especially through the application of chemical plant protection products, to humans, animals and the environment. Where possible, a significant proportion of chemical plant protection measures are to be replaced by non-chemical measures, such as preventive, biological and mechanical plant protection measures;
3. to further mitigate the risk caused by plant protection product residues in agricultural products and thereby to make an additional contribution to precautionary consumer protection;
4. to secure and promote regional production and the supply of the population with high-quality food;
5. to improve the conditions of use (application, storage, compliance with the authorisation requirements) by non-professional users, including by avoiding unnecessary applications of plant protection products;
6. to further mitigate the risk of pollution of soil, groundwater and surface waters by plant protection products and their relevant breakdown products, and to support remediation.

During the implementation of the package of measures of this Land Action Plan, it is expected, according to expert evaluation, that risks potentially arising from the application of plant protection products to humans, animals and the environment will already be reduced during the first period or the basis for effective risk mitigation measures will be created. This excludes measures necessary to eradicate quarantine pests in accordance with Directive 2000/29/EC.

4. Measures under § 13(1) of the 2011 Plant Protection Product Act in conjunction with Articles 5 to 15 of Directive 2009/128/EC

4.1 Use of plant protection products and cleaning of plant protection equipment (Article 13 of the Directive)

4.1.1 Use of plant protection products

Status quo

The regulation of the use of plant protection products is assigned to the Länder under the Austrian Federal Constitution.

In the Tyrol, the 2012 Tyrol Plant Protection Product Act contains a large number of detailed provisions covering this field. Inspection of users is undertaken by the Tyrol Land Government or by a supervisory body to which it has delegated this task.

In addition, there are currently:

- cross-compliance provisions on the use of plant protection products,
- SVB (Social Insurance Institution for Farmers) and AUVA (General Accident Insurance Institution) brochures for the safe application of plant protection products,
- ÖAIP (Austrian Working Group for Integrated Plant Protection) brochure '*Umweltgerechter Pflanzenschutz nur mit funktionierenden Geräten*' (environmentally sound pest management only with equipment that works).

Measure

The Land of the Tyrol will work towards devising, in cooperation with the Federal Government, harmonised dosing and application systems for the application of plant protection products in various crops (including organic farming).

- Sub-measure in arable farming

The Land of the Tyrol commits to the promotion of low-drift application techniques, e.g. air-assisted nozzles.

- Sub-measure in vertical crops

The Land of the Tyrol commits to the promotion of loss-minimising application, e.g. tunnel spray machines in orchards and vineyards and/or other low-drift measures.

Measure

The Land of the Tyrol will work towards increasing protection of workers and users (e.g. in floriculture and glasshouse during cold nebulisation).

4.1.2 Filling and cleaning of plant protection equipment

Status quo

As for use, there are regulations in the 2012 Tyrol Plant Protection Product Act for proper filling and cleaning.

In addition, there is currently:

the ‘*Handbuch für den Sachkundenachweis*’ (manual for the certificate of competence) issued by the Austrian Working Group for Integrated Plant Protection (ÖAIP), on which, alongside the Federal Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW), the Austrian Agency for Health and Food Safety (AGES), the Land Chambers of Agriculture, plant protection product firms, plant protection equipment manufacturers and farmers are also represented;

cross-compliance provisions on the filling and cleaning of plant protection equipment; Austrian Chamber of Agriculture (LKÖ) information leaflet on the filling and cleaning of plant protection equipment.

Measures

The Land of the Tyrol promotes the retrofitting of hand-washing and clear water tanks to clean the plant protection equipment in the field and recommends the fitment of continuous internal cleaning systems for plant protection equipment already in use. This allows possible impurities for succeeding crops and chemical reactions in the tank to be avoided and localised groundwater pollution by plant protection products to be reduced.

The Land of the Tyrol, in cooperation with the LKÖ, is making the filling and cleaning of plant protection equipment a focal point for advice.

The Land of the Tyrol supports the conversion and retrofitting of plant protection equipment with hand-washing and clear water tanks and internal cleaning nozzles to minimise risks to human health and the environmental impact.

4.2 Restrictions or bans on the use of plant protection products with regard to the risks associated with use under certain conditions or in certain areas (Articles 11 and 12 of the Directive)

Status quo

In implementation of § 13 of the 2011 Plant Protection Product Act, the Länder have to provide in their implementing Acts that the Land Government must adopt restrictions or bans (by means of protected area regulations) on the use of plant protection products with regard to the risks associated with use under certain conditions in certain areas. This was undertaken in the recasting of the Tyrol plant protection product law.

The existing legal framework also includes:

1. 1959 Water Act (*Wasserrechtsgesetz 1959* – WRG) – Handling in protected and closed areas, general conditions for the designation of observation areas and areas for prospective measures

Under § 34(1) WRG, to protect water supply systems from pollution or from impairment of their capacity, the water authorities may impose special orders by decision concerning the cultivation or other use of land and corresponding protected areas.

Under § 34(2) WRG, to protect the general water supply, the Governor must provide by regulation that in part of the catchment area, measures which may jeopardise the water quality, capacity or level are to be notified to the water authority or require authorisation or are permissible only in a certain way. Under § 35 WRG, this is also possible to secure a future drinking water and industrial water supply.

Under § 33f WRG, the Governor, if the thresholds are exceeded a certain number of times in a body of groundwater, must designate observation areas and, where the legal conditions are met, establish areas for measures to be taken. These instruments take effect only if groundwater pollution has been established.

2. The National Water Management Plan (March 2010) was adopted in implementation of the Water Framework Directive. It includes the inventory (current water status analysis), the summary of the monitoring results and the generally binding programmes of measures to achieve good water status or good potential. These may include measures (remediation measures), measures to avoid deterioration of the existing status (maintenance measures) and precautionary measures.

The topic of plant protection products is also dealt with in the National Water Management Plan. The effects on surface waters and groundwater are described and existing measures, such as, for example, the adaptation of protected and closed areas or the Austrian Programme for environmentally sound agriculture (ÖPUL) are summarised, as well as more far-reaching measures concerning groundwater, such as, for example, the Groundwater Status Monitoring Regulation (*Grundwasserzustandsüberwachungsverordnung* (GZÜV), special measuring programmes or the research project ‘GeoPEARL Austria’ with the aim of supporting the planning of measures to avoid potential pollution of the groundwater by pesticides or their relevant metabolites. Furthermore, it is pointed out that, in implementation of Directive 2009/128/EC, Land legislation on the use of plant protection products can be established on the basis of the Basic Plant Protection Act to protect the aquatic environment and the drinking water supply. This is to serve to support the specifications of the Water Framework Directive.

In addition, currently

ÖPUL has existed since 1995. It contains special instructions for the use of plant protection products, for which partial financial compensation is granted to cover the extra cost of their implementation.

Measures

The Land of the Tyrol ensures the necessary coordination with the Federal authorities regarding adaptation of the water legislation for protected and closed areas in the case of threshold values being newly exceeded or other risk situations, as well as for checking compliance with the water regulations on protected and closed areas. All parties concerned should be included in this.

The Land of the Tyrol adopts temporary, localised and objective restrictions on use where the conditions are met, in implementation of § 13 of the 2011 Plant Protection Product Act and § 6(2) of the 2012 Tyrol Plant Protection Product Act.

4.3 Training for professional users and advisers for the use of plant protection products in connection with the introduction of a certification system including mutual recognition (Article 5 of the Directive)

4.3.1 Ensuring user expertise

Status quo

There are regulations in the Tyrol on conditions to achieve expertise in the use of plant protection products. At present, the user can meet the conditions of expertise by means of certain vocational training or competence courses.

Measures

The Land of the Tyrol draws up specifications for the Chamber of Agriculture, other educational establishments and private and official plant protection advisers to ensure the expertise of professional users.

The Land of the Tyrol adapts the curricula of the agricultural technical and vocational colleges and other existing initial and additional training concepts to the requirements of Annex I to Directive 2009/128/EC and develops these further.

The Land of the Tyrol ensures an increase in the number of training events and thereby enhances the knowledge of users.

The Land of the Tyrol transfers the existing regulations on expertise to the new certification system in accordance with Directive 2009/128/EC. The certification system is to be introduced by 26 November 2013 at the latest. From 26 November 2015, only professional users with a valid training certificate may still use plant protection products authorised for professional users.

4.3.2 Boosting of plant protection advice

Status quo

Currently a plant protection adviser works half-time at the Chamber of Agriculture. His duties include initial and additional training in the plant protection field and maintenance of the weather stations run by the Chamber of Agriculture. Furthermore, specialist advisers from the production sectors (woods, forests, vegetables, fruit, ornamental plants, grassland and arable) act in the course of their advisory activities – even though as a secondary activity time-wise – as plant protection adviser contacts for holdings concerning cultivation advice, with the selection and recommendation of appropriate plant protection measures.

Measures

The Land of the Tyrol supports the official advice provided by the Chamber of Agriculture and thereby also the implementation of the content of the Land Action Plan.

The Land of the Tyrol prepares information materials in cooperation with the BMLFUW, AGES and the other Länder, and ensures efficient dissemination by means of modern media.

The Land of the Tyrol advocates boosting of advice which is independent of economic interests, thereby sustainably ensuring the economic success of agricultural production and the security of supply of high-quality food and ecological management of green areas in the public sphere.

The Land of the Tyrol supports the carrying out of plant protection trials to ensure the quality of advice and to establish basic principles for ecological management of green areas in order to reduce the use of plant protection products, to use low-risk plant protection products, to give priority to biological control measures and to develop suitable risk management measures.

The Land of the Tyrol supports the establishment and development of forecasting and warning systems with precise timing and thereby ecological optimisation of plant protection measures.

4.3.3 Additional training events on the use of plant protection products

Status quo

In the Land of the Tyrol, there are ongoing events in this field which relate to specific agricultural and forestry crops and to the non-agricultural sector (technical meetings).

Measure

The Land of the Tyrol ensures that the educational measures for professional users are also available to all interested parties.

4.4 Public information and awareness-raising, in so far as it is not already provided for in other legislation (Article 7 of the Directive)

4.4.1 Developing an Internet portal for plant protection

Status quo

In Austria, there is a high level of public awareness concerning the use of plant protection products.

Measures

The Land of the Tyrol, in cooperation with the other Länder, supports the establishment and maintenance of a plant protection Internet portal for effective communication in terms of quality and quantity of technical information and generally comprehensible information for non-professional users and other interested parties. This is to be built up on existing, established information sources for individual user groups, such as the homepage of AGES, the ÖAIP, the Agranet of the Chambers of Agriculture, the Infoportal of the SVB, the guidelines for golf courses, community newsletters and magazines of allotment clubs.

The Land of the Tyrol supports events to boost understanding of the need for plant protection measures (open days, presentations, etc.).

The Land of the Tyrol ensures that the information is objective and well-founded.

4.4.2 Information and training for non-professional users

Status quo

For ‘non-professional’ users too, comprehensive additional training is an important building block for ecofriendly use of pesticides.

In various Länder (Vienna, Upper Austria), there are compulsory training measures in the allotment sector; in all Länder, training of this kind is available to the general public.

Measure

The Land of the Tyrol supports the information for non-professional users through leaflets, events, such as for example in fruit-grower and horticultural associations, in allotment clubs, ‘*Siedlervereinen*’ and at garden shows.

4.5 Inspection of plant protection equipment already in use in connection with the introduction of a certification system (Article 8 of the Directive)

4.5.1 Further development of plant protection equipment and introduction of new technologies in practice

Status quo

At present, for plant protection equipment in use the 2009 ÖAIP guidelines ‘*Nur mit funktionierenden Pflanzenschutzgeräten*’ (Only with plant protection equipment that works), for new plant protection equipment the provisions of the Machinery Directive (2010 Machinery Safety Regulation (*Maschinen-Sicherheitsverordnung 2010*)) and for both categories of equipment the BMLFUW Decree of 2001 on equipment technology to reduce drift are applicable. Under ÖPUL measures, the regular inspection of plant protection equipment in use is mandatory.

Measure

The Land of the Tyrol supports the introduction of new plant protection equipment and new technologies, which contribute to reducing loss (drift and dripping losses) and to economic and efficient application of plant protection products. The regular review of trailed, mounted and self-propelled plant protection equipment in use has to take place for the first time by 26 November 2016.

4.6 Reduction in the risks and the quantity of plant protection products used **(Article 12 of the Directive)**

4.6.1 Reduction in the application of plant protection products

Status quo

The structure of the farming system in Austria, consisting of small farms by European standards, gives a patchwork appearance to the cultivated landscape. A voluntary reduction in plant protection measures has already been brought about since 1995 through ÖPUL measures (organic farming, IP).

Measures

The Land of the Tyrol advocates the establishment of voluntary renunciation of plant protection products posing a high threat to groundwater in existing promotion programmes (ÖPUL, etc.).

The Land of the Tyrol preserves the high level of near-natural landscaping and ecological maintenance in the sector of gardens and green areas.

The Land of the Tyrol supports the use of plant protection products that spare beneficial organisms in the context of integrated pest management.

The Land of the Tyrol advocates exhausting the saving potential in the non-agricultural sector (e.g. golf courses and sports grounds, gardens and allotment sector).

The Land of the Tyrol supports the development of crop-specific strategies to reduce the use of plant protection products or to find alternatives to active substances with high groundwater pollution potential in sensitive areas.

The Land of the Tyrol supports measures for the treatment of partial areas (row treatment or localised control).

4.6.2 Hot Spot Management

Status quo

Where no crop rotation is possible, seed treated with insecticide is currently used to eradicate the corn root worm and the wireworm. Incorrect handling of the seed or incorrect distribution of the seed may lead in particular to dust driftage of insecticide dressing and harm bee populations. Through the technology to reduce dust driftage already provided for in the Tyrol by regulation, the negative impact on flowering plants (such as meadows, road verges and field borders) should be avoided as far as possible.

Measure

The Land of the Tyrol is intensifying the inspections targeting the cultivation of maize in the area around affected beehives and supports information for users in these areas.

The Land of the Tyrol advocates the development of alternatives to the use of seed treated with insecticide to eradicate the wireworm and the corn root worm.

Status quo

Invasive plant species, such as ragweed, for example, also represent a major problem for allergy sufferers and biodiversity in the Tyrol.

Measure

The Land of the Tyrol supports the health, environmental and nature conservation authorities in drawing up effective environmentally-compatible control methods.

Status quo

In spite of explicit regulation in the 2012 Tyrol Plant Protection Product Act, incorrect filling and cleaning of plant protection equipment may lead to localised groundwater pollution.

Measure

The Land of the Tyrol recommends the establishment of suitable handling areas and the development of strategies to avoid localised pollution and supports information for users.

Status quo

Intensive plant protection measures are used on golf courses to maintain the greens.

Measure

The Land of the Tyrol carries out systematic inspections of the plant protection product applications at golf courses.

Status quo

The soil is enriched by active substances contained in plant protection products which are largely non-degradable.

Measure

The Land of the Tyrol limits the regional use of certain plant protection products in accordance with the results of scientific research.

The Land of the Tyrol supports farmers in the choice of suitable crops and crop rotations.

Status quo

The groundwater is enriched by active substances contained in plant protection products and relevant metabolites.

Measure

The Land of the Tyrol supports the Chamber of Agriculture in drawing up information and advice on suitable plant protection products for the location and in the choice of suitable crops and crop rotations.

If the conditions are met, in implementation of § 13 of the 2011 Plant Protection Product Act and of § 6(2) of the 2012 Tyrol Plant Protection Product Act, the Land of the Tyrol adopts temporary, localised and objective restrictions on use.

The Land, in cooperation with the Chamber of Agriculture of the Tyrol, promotes official advice.

4.7 Development and introduction of integrated pest management and alternative methods or procedures (Article 14 of the Directive)

4.7.1 Promotion of integrated pest management procedures and organic farming under promotion programmes

Status quo

In Austria, the promotion of integrated pest management and organic farming takes place under ÖPUL 2007-2013.

Measures

The Land of the Tyrol advocates the provision of sufficient financial resources for an appropriate environmental programme after 2013 and gives due consideration to integrated pest management procedures and organic farming in promotion and research programmes.

4.7.2 Drawing up of crop and sector-specific guidelines for integrated pest management

Status quo

At present there are the IP guidelines under ÖPUL in Austria, which are designed to encourage voluntary participation by professional users. The attempt is made to offset the anticipated lower yields or management difficulties by a fixed compensatory payment.

Measures

The Land of the Tyrol advocates the continuation of these programmes, subject to maintaining competitiveness (compensation for lower yields).

The Land of the Tyrol, together with the other Länder and Federal agencies, is continuing the technical development of the current IP guidelines, as defined in Annex III to the Directive, for all crops.

The Land of the Tyrol advocates the development and introduction of alternative pest management methods or procedures for the gardens and allotments sector, sports grounds and golf courses and public green areas.

The Land of the Tyrol supports this through further training and advice for all crops.

4.7.3 Establishment of untreated control areas (spraying windows)

Status quo

No general evaluation of plant protection measures is in progress at present.

Measure

In the context of integrated pest management and considering the field size, the Land of the Tyrol recommends the establishment of ‘spraying windows’, when harmful organisms occur in certain crops, to check the plant protection measure (identification as control area). The Land of the Tyrol supports the Chamber of Agriculture in the implementation of the findings obtained from this to optimise advice.

4.8 Indicators for monitoring the use of plant protection products (Article 15 of the Directive)

4.8.1 Collection of statistical data on the use of plant protection products

Status quo

Under IP, records are kept on the use of plant protection products; some Länder already require these records to be kept under their Land Acts. On the basis of Regulation (EC) No 1107/2009, keeping records of plant protection products is compulsory for professional users. The Federal Office for Food Safety (BAES) has at its disposal the quantities of active substances contained in plant protection products (quantities of registered products) placed on the market in Austria.

Measures

The Land of the Tyrol, in coordination with the other Länder, is developing standardised documentation for the farm records for professional users with a view to the production of indicators to monitor the use of plant protection products.

Status quo

The expenditure on plant protection products is also included in the annual raw data collection by the Landwirtschaftliche Buchführungsgesellschaft (LBG) for the preparation of the Green Report.

Measure

On the basis of the data collected, the Land of the Tyrol observes the change in the use of plant protection products in individual crops and organises spot checks where abnormalities arise.

4.8.2 Model calculation for the behaviour of plant protection products in the environment

The Federal Government is competent for this (the GeoPearl project carries out seepage water analyses, considering various parameters).

5. Summary

The Land of the Tyrol is concerned, under the legislation, to limit the use of chemical plant protection products to the levels that are necessary, in favour of non-chemical plant protection procedures.

This Action Plan contains measures which commit the Land of the Tyrol itself to making a contribution to the implementation of this project.

There are measures of both a private-sector nature, such as the granting of aid and the holding of training courses, and a public-sector nature, such as the adoption of regulations.

When formulating the individual measures, the attempt has been made to use generally comprehensible expressions and to keep the comments as brief as possible, which at times has been at the expense of technical precision.

6. Public participation

In accordance with § 3(8) of the 2012 Tyrol Plant Protection Product Act, on preparation and on each amendment of the Action Plan, public participation is provided for in application *mutatis mutandis* of § 6 of the Tyrol Environmental Assessment Act (*Umweltprüfungsgesetz*), LGBl. No 34/2005, which enables all relevant stakeholders to be heard. This meets the requirements of Article 4(5) of Directive 2009/128/EC. The comments submitted with regard to the aspects listed in the Act must verifiably be taken into account in the decision-making.

According to the application *mutatis mutandis* of § 6(3) *leg. cit.*, the draft Action Plan is to be made available by presentation for inspection at the Land Government Office, allowing the possibility to submit comments within a period of at least six weeks. According to § 6(4) *leg. cit.*, the way in which the Action Plan is made available to the public is to be announced in the *Boten für Tirol* and if necessary also in other suitable ways as well, and in particular on the Internet.

The announcement was made in the *Boten für Tirol* of 27 June 2012.

The disclosure period started on 2 July 2012

and ended on 13 August 2012.

The draft Action Plan was also announced during the disclosure period on the electronic official bulletin board of the Land of the Tyrol.

No observations were made within the disclosure period.

The provisions on the environmental report and on cross-border consultations within the meaning of §§ 5 and 7 of the Tyrol Environmental Assessment Act are not applicable to the drawing up and amendment of the Action Plan.

No subjective rights vis-à-vis the public authorities are founded by the provisions on public participation on the drawing up or amendment of the Action Plan and those on the Action Plan itself. This is clarified in § 3(9) of the 2012 Tyrol Plant Protection Product Act. The Action Plan is a planning instrument. It is not to be considered as a regulation.

Land Action Plan of Vienna on the sustainable use of plant protection products 2012 to 2016

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1. Introduction

Pest management in Austria includes the placing on the market and use of plant protection products. In this respect, particular attention is paid to the protection of humans, animals, water and the environment. The Austrian Federal Constitution provides for a division of competence between Federal Government and Länder in this field:

- regulation of placing of plant protection products on the market and the framework legislation in the field of pest management and plant protection products lies within the competence of the Federal Government;
- regulation of the use of plant protection products is undertaken in the implementing Acts and accompanying regulations of the Länder.

The Acts and their accompanying regulations on the use of plant protection products serve on the one hand to protect human health and the environment on the application of plant protection products and on the other hand to protect crops against harmful organisms.

The 'Land Action Plan of Vienna on the sustainable use of plant protection products, 2012 to 2016' is drawn up in implementation of the Directive of the European Parliament and of the Council of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides, OJ L 309 of 24 November 2009, p. 71, (Directive 2009/128/EC). This Directive calls upon Member States to draw up National Action Plans setting quantitative objectives, targets, measures and timetables, to reduce risks and impacts of pesticide use on human health and the environment. In addition, integrated pest management and alternative approaches and techniques are to be encouraged to reduce dependency on the use of plant protection products. Furthermore, indicators to monitor the use of plant protection products containing active substances of particular concern are developed. Council Directive 91/414/EEC, the predecessor to that published in OJ L 309 of 24 November 2009, p. 1, already called for the application of the principles of good plant protection practice, as well as, whenever possible, the principles of integrated pest control.

Under the basic provisions of §§ 13 and 14 of the 2011 Plant Protection Product Act (*Pflanzenschutzmittelgesetz 2011*), BGBl. I No 10, in implementation of Directive 2009/128/EC, each Land must draw up its own Land Action Plan for the purpose of drawing up and compiling a Federal ‘National Action Plan on plant protection products’. The plan has to be drawn up taking into account the general principles of integrated pest management, the principles of good plant protection practice and the application of the precautionary principle.

To meet these specifications, the Vienna Plant Protection Product Act has been amended (promulgation of 21 June 2012, LGBl. for Vienna No 32/2012, Vienna Plant Protection Product Act (*Wiener Pflanzenschutzmittelgesetz*)). The Federal Government is competent for drawing up a ‘National Action Plan on plant protection products’ under the UNAPP project (implementation of National Action Plan on Pesticides).

The ‘Land Action Plan of Vienna on the sustainable use of plant protection products, 2012 to 2016’ builds on the legal bases of the law on plant protection products and implements objectives and measures in accordance with § 13(1) of the 2011 Plant Protection Product Act, BGBl. No 10, in conjunction with Articles 5 to 15 of Directive 2009/128/EC. The measures under the Land Action Plan relate, for example, to the use of plant protection products, the cleaning of plant protection equipment (handling area), the initial and additional training of professional users (certification system), public information and awareness-raising, the inspection of plant protection equipment already in use and the monitoring of plant protection products in the environment.

The necessary public participation is described in more detail in the Vienna Plant Protection Product Act.

2. Legal bases

1. The European Union has adopted new regulations governing plant protection products through two legal instruments:

a) Regulation (EC) No 1107/2009 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC, OJ L 309 of 24 November 2009, p. 1 (Regulation (EC) No 1107/2009)

b) Directive 2009/128/EC of the European Parliament and of the Council establishing a framework for Community action to achieve the sustainable use of pesticides, OJ L 309 of 24 November 2009, p. 71 (Directive 2009/128/EC).

These new regulations create an entirely different legal framework for the implementing Acts of the Länder and the Federal Basic Plant Protection Act (*Pflanzenschutz-grundgesetz*) of the Republic of Austria.

2. In response to this, in spring 2010, the Federal Government submitted a draft of an Act amending the Basic Plant Protection Act, BGBl. I No 114/1999, in the version of BGBl. I No 87/2005, for evaluation, which was confined to transposing the broad outlines of Directive 2009/128/EC on the framework for action on the use of pesticides.

3. In parallel to this, the Federal Ministry of Agriculture, Forestry, Environment and Water Management initiated the UNAPP project (= implementation of the National Action Plan on plant protection products) and also established two work packages in this context which involve Land competences:

Work package 2.1 under the UNAPP involved screening the existing Land legislation. The object of work package 2.2 was to draw up text modules for implementing Acts of the Länder under the chairmanship of a staff member of the Federal Ministry of Agriculture, Forestry, Environment and Water Management. The procedure followed for this was that,

on the basis of the screened existing Land legislation, the measures needed to transpose the Directive were ascertained and the representatives of the individual Länder provided text modules for the various fields, which were discussed jointly and consolidated by the chairman. The transitional provisions for the use of plant protection products authorised under the old system were contributed by the Federal Ministry of Agriculture, Forestry, Environment and Water Management.

4. In parallel to work package 2.2, the procedure at the Federal Ministry of Agriculture, Forestry, Environment and Water Management was amended so that the concrete provisions are no longer regulated in a separate Basic Act, but the provisions of the Basic Plant Protection Act are divided according to specific subject-matter between a new 2011 Plant Protection Product Act (*Pflanzenschutzmittelgesetz 2011*) and a 2011 Plant Protection Act (*Pflanzenschutzgesetz 2011*).

The new 2011 Plant Protection Product Act, BGBl. I No 10/2011, was passed on 15 February 2011. It contains the following essential basic provisions for the implementing legislation of the Länder in §§ 13 and 14:

‘Use of plant protection products

§ 13 (1) (Basic provision): The Land legislation shall provide for measures to implement Directive 2009/128/EC, except biocidal products under the Biocidal Products Act (*Biozid-Produkte-Gesetz*), BGBl. I No 105/2000, considering the general principles of integrated pest management, the principles of good plant protection practice and the application of the precautionary principle, in particular with regard to

1. Use of plant protection products and cleaning of plant protection equipment,
2. Restrictions or bans on the use of plant protection products with regard to the risks associated with use under certain conditions or in certain areas,
3. Training for professional users and advisers for the use of plant protection products in connection with the introduction of a certification system including mutual recognition,
4. Public information and awareness-raising, in so far as it is not already provided for in other legislation,

5. Inspection of plant protection equipment already in use in connection with the introduction of a certification system,
6. Reduction in the risks and the quantity of plant protection products used,
7. Development and introduction of integrated pest management and alternative methods or procedures and
8. Indicators for monitoring the use of plant protection products.

(2) The Land legislation shall provide that reports are to be drawn up and forwarded to the Federal Ministry of Agriculture, Forestry, Environment and Water Management, with regard to

1. the implementation of the inspection measures under Article 8 of Directive 2009/128/EC,
2. the integrated pest management under Article 14 of Directive 2009/128/EC,
3. the results of the evaluations under Article 15 of Directive 2009/128/EC and
4. the controls of the use of plant protection products in accordance with the first subparagraph of Article 68 of Regulation (EC) No 1107/2009 by 31 May of the year following that to which the report relates.

(3) The Land legislation shall provide that – considering the grace period and § 3(2), point 2 – only the products entered in the plant protection product register may be applied. The use covers the consumption, application and spreading, as well as the use, storage, keeping in stock and transport within the business premises of plant protection products for the purposes of application.

(4) The Land legislation shall impose penalties for infringements of the provisions established in the Land implementing Acts.’

‘Land Action Plans and National Action Plan on plant protection products

§ 14(1) (Basic provision): For the purposes of drawing up and consolidating a National Action Plan on plant protection products at Federal level and its amendments, Land legislation shall provide, in accordance with the specifications under Article 4 of Directive

2009/128/EC and considering § 2(2), that Land Action Plans are drawn up and also amended, where appropriate, in which, to reduce the risks and the effects of plant protection product use on human health and the environment, the baseline situation and the measures already introduced and to be carried out are surveyed and documented and targets are established by means of timetables. The Land Action Plans shall also describe the implementation of the measures listed in § 13(1).

(2): Land legislation shall provide that the Land Action Plans as referred to in paragraph 1 are to be forwarded to the Federal Ministry of Agriculture, Forestry, Environment and Water Management for the first time by 30 April 2012.

(3): Land legislation shall provide that Land Action Plans shall be reviewed and updated at least every five years and that the provisions on public participation in accordance with Article 2 of Directive 2003/35/EC providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation Council Directives 85/337/EEC and 96/61/EC, OJ L 156 of 25 June 2003, page 17, shall apply for drawing up or amending the Land Action Plans.’

5. The Vienna Plant Protection Product Act, LGBI. for Vienna No 32/2012, serves to implement the basic legal provisions of the 2011 Plant Protection Product Act, BGBl. I No 10/2011, (Part 4, § 13) and Directive 2009/128/EC.

<http://www.wien.gv.at/recht/landesrecht-wien/rechtsvorschriften/pdf/14600000.pdf>

NB: § 4 of the consolidated version of the Vienna Plant Protection Product Act is valid only up to and including 25 November 2013!

From 26 November 2013, the following will apply:

‘§ 4(1) Plant protection products may be used only by a professional user.

(2) A professional user may operate only if he or she has completed relevant training (§ 9b) or additional training (§ 9c) and if necessary also corresponding further training (§ 9d) and this is evidenced by a training certificate (§ 9e).’

6. Specific contents of the Directive (Articles 6, 9 and 10) have not been included in the Action Plan because they are already covered in full by existing Federal or Land legislation.

3. Objectives of the Land Action Plan of Vienna

The aims of the measures defined below are as follows:

1. to maintain the fundamentally environmentally sound, high level in plant protection;
2. to mitigate additional risks, arising especially through the application of chemical plant protection products, to humans, animals and the environment and to reduce the intensity of application of these plant protection products to a reasonable level.
 - The number of applications of chemical plant protection products which exceed the levels that are necessary within the meaning of integrated pest management is to be reduced and
 - where possible, a significant proportion of chemical plant protection measures are to be replaced by non-chemical measures;
3. to further mitigate the risk caused by plant protection product residues in agricultural products and thereby to make an additional contribution to precautionary consumer protection;
4. to secure and promote regional production and the supply of the population with high-quality food and
5. to improve the conditions of use (application, storage, compliance with the authorisation requirements) by non-professional users, including by avoiding unnecessary applications of plant protection products.

During the implementation of the package of measures of the Land Action Plan of Vienna, it is expected, according to expert evaluation, that risks potentially arising from the application of plant protection products to humans, animals and the environment will already be reduced during the first period. This excludes measures necessary to eradicate

quarantine pests in accordance with Council Directive 2000/29/EC of 8 May 2000 on protective measures against the introduction into the Community of organisms harmful to plants or plant products and against their spread within the Community, OJ L 169 of 10 July 2000, p. 1.

4. Measures under § 13(1) of the 2011 Plant Protection Product Act in conjunction with Articles 5 to 15 of Directive 2009/128/EC

4.1. Use of plant protection products and cleaning of plant protection equipment (Article 13 of the Directive)

4.1.1. Use of plant protection products

Status quo

The regulation of the use of plant protection products is assigned to the Länder under the Austrian Federal Constitution. The Vienna Plant Protection Product Act contains a large number of detailed provisions covering this field. Inspection of users is undertaken by the authority in Vienna (*Amtlicher Österreichischer Pflanzenschutzdienst für Wien*).

In addition, there are currently:

- cross-compliance provisions on the use of plant protection products,
- Sozialversicherungsanstalt der Bauern (Social Insurance Institution for Farmers – SVB) and Allgemeine Unfall-Versicherungs-Anstalt (General Accident Insurance Institution - AUVA): brochures for the safe application of plant protection products,
- Österreichische Arbeitsgemeinschaft für Integrierten Pflanzenschutz (Austrian Working Group for Integrated Plant Protection – ÖAIP) brochure ‘*Umweltgerechter Pflanzenschutz nur mit funktionierenden Geräten*’ (environmentally sound pest management only with equipment that works).

Measure:

The Land of Vienna supports, where appropriate, research projects devising harmonised dosing and application systems for the application of plant protection products in various crops. The support relates, for example, to making available technical knowledge and experience and/or cooperative partners and/or trial areas.

Measure

The Land of Vienna commits to the promotion of low-drift application techniques and of loss-minimising application of plant protection products by professional users. This measure for the protection of workers, users and consumers is undertaken by means of

- appropriate advice for professional users
- appropriate consideration of this topic during training and additional training to become professional users.

4.1.2. Filling and cleaning of plant protection equipment

Status quo

There are regulations in the Vienna Plant Protection Product Act in this field too.

In addition, there is currently:

- the '*Handbuch für den Sachkundenachweis*' (manual for the certificate of competence) issued by the Austrian Working Group for Integrated Plant Protection (ÖAIP), on which, alongside the Federal Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW), the Austrian Agency for Health and Food Safety (AGES), the Land Chambers of Agriculture, plant protection product firms, plant protection equipment manufacturers and farmers are also represented;
- cross-compliance provisions on the filling and cleaning of plant protection equipment.

The Austrian Chamber of Agriculture (LKÖ) is also planning an information leaflet on the filling and cleaning of plant protection equipment.

Measure

The Land of Vienna recommends the fitting of hand-washing and clear water tanks to clean the plant protection equipment in the field and the fitment of continuous internal cleaning systems for plant protection equipment already in use. This allows possible impurities for succeeding crops and chemical reactions in the tank to be avoided and localised groundwater pollution by plant protection products to be reduced.

These recommendations take place

- in the course of appropriate advice for professional users
- through appropriate consideration of this topic during training and additional training to become professional users.

In addition, all relevant information concerning the plant protection product handling area is requested during inspections of the holdings and noted in the report.

4.2. Restrictions or bans on the use of plant protection products with regard to the risks associated with use under certain conditions or in certain areas (Articles 11 and 12 of the Directive)

Status quo

The Länder may adopt regulations on protected areas, *inter alia*, in implementation of § 13 of the 2011 Plant Protection Product Act.

The National Water Management Plan including a programme of measures (March 2010) was adopted in implementation of the Water Framework Directive.

This includes the current status analysis, the summary of the monitoring results and on the basis of these, the programme of measures to achieve good water status or good potential (remediation measures), measures to avoid deterioration of the existing status (maintenance measures) and precautionary measures.

The topic of plant protection products is dealt with in the measures section. Explanations are given on existing measures, such as, for example, the adaptation of protected and closed areas or the Austrian Programme for Environmentally Sound Agriculture (ÖPUL), as well as more far-reaching measures, such as, for example, the Groundwater Status Monitoring Regulation (*Grundwasserzustandsüberwachungsverordnung* (GZÜV), special measuring programmes or the research project ‘GeoPEARL Austria’.

In addition, there is currently:

- adaptation of the water regulations for protected and closed areas in the case of exceeding the limit values;
- ÖPUL has existed since 1995. It contains special instructions for the use of plant protection products, for which partial financial compensation is granted to cover the extra cost of their implementation.

Measure

Where appropriate, the Land of Vienna ensures the necessary coordination with the Federal authorities to monitor compliance with the water regulations for protected and closed areas. The Land of Vienna adopts temporary, localised and objective restrictions on use where the conditions are met, in implementation of § 13 of the 2011 Plant Protection Product Act and § 8 of the Vienna Plant Protection Product Act.

The Land of Vienna ensures appropriate awareness-raising of professional users concerned

- in the course of appropriate advice for professional users
- through appropriate consideration of this topic during training and additional training to become professional users.

4.3. Training for professional users and advisers for the use of plant protection products in connection with the introduction of a certification system including mutual recognition (Article 5 of the Directive)

4.3.1. Ensuring professional user expertise

Status quo

There are regulations in Vienna on conditions to achieve expertise in the use of plant protection products. At present, professional users can meet the conditions of expertise by means of certain vocational training or special courses.

Measure

The Land of Vienna introduces measures to ensure the expertise, coordinated with the Vienna Chamber of Agriculture, other educational establishments and, where appropriate, private and official plant protection advisers.

The Land of Vienna raises awareness and advises the agricultural technical and vocational colleges on the adjustment of the curricula and other existing initial and additional training concepts in accordance with the requirements set out in Annex I to Directive 2009/128/EC and provides support in their adaptation and further development.

The Land of Vienna ensures an increase in the number of training events, thereby enhancing the knowledge of the professional users. These are held by the authority or by agencies authorised by the authority.

The Land of Vienna transfers the existing regulations on expertise to the new certification system in accordance with Directive 2009/128/EC. The certification system is to be introduced by 26 November 2013 at the latest. From 26 November 2015, only professional users may still use plant protection products authorised for professional users.

4.3.2. Boosting of plant protection advice

Status quo

At present the advice on use and prevention in Vienna is provided as follows by the Amtlicher Österreichischer Pflanzenschutzdienst (official Austrian plant protection organisation) in municipal department 42 (MA 42):

- advice on the plant protection telephone service
- advice during events
- advice during meetings at the Zentralverband der Kleingärtner und Siedler Österreichs (Central federation of leisure gardeners, home-crofters and small animal breeders of Austria)
- advice during on-the-spot inspections of holdings
- database support for the AGES orchard warning service.

Measure

The Land of Vienna encourages the boosting and extension of plant protection advice especially with regard to the use of biological plant protection products. The status quo is already at a very high level and is to be maintained and possibly extended further in the future.

The Land of Vienna provides decisive support for the content of the Land Action Plan of Vienna by building up and extending the official advice.

The Land of Vienna prepares information materials, where appropriate in cooperation with the BMLFUW, AGES and the other Länder, and ensures efficient dissemination.

The Land of Vienna supports the carrying out of plant protection trials to ensure the quality of advice. The support relates, for example, to making available technical knowledge and experience, cooperation partners and trial areas.

The Land of Vienna supports the establishment and development of forecasting and warning systems with precise timing and thereby ecological optimisation of plant protection measures (orchard warning service in cooperation with AGES and the other Länder).

4.3.3. Additional training events on the use of plant protection products

Status quo

In the Land of Vienna, there are ongoing events in this field. These relate to specific crops and the non-agricultural sector (advice during various MA 42 events).

Measure

The Land of Vienna ensures that the educational measures for professional users are made available in sufficient number. These courses are expected to be offered by various organisations, such as for example the Amtlicher Österreichischer Pflanzenschutzdienst (official Austrian plant protection organisation) for Vienna, the Vienna Chamber of Agriculture and the Zentralverband der Kleingärtner und Siedler (Central federation of leisure gardeners, home-crofters and small animal breeders) of Vienna (provided that they have been accredited).

4.4. Public information and awareness-raising, in so far as it is not already provided for in other legislation (Article 7 of the Directive)

4.4.1. Developing an Internet portal for plant protection

Status quo

In Austria, there is a very high level of public awareness concerning the use of plant protection products.

Measure

The Land of Vienna, in cooperation with the other Länder, supports the establishment and maintenance of a plant protection Internet portal for effective communication in terms of quality and quantity of technical information and generally comprehensible information for non-professional users and other interested parties. This is to be built up on existing, established information sources for individual user groups, such as the homepage of the Austrian Agency for Health and Food Safety (AGES), the Austrian Working Group for Integrated Plant Protection (ÖAIP), the Agranet of the Chambers of Agriculture (LK), the Infoportal of the Sozialversicherungsanstalt der Bauern (Social Insurance Institution for Farmers – SVB), the guidelines for golf courses, community newsletters, and magazines of allotment clubs, such as ‘*Kleingärtner*’.

In addition, relevant information is to be made available on the homepage of MA 42.

Furthermore, the Land of Vienna continues to support the events which have already taken place so far at a very high level to boost understanding of the need for plant protection measures (open days, presentations, etc.). Priority subjects are to be defined in the future. The Land of Vienna ensures that the information is objective and well-founded.

4.4.2. Information and training for non-professional users

Status quo

In various Länder (Vienna and Upper Austria), there are already compulsory educational measures, for example in the allotment sector. In all Länder, courses of this kind are open to the general public.

Measure

The Land of Vienna supports the information for non-professional users through leaflets, events such as in allotment and leisure gardening clubs, *Siedlervereinen* and at garden shows. As in the past, technical presentations will continue to be given at meetings, inspections and consultations at the clubs.

4.5. Inspection of plant protection equipment already in use in connection with the introduction of a certification system (Article 8 of the Directive)

4.5.1. Further development of plant protection equipment and introduction of new technologies in practice

Status quo

At present, for plant protection equipment in use, the 2009 guidelines of the Austrian Working Group for Integrated Plant Protection (ÖAIP) ‘*Nur mit funktionierenden Pflanzenschutzgeräten*’ (Only with plant protection equipment that works) are applicable. For new plant protection equipment, the provisions of the Machinery Directive (2010 Machinery Safety Regulation (*Maschinen-Sicherheitsverordnung 2010*)) are binding. For both categories of equipment, the Decree of the Federal Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW) of 2001 on equipment technology to reduce drift is applicable. Under the measures of the Austrian Programme for

Environmentally Sound Agriculture (ÖPUL), the regular inspection of plant protection equipment in use is mandatory.

Measure

The Land of Vienna places emphasis on new equipment technologies in the training and additional training for professional users.

The regular inspection of trailed, mounted and self-propelled plant protection equipment in use must be implemented by 26 November 2016.

4.6. Reduction in the risks and the quantity of plant protection products used (Article 12 of the Directive)

4.6.1. Reduction in the application of plant protection products

Status quo

The structure of the farming system in Austria, consisting of small farms by European standards, gives a patchwork appearance to the cultivated landscape. This facilitates optimum adaptation of the concrete plant protection measures.

Since 1995, a voluntary reduction in plant protection products has been achieved through ÖPUL measures.

Measure

The Land of Vienna supports the use of environmentally-friendly plant protection products that spare beneficial organisms in the context of integrated pest management in connection with the training and additional training courses and through information during the holding inspections.

In the public sector, the City of Vienna, through its own task force, increasingly uses biological plant protection products.

The Land of Vienna advocates exhausting the saving potential in the non-agricultural sector (golf courses).

Among non-professional users, the use of plant protection products is to be reduced to the levels that are necessary through expert advice (presentations in allotment clubs, MA 42 plant protection telephone service, etc.).

4.6.2. Hot Spot Management

Status quo

Seed treated with insecticide is currently being used in Austria to eradicate the corn root worm where no crop rotation occurs. Incorrect handling of the seed or incorrect distribution of the seed may harm bee populations.

Measure

The Land of Vienna is intensifying the inspections targeting the cultivation of maize in the area around affected beehives.

Status quo

Weeds, such as *Ambrosia artemisiifolia* (ragweed) for example, represent a problem in Vienna for allergy sufferers. Effective plant protection products (herbicides) against these weeds should not be applied in closed areas.

Measure

The Land of Vienna supports the health, environmental and nature conservation authorities in devising effective, environmentally-compatible control methods. In the public parks tended by Vienna, only mechanical weeding takes place.

The Land of Vienna takes into account the results of the research project ‘*Ragweed: Eine Pflanze mit allergenem Potenzial*’ (Ragweed, a plant with allergenic potential) of the University of Natural Resources and Life Sciences, Vienna, and implements them.

Emphasis is placed on this weed in the course of advisory activity and at events.

Status quo

Incorrect filling and cleaning of plant protection equipment may lead to localised groundwater pollution.

Measure

The Land of Vienna recommends the establishment of suitable handling areas and the development of strategies to avoid localised pollution. During holding inspections, special attention is paid to the handling area and this is noted in the report (see section 4.1.2.).

Status quo

Intensive plant protection measures are used on golf courses to maintain the greens.

Measure

The Land of Vienna carries out inspections at golf courses on a regular basis.

Status quo

The soil is enriched by active substances contained in plant protection products which are largely non-degradable.

Measure

The Land of Vienna, where necessary, restricts the regional use of certain plant protection products in accordance with the results of scientific research.

The Land of Vienna, where appropriate, supports farmers in the choice of suitable crops and crop rotations (see section 4.2.). Support is given via the MA 42 plant protection telephone service and in the course of various events and holding inspections.

Status quo

The groundwater is enriched by active substances contained in plant protection products and relevant metabolites.

Measure

The Land of Vienna supports users in the choice of suitable plant protection products.

The Land of Vienna supports farmers in the choice of suitable crops and crop rotations (see section 4.2.). Support is given via the MA 42 plant protection telephone service and in the course of various events and holding inspections.

If the conditions are met, in implementation of § 13 of the 2011 Plant Protection Product Act and § 8 of the Vienna Plant Protection Product Act, the Land of Vienna adopts temporary, localised and objective restrictions on use.

4.7.1. Promotion of integrated pest management procedures and organic farming under promotion programmes

Status quo

In Austria, the promotion of integrated pest management and organic farming takes place under ÖPUL 2007-2013.

Measure

The competent body for promotion of the Land of Vienna advocates the provision of sufficient financial resources after 2013 and gives due consideration to integrated pest management procedures and organic farming in promotion and research programmes.

4.7.2. Drawing up of crop and sector-specific guidelines for integrated pest management

Status quo

At present there are the IP guidelines under ÖPUL in Austria, which are designed to encourage voluntary participation by professional users. The attempt is made to offset the anticipated lower yields or management difficulties by a fixed compensatory payment.

Measure

The Land of Vienna advocates the continuation of these programmes, where appropriate, subject to maintaining competitiveness (compensation for lower yields) and provides support in this case through further training and advice.

The Land of Vienna, where appropriate together with the other Länder and Federal agencies, is continuing the technical development of the current IP guidelines, as defined in Annex III to the Directive, for all crops.

4.7.3. Establishment of untreated control areas (spraying windows)

Status quo

No general evaluation of plant protection measures is in progress at present.

Measure

The Land of Vienna recommends the establishment of ‘spraying windows’, when harmful organisms occur in certain crops, to check the plant protection measure (identification as control area).

The Land of Vienna uses the findings obtained from this to optimise advice (reduction of the number of sprayings).

4.8. Indicators for monitoring the use of plant protection products (Article 15 of the Directive)

4.8.1. Collection of statistical data on the use of plant protection products

Status quo

Currently, under IP, records are kept on the use of plant protection products. Vienna, like some other Länder, already requires these records to be kept under the Land Act. On the basis of Regulation (EC) No 1107/2009, keeping records of plant protection products is compulsory for professional users.

Measure

In the Land of Vienna, under the provisions of the Vienna Plant Protection Product Act (§ 5(1)), a spray logbook must be kept secured against change to the chronological sequence (records). This is to be retained for seven years and to be presented to the

authority during holding inspections. Where appropriate, the Land of Vienna, in coordination with the other Länder, develops standardised documentation (records according to crops, field size, quantity applied/concentration, plant protection product and possibly active substance, time of application).

The Land of Vienna carries out representative surveys of the pest management measures implemented during the holding inspections, according to certain specifications (main/subsidiary business; ratio between types of crops, size of holding, livestock) and interprets the results to evaluate, and where appropriate improve, the advisory service. Emphasis is placed on specific main crops for precisely defined periods.

The Land of Vienna ascertains from the Federal Office for Food Safety (BAES) the quantities of active substances contained in plant protection products (quantities of registered products) placed on the market in Austria.

Status quo

The expenditure on plant protection products is also included in the annual raw data collection by the Landwirtschaftliche Buchführungsgesellschaft (LBG) for the preparation of the Green Report.

Measure

On the basis of the data collected, the Land of Vienna observes the change in the use of plant protection products in individual crops and organises spot checks where abnormalities arise.

4.8.2. Monitoring of plant protection products in the environment

The Federal Government is competent for this (groundwater analysis, preventive GeoPEARL project).

5. Public participation

The public participation for the ‘Land Action Plan of Vienna on the sustainable use of plant protection products, 2012 to 2016’ on the one hand is regulated by Directive 2003/35/EC of the European Parliament and of the Council of 26 May 2003 providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice Council Directives 85/337/EEC and 96/61/EC. On the other hand, § 10h(8) of the Vienna Plant Protection Product Act, in implementation of the above-mentioned Directive, takes into account, on the preparation and/or review of the Vienna Land Action Plan,

- a public consultation. For this purpose, the draft or the revision of the Vienna Land Action Plan is to be posted on an Internet site of the City of Vienna (www.gemeinderecht.wien.at) and the time and place of a possible public inspection announced (at least four weeks of inspection). Within this period, any person who can plausibly demonstrate an interest in so doing may comment in writing (form, type of communication and deadline for receipt are also to be announced on the Internet site). Comments received in time are to be taken into consideration in the deliberations by the authority before the decision is taken;
- the health, social, economic and environmental impacts of the planned measures;
- the specific ecological, climate, geological, water management and agricultural conditions in Vienna;
- all relevant stakeholder groups within the meaning of point 1.

6. Comments

7. Summary

The European Union has adopted new regulations governing plant protection products through two legal instruments: firstly, Regulation (EC) No 1107/2009 concerning the placing of plant protection products on the market and secondly Directive 2009/128/EC on the sustainable use of pesticides. The UNAPP project (implementation of the National Action Plan on plant protection products) was initiated by the Federal Ministry of Agriculture, Forestry, Environment and Water Management in order to draw up the 'National Action Plan on plant protection products' required in the above-mentioned Directive. Furthermore, the Basic Act was split into a new 2011 Plant Protection Product Act (*Pflanzenschutzmittelgesetz 2011*) and a 2011 Plant Protection Act (*Pflanzenschutzgesetz 2011*). The Vienna Plant Protection Product Act was also amended. This provides for the preparation of a Land Action Plan for Vienna.

The Land Action Plan for Vienna, in implementation of Directive 2009/128/EC, establishes the basic strategies for sustainable use of pesticides in the period from 2012 to 2016. Quantitative objectives, targets, measures and timetables are to be set to reduce risks and impacts of pesticide use on human health and the environment. The plan is drawn up taking into account the general principles of integrated pest management, the principles of good plant protection practice and the application of the precautionary principle. Integrated pest management is the umbrella concept worldwide for sustainable pest management in conventional farming. § 2(4) of the Vienna Plant Protection Product Act defines integrated pest management as careful consideration of all available plant protection methods and subsequent integration of appropriate measures. These are to discourage the development of populations of various harmful organisms and to keep the use of plant protection products to levels that are economically and ecologically justified. Furthermore, risks to human health and the environment are to be reduced.

To this end, the Land of Vienna establishes in the present Land Action Plan which measures under § 13(1) of the 2011 Plant Protection Product Act in conjunction with Articles 5 to 15 of Directive 2009/128/EC are to be set in the coming five years. The objectives named in Chapter 3 are to be achieved in this way. The objectives are: to continue to maintain the high level of plant protection, to reduce the risks arising from the

application of chemical plant protection products, to reduce the risks caused by plant protection product residues in agricultural products, to secure regional production and to improve information for non-professional users. However, measures to eradicate quarantine pests in accordance with Directive 2000/29/EC are excluded from this. Examples of important measures in this respect are the use of plant protection products and the cleaning of plant protection equipment (handling area), the initial and additional training of professional users (certification system) and inspection of plant protection equipment already in use.

In 2016, in the course of an evaluation of the Land Action Plan for the first five years, a review will be carried out of the extent to which the objectives set could be achieved with the measures provided for.

Land Action Plan on plant protection products
Action Plan of the Land of Vorarlberg
on the responsible use of
plant protection products

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Preface

In the ORF broadcast ‘*am Schauplatz*’ of 14 September 2012, worried citizens in Korneuburg reported groundwater contamination by plant protection products. Curled tomato leaves, tap water which cannot be drunk and must pass through an ultrafiltration system before use. 570 times the authorised maximum value of the active substance thiamethoxam contained in plant protection products was found in groundwater. The polluter was probably a chemicals firm which manufactures plant protection products. One of its rinsing water wells had sprung a leak and the polluted water was seeping into the soil. Such reports time and again shake public confidence in dealing responsibly with plant protection products. Farmers too are judged very harshly where the application of such products is concerned. How much and how often plant protection products may be applied and which farmers are among the black sheep are topics of discussion by residents.

What is certain is that, on account of consumer demands, the market today requires products of the highest quality. An apple with black flecks on the skin is not readily bought by either the retailer or the customer. It is discarded as unmarketable as fresh fruit as although untreated, it does not look good. Fruit and vegetables are usually treated with plant protection products in both conventional and organic farming, although the choice of product makes an organic apple what it is. The catalogue of inputs decides which plant protection products may be used in organic farming. All chemically synthesised products are discarded and the risk of residues in food or the environment is reduced as a result.

Dealing responsibly with plant protection products is a concern of the Land of Vorarlberg. With this in mind, the Plant Protection Act (*Pflanzenschutzgesetz*) contains not only guidelines on how to deal with outbreaks of harmful organisms, but also provisions regulating the use (use of authorised plant protection products, storage and handling, dilution and mixing of plant protection products, training obligation for persons who use plant protection products professionally).

In addition to the legal basis, objectives for sustainable agriculture are to be implemented by 2020 through the recently presented agricultural strategy ‘Organic Land of Vorarlberg - regional and fair’. The declared objectives are: to continue to promote environmentally sound agriculture, to double the proportion of organic holdings and consumers of organic produce and to develop a uniform quality standard for produce which is produced in the region and which is above the legal requirements with regard to product quality and production procedures. These requirements will have an impact on plant protection measures. In the medium term, a further reduction in plant protection products with hazardous properties¹ and the application of preventive measures, as well as ecologically less harmful plant protection measures, are indispensable.

The Land Action Plan is part of the implementation of the strategy ‘Organic Land of Vorarlberg - regional and fair’. It supports dealing responsibly with plant protection products in all areas where renouncing pesticides does not (yet) seem possible. This mitigates the unavoidable risk of negative consequences arising from the application of plant protection products.

¹ According to § 3(1), points 1-15, of the 1996 Chemicals Act (*Chemikaliengesetz 1996*), as amended, substances or mixtures are ‘hazardous’ within the meaning of this Federal Act if they possess one or more of the hazardous properties listed below: explosive, oxidising, extremely flammable, highly flammable, flammable, highly toxic, toxic, harmful to health, corrosive, irritant, sensitising, carcinogenic, toxic to reproduction, mutagenic or dangerous for the environment.

List of abbreviations

AGES	Österreichische Agentur für Gesundheit und Ernährungssicherheit (Austrian Agency for Health and Food Safety)
BAES	Bundesamt für Ernährungssicherheit (Federal Office for Food Safety)
BMLFUW	Federal Ministry of Agriculture, Forestry, Environment and Water Management
IP	Integrated pest management
LBG	Landwirtschaftliche Buchführungsgesellschaft (agricultural accounting firm)
LFI	Ländliches Fortbildungsinstitut (rural training institution)
LKÖ	Landwirtschaftskammer Österreich (Austrian Chamber of Agriculture)
ÖAIP	Österreichische Arbeitsgemeinschaft für integrierten Pflanzenschutz (Austrian Working Group for Integrated Plant Protection)
ÖPUL	Österreichisches Programm für umweltgerechte Landwirtschaft (Austrian Programme for Environmentally Sound Agriculture)
OGV	Obst- und Gartenkultur Vorarlberg (fruit and gardening association)
SVB	Sozialversicherungsanstalt der Bauern (Social Insurance Institution for Farmers)

1. Introduction

The implementation of pest management measures and especially the placing on the market and use of plant protection products are regulated comprehensively in Austria and at a high level of protection for humans and the environment. On the basis of the provisions on competence of the Austrian Federal Constitution, the Federal Government is competent for the placing on the market of plant protection products and the framework legislation in the field of pest management and plant protection products, whereas it is the responsibility of the Länder to adopt implementing Acts for the use of plant protection products and for local pest management.

The comprehensive legislation on the use of plant protection products was established to protect plants and plant products against harmful organisms, to control harmful organisms and to prevent their further spread. The use of plant protection products is one of several plant protection measures to achieve this aim. To minimise as far as possible negative effects on human life and health or the environment, correct use of plant protection products is part and parcel of phytosanitary law and the concept of 'integrated pest management' is assigned an important role.

Integrated pest management is the umbrella concept worldwide for sustainable pest management in **conventional farming**. Integrated pest management is a process in which all techniques that can be used are rationally coordinated for the best possible preventive action against harmful organisms. These methods include indirect measures which reduce the probability of damage, such as, for example, choice of location, tillage, the choice of resistant varieties, optimum fertilisation, crop rotation, and time of sowing and sowing technique. However, part of this pest management is also the targeted use of mechanical, thermal, biological and chemical procedures if harmful organisms occur. Plant protection products with hazardous properties are to be used selectively and with economic application techniques. This requires careful consideration in decision-making processes and makes high demands on the supply and use of technical information.

In **organic farming**, chemically synthesised plant protection products may not be used. The measures to minimise the risk of the occurrence of pests include tougher preventive techniques (selection of varieties, seed and location, fertilisation, tillage, crop rotation, etc.) and mechanical, thermal, biological and in emergencies chemical procedures, in which the selection of chemical products and their field of application are restricted as far as possible. As in integrated pest management, predatory mites, gall midges, wasps, traps and mating disruption techniques (for example, as a result of messenger substances applied, males and females no longer find one another) are used for pest control. Substances such as copper hydroxide, sulphur, ferric phosphate and fatty acid potassium salt may be used, according to the EU provisions (Regulation (EC) No 889/2008). However, such substances also sometimes have negative side-effects, so the search continues in organic farming too for alternatives to the use of plant protection products. The aim of organic farming is to promote and maintain natural control measures and to use them *ad hoc*. Biodiversity is promoted by various measures (hedges, tillage, crop rotation) and in this way harmful organisms are contained.

A reduction in or ecologically less harmful use of plant protection products with hazardous properties is possible only in connection with integrated or biological pest management measures. Directive 91/414/EEC, the predecessor to the current Directive 2009/128/EC (Directive of the European Parliament and of the Council establishing a framework for Community action to achieve the sustainable use of pesticides), already referred to the principles of good plant protection practice and provided that, whenever possible, the principles of integrated pest control should be applied. In Vorarlberg, the 1991 Plant Protection Product Act (*Pflanzenschutzmittelgesetz 1991*) already followed the principle of restricting the use of plant protection products to the extent necessary and of avoiding the use of toxic and highly toxic plant protection products. Furthermore, the intended and appropriate use of plant protection products in the 2007 Plant Protection Act (*Pflanzenschutzgesetz 2007*) also included compliance with the principles of integrated pest management.

The basic provisions of §§ 13 and 14 of the new 2011 Federal Plant Protection Product Act (*Pflanzenschutzmittelgesetz 2011*), BGBl. I No 10/2011, require the implementing legislation of the Länder to provide for measures to transpose Directive 2009/128/EC, taking into account the general principles of integrated pest management, the principles of good plant protection practice and the application of the precautionary principle, and Land Action Plans to be drawn up.

The Land of Vorarlberg has complied with the basic legal requirements through the Plant Protection Act (*Pflanzenschutzgesetz*), LGBl. No 62/2012, which entered into force on 17 August 2012. This established the legal basis for the Action Plan of the Land of Vorarlberg (Land Action Plan of Vorarlberg) on the sustainable use of plant protection products. The Federal Government is competent for drawing up the National Action Plan on plant protection products.

The aim of the 2013-2016 Land Action Plan of Vorarlberg, in addition to the renunciation of plant protection products with hazardous properties, is to mitigate the risks arising from the use of plant protection products. Focusing on quantities of plant protection products sold would fail to take account of the properties of the substances and the risks associated with their use. For example, under a quantitative approach of this kind, the use of a higher-risk plant protection product, which is already effective in smaller quantities, could be considered more favourably than the use of a plant protection product with lower risk but which would have to be applied in larger quantities. The aim of the Land Action Plan of Vorarlberg is therefore, in addition to the renunciation of plant protection products with hazardous properties, to deal responsibly, appropriately and economically with plant protection products.

Key aims of Directive 2009/128/EC, the 2011 Plant Protection Product Act and the Plant Protection Act, in addition to drawing up the Land Action Plan of Vorarlberg, are improved initial and additional training, the introduction of a plant protection product certificate for persons who use plant protection products professionally and for persons wishing to use plant protection products authorised for professional use, as well as for persons acting in an advisory capacity as part of a professional activity in the field of pest management or the use of plant protection products. A further aim is to raise awareness and educate the

population regarding the effects of the use of plant protection products and to provide information on the prevention or reduction of the occurrence of harmful organisms.

The need for information and public participation was already met when drawing up this Land Action Plan of Vorarlberg in so far as, in draft form, it was subject to a public hearing and relevant observations could be submitted by the Vorarlberg citizens and assessed in the further preparation.

Specific contents of Directive 2009/128/EC (Articles 6, 9 and 10) have not been considered in the Land Action Plan of Vorarlberg because they are already covered in full by existing Federal or Land legislation.

2. Legal bases

1. The European Union has adopted new regulations governing plant protection products through two legal instruments:

a) Regulation (EC) No 1107/2009 of the European Parliament and of the Council concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC, OJ L 309 of 24 November 2009, p. 1;

b) Directive 2009/128/EC of the European Parliament and of the Council establishing a framework for Community action to achieve the sustainable use of pesticides, OJ L 309 of 24 November 2009, p. 71.

These new regulations create a different legal framework for the Federal Plant Protection Product Act (*Pflanzenschutzmittelgesetz*) and for the implementing Acts of the Länder.

2. In response to this, in spring 2010, the Federal Government submitted a draft of an Act amending the Basic Plant Protection Act, BGBl. I No 114/1999, in the version of BGBl. I No 87/2005, for evaluation, which was confined to transposing the broad outlines of Directive 2009/128/EC on the framework for action on the use of pesticides.

3. In parallel to this, the Federal Ministry of Agriculture, Forestry, Environment and Water Management initiated the UNAPP project (= implementation of the National Action Plan on plant protection products) and also established two work packages in this context which involve Land competences:

Work package 2.1 under the UNAPP involved screening the existing Land legislation.

Work package 2.2 involved drawing up text modules for implementing Acts of the Länder. The procedure followed for this was that, on the basis of the existing Land legislation, the measures needed to transpose the Directive were ascertained and the text modules provided for the various fields by the representatives of the individual Länder were discussed jointly and consolidated. The transitional provisions for the use of the plant protection products authorised under the 1997 Plant Protection Product Act (*Pflanzenschutzmittelgesetz 1997*) were drawn up by the Federal Ministry of Agriculture, Forestry, Environment and Water Management.

4. In parallel to work package 2.2, the procedure at the Federal Ministry of Agriculture, Forestry, Environment and Water Management was amended so that the basic legal

provisions are no longer regulated in a separate Basic Act, but the provisions of the Basic Plant Protection Act are divided according to specific subject-matter between a new 2011 Plant Protection Product Act (*Pflanzenschutzmittelgesetz 2011*) and a new 2011 Plant Protection Act (*Pflanzenschutzgesetz 2011*).

The 2011 Plant Protection Product Act, BGBl. I No 10/2011, was passed on 15 February 2011.

It contains the following essential basic provisions for the implementing legislation of the Länder in §§ 13 and 14:

‘Use of plant protection products

§ 13. (Basic provision)

(1) The Land legislation shall provide for measures to implement Directive 2009/128/EC, except biocidal products under the Biocidal Products Act (*Biozid-Produkte-Gesetz*), BGBl. I No 105/2000, considering the general principles of integrated pest management, the principles of good plant protection practice and the application of the precautionary principle, in particular with regard to

1. Use of plant protection products and cleaning of plant protection equipment,
2. Restrictions or bans on the use of plant protection products with regard to the risks associated with use under certain conditions or in certain areas,
3. Training for persons who use plant protection products professionally or persons who use plant protection products which are authorised for professional use and advisers for the use of plant protection products in connection with the introduction of a certification system including mutual recognition,
4. Public information and awareness-raising, in so far as it is not already provided for in other legislation,
5. Inspection of plant protection equipment already in use in connection with the introduction of a certification system,
6. Reduction in the risks and the quantity of plant protection products used,

7. Development and introduction of integrated pest management and alternative methods or procedures and

8. Indicators for monitoring the use of plant protection products.

(2) The Land legislation shall provide that reports are to be drawn up and forwarded to the Federal Ministry of Agriculture, Forestry, Environment and Water Management, with regard to

1. the implementation of the inspection measures under Article 8 of Directive 2009/128/EC,

2. the integrated pest management under Article 14 of Directive 2009/128/EC,

3. the results of the evaluations under Article 15 of Directive 2009/128/EC and

4. the controls of the use of plant protection products in accordance with the first subparagraph of Article 68 of Regulation (EC) No 1107/2009 by 31 May of the year following that to which the report relates.

(3) The Land legislation shall provide that – considering the grace period and § 3(2), point 2 – only the products entered in the plant protection product register may be applied. The use covers the consumption, application and spreading, as well as the use, storage, keeping in stock and transport within the business premises of plant protection products for the purposes of application.

(4) The Land legislation shall impose penalties for infringements of the provisions established in the Land implementing Acts.’

‘Land Action Plans and National Action Plan on plant protection products

§ 14. (Basic provision)

(1) For the purposes of drawing up and consolidating a National Action Plan on plant protection products at Federal level and its amendments, Land legislation shall provide, in accordance with the specifications under Article 4 of Directive 2009/128/EC and considering § 2(2), that Land Action Plans are drawn up and also amended, where appropriate, in which, to reduce the risks and the effects of plant protection product use on human health and the environment, the baseline situation and the measures already introduced and to be carried out are surveyed and documented and targets are established by means of timetables. The Land Action Plans shall also describe the implementation of the measures listed in § 13(1).

(2) Land legislation shall provide that the Land Action Plans as referred to in paragraph 1 are to be forwarded to the Federal Ministry of Agriculture, Forestry, Environment and Water Management for the first time by 30 April 2012.²

(3) Land legislation shall provide that Land Action Plans shall be reviewed and updated at least every five years and that the provisions on public participation in accordance with Article 2 of Directive 2003/35/EC providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation Council Directives 85/337/EEC and 96/61/EC, OJ L 156 of 25 June 2003, page 17, shall apply for drawing up or amending the Land Action Plans.’

5. The Plant Protection Act (*Pflanzenschutzgesetz*), LGBI. No 62/2012, entered into force on 17 August 2012. It serves to implement the basic legal provisions of the 2011 Plant Protection Product Act (*Pflanzenschutzmittelgesetz 2011*), BGBl. I No 10/2011, (§§ 13 and 14) and Directive 2009/128/EC.

6. This Act contains the following key innovations:

Monitoring and investigation tasks in the pest management sector are in future to be undertaken by the Chamber of Agriculture of Vorarlberg.

Under certain conditions, the Land Government may transfer some of these individual tasks to the municipality previously competent. The Land Government has to adopt an Action Plan on the sustainable use of plant protection products with the involvement of the public. Persons who use plant protection products professionally or who act as advisers as part of a professional activity in the field of pest management or the use of plant protection products must in future be in possession of a plant protection product certificate.

A plant protection product certificate is issued only to persons who have the relevant technical knowledge and are reliable. The plant protection product certificate is issued for a limited period of time and is extended only if evidence is provided of attendance at an additional training course.

² The basis for the Land Action Plan was established only with the Plant Protection Act (*Pflanzenschutzgesetz*), LGBI. No 62/2012, which entered into force on 17 August 2012.

For detailed regulations concerning the restriction or prohibition of the use of plant protection products, the storage of plant protection products, the use of protective clothing and protection equipment, the requirements concerning and inspection of plant protection equipment, the initial and additional training and the recognition of qualifications and the plant protection product certificate, provision has been made for authorisations to issue regulations for the Land Government.

Monitoring of the use of plant protection products is in principle the responsibility of the District Commission. However, the Land Government may transfer some or all of the monitoring tasks to appropriate establishments.

The Land Government has to promote measures to raise awareness and educate the population concerning the effects of the use of plant protection products and to make information available concerning the control of harmful organisms.

3. Objectives of the Land Action Plan of Vorarlberg

The aims of the measures defined below are as follows:

1. to maintain and further improve the fundamentally high environmental compatibility in the use of plant protection products;
2. to mitigate additional risks arising through the use of plant protection products with hazardous properties for humans and the environment, and to reduce the use of these plant protection products.
 - The application of plant protection products with hazardous properties is to be limited in terms of the number of treatments and the dose rates to the amount necessary as defined in organic farming or integrated pest management. When deciding on the choice of measure, careful consideration is to be given to whether an economic injury arises from the occurrence of the harmful organisms (information to be obtained from pest traps, forecasting procedure). Only after the injury level is exceeded may plant protection products with hazardous properties be used;
 - a clear proportion of plant protection product applications – as far as possible – are to be replaced by preventive biological and physical plant protection measures;
3. to further mitigate the risk caused by plant protection product residues in agricultural products and thereby to make an additional contribution to precautionary consumer protection;
4. to promote regional production and the supply of the population with high-quality food;
5. to improve the conditions of use (consumption, utilisation, application, use, storage, stocking and transport within the holding), *inter alia* by still further reducing the need for utilisation of plant protection products, for example through the forecasting procedure or improved up-to-date information for farmers;
6. to further mitigate the risk of pollution of soil, groundwater and surface waters by plant protection products and their relevant breakdown products.

During the implementation of the package of measures of this Action Plan of Vorarlberg for the responsible use of plant protection products, it is expected, according to expert evaluation, that risks potentially arising from the application of plant protection products to humans and the environment will be reduced.

This excludes measures necessary to eradicate quarantine pests in accordance with Directive 2000/29/EC.

4. Measures under the Plant Protection Act in conjunction with Articles 5 to 15 of Directive 2009/128/EC

4.1 Use of plant protection products and cleaning of plant protection equipment (Article 13 of the Directive)

4.1.1 Use of plant protection products

Status quo

Section 3 of the Plant Protection Act regulates the use of plant protection products. Detailed provisions are to be implemented in the new Plant Protection Product Regulation still to be adopted. At present, § 3 of the still valid Plant Protection Product Regulation (*Pflanzenschutzmittelverordnung*), LGBI. No 18/2008, regulates details of use.

Monitoring of the use of plant protection products is in principle the responsibility of the District Commission. However, the Land Government can transfer some or all of the monitoring tasks to appropriate establishments.

In addition, there are currently:

- The ‘*Handbuch für den Sachkundenachweis im Pflanzenschutz*’ (manual for the certificate of competence in pest management) and the brochure ‘*Umweltgerechter Pflanzenschutz nur mit funktionierenden Geräten*’ (environmentally sound pest management only with equipment that works) of the Österreichische Arbeitsgemeinschaft für integrierten Pflanzenschutz (Austrian Working Group for Integrated Plant Protection – ÖAIP);
- Various brochures of the Sozialversicherungsanstalt der Bauern (Social Insurance Institution for Farmers) and Allgemeine Unfallversicherungsanstalt (General Accident Insurance Institution), *inter alia*, for the safe application of plant protection products;
- Guidelines under ÖPUL for organic farming and integrated production (IP) in fruit, wine and protected agricultural crops;
- Joint guidelines on ‘*Verlustarm Sprühen*’ (low-loss spraying) for Austria, Bodensee, South Tyrol.

Measure

Vorarlberg will work towards optimisation of dosing and application systems for the application of plant protection products in various crops.

- Sub-measure in arable farming

The Land of Vorarlberg provides information on the advantages of low-drift application techniques, e.g. air-assisted spreading systems, low-drift nozzles.

- Sub-measure in vertical crops

The Land of Vorarlberg supports the development and improvement of loss-minimising dosing and application systems in fruit-growing and wine-growing.

- Improved training and increased controls to promote the protection of customers and users, as well as consumer protection in floriculture.

4.1.2 Filling and cleaning of plant protection equipment

Status quo

At present, § 3(2) and (6) of the still current Plant Protection Product Regulation, LGBI. No 18/2008, regulate how spray mixtures are to be prepared and tanks of plant protection equipment are to be filled and how equipment and containers are to be cleaned. § 10(3)(c) and (f) of the Plant Protection Act contains the legal bases for the detailed provisions which are to be implemented in the new Plant Protection Product Regulation still to be adopted.

In addition, there is currently:

- the ‘*Handbuch für den Sachkundenachweis im Pflanzenschutz*’ (manual for the certificate of competence in pest management’ issued by the Austrian Working Group for Integrated Plant Protection (ÖAIP);
- the leaflet ‘*Sachgerechtes Befüllen und Reinigen von Pflanzenschutzgeräten*’ (Proper filling and cleaning of plant protection equipment’ (Austrian Chamber of Agriculture (LKÖ), ÖAIP, Fachverband der chem. Industrie Österreichs (Association of the Austrian Chemical Industry) – Pest Control Industry Group, Industrieverband Agrar e.V.).

Measures

Vorarlberg recommends that plant protection equipment already in use should be retrofitted with hand-washing and clear water tanks to clean the plant protection equipment in the field and for new and used equipment the fitment of continuous internal cleaning systems.

This allows possible impurities for succeeding crops and chemical reactions in the tank to be avoided and the risk of localised soil and water pollution to be reduced.

The Land of Vorarlberg, in cooperation with the Chamber of Agriculture of Vorarlberg is making the filling and cleaning of plant protection equipment a focal point for advice.

Vorarlberg also supports information on proper filling and cleaning of plant protection equipment and in this connection reference is made to the possibility of retrofit kits for clear water tanks and interior cleaning nozzles to minimise the environmental impact.

The Chamber of Agriculture of Vorarlberg carries out surveys on the actual numbers of tractor-drawn and tractor-driven plant protection equipment in use in Vorarlberg and its technical equipment and possibilities for retrofitting.

4.2 Restrictions or bans on plant protection products with regard to risks associated with use under certain conditions or in certain areas (Articles 11 and 12 of the Directive)

Status quo

1. According to § 10 of the Plant Protection Act, the Land Government has to adopt, by regulation, detailed provisions on restrictions of the use of plant protection products and on the promotion of low-risk methods where necessary to protect human life and health or the environment or biodiversity or to implement the provisions of Union law.

The restrictions on use include in particular, taking into account the effects on human health and biodiversity or the results of relevant risk assessments, a ban or temporary, localised, objective or quantitative restriction on the use of plant protection products in the following areas:

- a. areas used by the general public or by vulnerable groups as defined in Article 3 of Regulation (EC) No 1107/2009 (public parks, sports grounds, school grounds, etc.),
- b. areas where the Birds Directive and the Flora and Fauna Habitats Directive apply, and
- c. protected areas as defined in the Water Framework Directive.

In these areas, the use of plant protection products is to be kept as low as possible, priority is to be given to low-risk plant protection products and biological control measures and suitable risk management measures are to be taken.

Detailed provisions are to be implemented in the new Plant Protection Product Regulation still to be adopted.

At present, § 1 of the Plant Protection Product Regulation still in force, LGBI. No 18/2008, prohibits the aerial spraying of plant protection products (paragraph 1(a)) and the use of plant protection products (paragraph 2(b)) in wetlands, litter and meagre meadows or dry locations and in the 3 metre-wide strips of land bordering them (point 1), in 3 metre-wide strips of land bordering forest or the tops of banks of surface waters (point 2), in other areas, especially residential or agricultural areas, if interference with neighbours, the health of neighbours, other persons residing there or plants or plant products growing on neighbouring land is to be expected (point 3).

2. Further legal framework conditions:

2.1 Water Act (*Wasserrechtsgesetz* – WRG 1959) – Establishment of protected and closed areas, adoption of regional programmes and designation of observation areas and areas for prospective measures:

Under § 34(1) WRG 1959, to protect water supply systems from pollution or from impairment of their capacity, the competent water authority may impose special orders by decision concerning the cultivation or other use of land and waters, prohibit the erection of certain installations and define corresponding protected areas.

Under § 34(2) WRG 1959, to protect the general water supply, the Governor may provide by regulation that in part of the catchment area, before they are implemented, measures which may jeopardise the water quality, capacity or level are to be notified to the water authority or require authorisation under water law or are not permissible or only in a certain way.

Under § 55g WRG 1959, the Governor has the possibility, in connection with the implementation of measures to achieve and maintain the environmental aims set, to adopt regional water management programmes (including for the protection of groundwater bodies).

Under § 33f WRG 1959, the Governor, if the thresholds are exceeded a certain number of times in a body of groundwater, must designate observation areas and, where the legal conditions are met, establish areas for measures to be taken. These instruments take effect only if groundwater pollution has been established.

2.2 The National Water Management Plan (NWMP) was adopted in March 2010 in implementation of the Water Framework Directive. It includes the inventory (current water status analysis), the summary of the monitoring results and the generally binding programme of measures to achieve good water status or good potential. These may include measures for remediation (remediation measures), measures to avoid deterioration of the existing status (maintenance measures) and precautionary measures.

The topic of plant protection products is also dealt with in the NWMP. The effects on surface waters and groundwater are described and existing measures, such as, for example, the adaptation of protected and closed areas or the Austrian Programme for Environmentally Sound Agriculture (ÖPUL) are summarised, and more far-reaching measures concerning groundwater are cited, such as, for example, the Groundwater Status Monitoring Regulation (*Grundwasserzustandsüberwachungsverordnung – GZÜV*), special measuring programmes or the research project ‘GeoPEARL Austria’ with the aim of supporting the planning of measures to avoid potential pollution of the groundwater by pesticides or their relevant metabolites. Furthermore, it is pointed out that, in implementation of Directive 2009/128/EC, Land legislation on the use of plant protection products can be established on the basis of the basic legal provisions on plant protection to protect the aquatic environment and the drinking water supply. These are to serve to support the specifications of the Water Framework Directive.

Establishing possible restrictions ranging as far as bans concerning the use of plant protection products to protect the waters in a regulation under § 10 of the Plant Protection Act therefore requires careful consideration and will only be contemplated in support of the provisions of Directive 2000/60/EC which cannot be implemented (or not adequately) with measures based on water law.

Measures

The respective competent local water authority of the Land of Vorarlberg is competent for the amendment and adaptation of the water regulations on protected and closed areas and for monitoring compliance with these regulations.

The Land of Vorarlberg adopts temporary, localised and objective restrictions on use where the conditions are met, in accordance with § 10 of the 2012 Plant Protection Act.

4.3 Training for persons who use plant protection products professionally and advisers for the use of plant protection products in connection with the introduction of a plant protection product certificate including mutual recognition (Article 5 of the Directive)

4.3.1 Ensuring user expertise

Status quo

The 1991 Plant Protection Product Act already contained provisions on the conditions to achieve expertise in the use of plant protection products.

Under § 11(2) of the Plant Protection Act, the professional knowledge and skills can be acquired or proved by participating in a training course organised by the Chamber of Agriculture of Vorarlberg or training recognised on request by decision, the completion of training in another Land or the authorisation to pursue the trade of pest control.

The possibility of recognising further training certificates as equivalent to the training course of the Chamber of Agriculture of Vorarlberg is also regulated in § 13(4) of the Plant Protection Act.

According to § 4(1) of the Plant Protection Regulation still in force, LGBI. No 18/2008, the successful completion of study at the BOKU, a college of higher education in agriculture and forestry, a technical college for agriculture and forestry, passing the skilled worker or master craftsman examination for a profession in agriculture or forestry or for the trade of gardener and the certificate of professional competence for use as a forester are currently considered equivalent to the training course of the Chamber of Agriculture of Vorarlberg for the use of toxic and highly toxic plant protection products.

Measures

Vorarlberg introduces measures coordinated with the Chamber of Agriculture of Vorarlberg to ensure the expertise.

‘Plant protection’ appears repeatedly as teaching content in the curricula of the agricultural college in Hohenems and is dealt with very extensively in the teaching on the subjects of plant cultivation, vegetable growing and processing, horticulture and fruit-growing. The Land of Vorarlberg will also ensure the improvement and further development of existing initial and additional training concepts, and, on the next revision of the framework curriculum for agricultural colleges, adapt the curricula of the agricultural college in Hohenems to the specifications of Directive 2009/128/EC, Annex I.

The Land of Vorarlberg ensures a sufficient number of initial and additional training events and thereby enhances the knowledge of users.

The Land of Vorarlberg transfers the existing regulations on expertise to the new system in accordance with Directive 2009/128/EC. The certificate of competence existing hitherto applies until 25 November 2015 at the latest as plant protection product certificate. Persons wishing to use plant protection products professionally and possessing a certificate of competence must participate in an additional training course or provide evidence of a recognised additional training measure for a plant protection product certificate to be issued. As in the past, if these persons do not have any certificate of competence, they may not use toxic or highly toxic plant protection products. Persons acting in an advisory capacity must be in possession of a plant protection product certificate by no later than 26 November 2015.

The Land of Vorarlberg will adopt the detailed provisions on the form and content of the plant protection product certificate by regulation.

4.3.2 Ensuring independent plant protection advice

Status quo

As regards plant protection advice, plant protection experts and production advisers of the Chamber of Agriculture of Vorarlberg are currently operating on behalf of the Land. In addition to advice on application and prevention, they are also involved in initial and additional training.

Measures

The Land of Vorarlberg provides decisive support for the content of the Land Action Plan by cofinancing the official advice of the Chamber of Agriculture.

The Land of Vorarlberg prepares information materials in cooperation with the BMLFUW, AGES or the Chamber of Agriculture and the other Länder, and ensures efficient dissemination by means of modern media.

Vorarlberg advocates boosting independent advice, thereby also sustainably ensuring the economic success of agricultural production and the security of supply of high-quality food.

Vorarlberg supports the carrying out of plant protection trials to ensure the quality of advice and to create the basis for the authorisation and use of suitable plant protection products. Furthermore, the Land of Vorarlberg advocates renunciation or reduced use or the use of less environmentally harmful plant protection products, the promotion of the use of low-risk plant protection products and biological control measures.

Vorarlberg supports the establishment and development of forecasting and warning systems with precise timing and thereby ecological optimisation of plant protection measures.

4.3.3 Additional training events on the use of plant protection products

Status quo

In Vorarlberg, there are ongoing additional training courses and events regarding the application of plant protection products and information relating to specific crops (e.g. fruit-growing day, potato day, use of grassland, alpine pasture management and improvement) and the non-profit sector (vegetable-growing in gardens).

Measures

The Land of Vorarlberg ensures that the educational measures for persons who use plant protection products professionally are also on offer to other interested parties.

4.4 Public information and awareness-raising, in so far as it is not already provided for in other legislation (Article 7 of the Directive)

4.4.1 Developing an Internet portal for plant protection

Status quo

In Austria, there is a high level of public awareness concerning the use of plant protection products. The risks to life and the environment are however sometimes viewed very critically.

Measures

The Land of Vorarlberg, in cooperation with the other Länder, supports the establishment and maintenance of a plant protection Internet portal for the communication of technical information and with generally comprehensible information for persons who do not use plant protection products professionally and other interested parties. This is to be built up on existing, established information sources for individual user groups, such as, for example, the homepage of AGES, the ÖAIP, the Agranet of the LKÖ, the Infoportal of the SVB, the homepage of the OGV, the guidelines for golf courses, community newsletters and magazines of allotment clubs, such as '*Kleingärtner*'.

The Land of Vorarlberg supports events to boost understanding of the need for plant protection measures (open days, presentations, etc.).

Vorarlberg, in cooperation with the other Länder, ensures that the communication of information is objectively well-founded.

4.4.2 Information and training for persons who do not use plant protection products professionally

Status quo

In Vorarlberg, training on the use of plant protection products is available to the general public (e.g. LFI courses).

Measure

Vorarlberg supports the information for persons who do not use plant protection products professionally through leaflets, events, such as in fruit-grower and horticultural

associations, in allotment clubs, through the Fachverband der Baumwärter (tree wardens' association) and at garden shows.

Vorarlberg ensures that the training measures for persons who use plant protection products professionally are also open to other interested parties.

The Land of Vorarlberg is ensuring that in 2013 at least two basic courses and by 2015 at least two refresher courses will be offered for correct use of plant protection products. These courses are accessible to all. From 2016, a basic course and a refresher course will be on offer every year.

The Land of Vorarlberg ensures, also in cooperation with the Chamber of Agriculture of Vorarlberg, that information is provided in the community publications on plant protection products with hazardous properties and that the risks of plant protection products used in the hobby and gardening sector are pointed out.

4.5 Inspection of plant protection equipment already in use in connection with the introduction of a certification system (Article 8 of the Directive)

Status quo

Plant protection equipment must be designed, maintained and cleaned in such a way that if used properly, adverse effects on human life and health and the environment are avoided.

According to § 10(3)(f) and (g) of the Plant Protection Act, LGBL No 62/2012, the Land of Vorarlberg, where necessary to protect human life or health or the environment or to transpose the law of the European Union, may adopt detailed provisions by regulation on the requirements concerning plant protection equipment and its handling and cleaning after use and on the plant protection equipment to be inspected, the requirements concerning the inspection including the establishment of the frequency of inspections, the appropriate bodies for carrying out the inspection and the recognition of inspections carried out in other Member States of the European Union.

According to § 3(5) of the still current Plant Protection Product Regulation, LGBL No 18/2008, plant protection equipment must be carefully maintained. Equipment which is towed and driven by tractor is verifiably to be subject to regular maintenance, at least every three years; written evidence of the maintenance is to be kept for at least three years.

Reference is made in addition to the 2009 ÖAIP Guidelines ‘*Umweltgerechter Pflanzenschutz nur mit funktionierenden Pflanzenschutzgeräten*’ (Environmentally sound plant protection only with plant protection equipment that works).

Under ÖPUL measures too, the regular inspection of plant protection equipment in use is mandatory.

For new plant protection equipment the provisions of Machinery Directive 2006/42/EC and Directive 2009/127/EC are applicable. These Directives are transposed nationally by the 2010 Machinery Safety Regulation (*Maschinen-Sicherheitsverordnung 2010*).

Measure

The Land of Vorarlberg supports the practical introduction of new plant protection equipment and new technologies, which contribute to reducing loss (reduction of drift and dripping losses, e.g. by optimisation of the blower air flow) and to economic and efficient application of plant protection products. The regular inspection of plant protection equipment in use (a detailed definition will be laid down in the Plant Protection Product Regulation still to be drawn up) has to take place for the first time by 26 November 2016. Equipment which is tractor-drawn and operated is already inspected regularly.

The Land of Vorarlberg ensures that, within the territory of the Land, a possibility for inspection will be offered at least once every three years and therefore at a shorter interval than provided for by Directive 2009/128/EC – according to Article 8(1) of Directive 2009/128/EC, the interval between inspections may not exceed five years until 2020 and may not exceed three years only thereafter – for the following plant protection equipment:

- tractor-driven plant protection equipment for arable farming (field sprayers)
- □ tractor-driven plant protection equipment for fruit-growing and wine-growing (blower spraying equipment, herbicide boom sprayers, etc.).

The Land of Vorarlberg supports the externalisation of the monitoring of the use of plant protection products to an appropriate body which is impartial, fulfils the requirements concerning the quality of performance of the task and the protection of confidential information, and is not exposed to any conflict of interests between the performance of the duties delegated to it and its other activities.

4.6 Reduction in the risks and the quantity of plant protection products used (Article 12 of the Directive)

4.6.1 Reduction in the application of plant protection products

Status quo

The structure of the farming system in Vorarlberg, consisting of small farms by European standards, gives a patchwork appearance to the cultivated landscape. A voluntary reduction in the use of plant protection products with hazardous properties has already been supported and brought about since 1995 through ÖPUL measures (e.g. organic farming, IP, renunciation of input products).

Measures

The Land of Vorarlberg advocates maintaining the variety of agricultural structures.

The Land of Vorarlberg advocates the establishment of voluntary renunciation of plant protection products posing a high threat to groundwater in existing support programmes (e.g. ÖPUL).

The Land of Vorarlberg supports the use of environmentally-friendly plant protection products that spare beneficial organisms in the context of organic farming and integrated pest management.

Vorarlberg advocates exhausting the saving potential in the non-agricultural sector too (e.g. golf courses, sports grounds or house gardens).

Vorarlberg supports the development of crop-specific strategies to reduce the use of plant protection products or to find alternatives to active substances with high groundwater pollution potential in sensitive areas.

The Land of Vorarlberg is planning for the years 2013 to 2020 the implementation of the new agricultural strategy ‘Organic Land of Vorarlberg - regional and fair’. One of the aims involves the further development of a quality label based on a uniform quality standard. Products to bear this quality label meet criteria above the statutory requirements with regard to product quality and production processes, in so far as this is possible and appropriate. Together with the aim to double the proportion of organic holdings and consumers of organic products by 2020, a reduction in plant protection products with hazardous properties is one of the long-term objectives.

4.6.2 Specific priorities

Status quo

The possibilities of crop rotation are used as a priority to prevent the occurrence of the corn root worm and the spread of the wireworm in Vorarlberg. Seed treated with insecticide is used in addition to control these harmful organisms. Incorrect handling of the seed and incorrect distribution of the seed may harm bee populations. The proper use of treated maize seed is regulated in the Sowing Machinery Regulation (*Sägeräteverordnung*).

Measure

The Land of Vorarlberg carries out targeted inspections in maize cultivation in the area around affected beehives.

The Land of Vorarlberg advocates very varied crop rotation as an alternative to the use of seed treated with insecticide to control wireworm and prevent the occurrence of the corn root worm.

Under the agricultural strategy ‘Organic Land of Vorarlberg - regional and fair’, the Land of Vorarlberg pursues the aim of increasing self-supply with market fruits, thereby potentially leading to multiple crop rotation and hence a preventive effect on harmful organisms.

Status quo

Invasive plant species, such as ragweed for example, represent a known problem for allergy sufferers and biodiversity in Vorarlberg too.

Measures

The Land of Vorarlberg supports the health, environmental and nature conservation authorities in drawing up effective, environmentally compatible eradication methods.

Status quo

In spite of explicit regulation in the Plant Protection Act, LGBL No 62/2012 and in § 3(2) and (6) of the currently still applicable Plant Protection Product Regulation, LGBL No 18/2008, incorrect filling and cleaning of plant protection equipment may lead to localised groundwater pollution.

Measure

The Land of Vorarlberg recommends the establishment of suitable handling areas and the development of strategies to avoid localised pollution.

Status quo

Intensive plant protection measures are sometimes used on sports and leisure grounds to maintain the green areas.

Measure

The Land of Vorarlberg advocates that plant protection products with hazardous properties are not used in public areas, such as children's playgrounds, sports and leisure grounds, traffic islands and such like.

Status quo

Total herbicides (such as Roundup) are sometimes used to keep paved leisure areas and pathways weed-free.

Measure:

The Land of Vorarlberg will provide information on the hazardous properties of total herbicides in community newsletters and call for renunciation.

4.7 Development and introduction of integrated pest management and alternative methods or procedures (Article 14 of the Directive)

4.7.1 Promotion of integrated pest management procedures and organic farming under promotion programmes

Status quo

In Austria, the promotion of integrated pest management and organic farming takes place under ÖPUL 2007-2013.

Measures

The Land of Vorarlberg advocates the provision of sufficient financial resources for an appropriate environmental programme after 2013 and provides due support for integrated pest management procedures and organic farming in promotion and research programmes.

4.7.2 Drawing up of crop and sector-specific guidelines for biological and integrated pest management

Status quo

Under ÖPUL, organically farmed holdings are compensated for the anticipated reduced yields and management difficulties.

Measures

The Land of Vorarlberg advocates doubling the proportion of organically farmed holdings by 2020.

The Land of Vorarlberg supports holdings which convert to organic farming methods during the period 2012-13. This creates an additional incentive for conversion.

Vorarlberg promotes information events, advice and training in connection with the organic farming method.

Status quo

At present there are the IP guidelines under ÖPUL in Austria which are designed to encourage voluntary participation by persons who use plant protection products professionally. The attempt is made to offset the anticipated reduced yields or management difficulties by a fixed compensatory payment.

Measures

The Land of Vorarlberg advocates the continuation of these programmes, with due regard to the competitiveness of IP (compensation for lower yields).

The Land of Vorarlberg, together with the other Länder and the Federal agencies, is continuing the technical development of the current IP guidelines, as defined in Annex III to the Directive, for all crops.

Vorarlberg supports this through further training and advice.

Vorarlberg supports the development and introduction of alternative pest management approaches or techniques.

The Land of Vorarlberg endeavours that when producing publicly subsidised agricultural brand programmes for plant-based foods (e.g. Ländle apple), the plant protection products which may be used are confined to the authorised products under the respective IP guidelines.

4.7.3 Establishment of untreated control areas (spraying windows)

Status quo

No general evaluation of plant protection measures is in progress at present.

The Chamber of Agriculture of Vorarlberg is establishing control areas on trial plots.

Measure

The Chamber of Agriculture of Vorarlberg includes ‘spraying windows’ in trial plots to check plant protection measures in certain annual crops in the event of the occurrence of harmful organisms (identification as control area).

The Land of Vorarlberg uses the findings obtained from this to optimise advice.

4.8 Indicators for monitoring the use of plant protection products (Article 15 of the Directive)

4.8.1 Collection of statistical data on the use of plant protection products

Status quo

In Vorarlberg, it has been compulsory to keep records of the use of toxic and highly toxic plant production products since the entry into force of the Plant Protection Act, LGBI. No 58/2007. Furthermore, under IP, records have been kept for years on the use of plant protection products

On the basis of Regulation (EC) No 1107/2009, keeping records of plant protection products is compulsory throughout the EU for persons who use plant protection products professionally.

The Federal Office for Food Safety (BAES) has at its disposal data regarding the quantities of plant protection products and active substances of registered products placed on the market in Austria.

Measures

The Land of Vorarlberg, in coordination with the other Länder, is updating standardised documentation for the farm records of the use of plant protection products for persons who use plant protection products professionally.

The Land of Vorarlberg carries out inspections of the use of plant protection products at regular intervals.

4.8.2 Model calculation for the behaviour of plant protection products in the environment

The Federal Government is competent for this (e.g. in the GeoPearl project, in which seepage water analyses are carried out under treated areas, considering various parameters).

5. Summary

The Land of Vorarlberg is concerned to reduce the use of plant protection products with hazardous properties in favour of preventive, biological or physical plant protection measures under the legislation. This Land Action Plan contains measures which commit the Land of Vorarlberg itself to making a contribution to the implementation.

- Promotion of organic farming and integrated production
- Further development of a Vorarlberg quality label
- Promotion of multiple crop rotation with the aim of achieving a higher degree of self-supply with market fruits
- In the case of publicly subsidised agricultural brand programmes, the applicable plant protection products will be limited to the products permitted in integrated production
- Uniform documentation on the use of plant protection products for professional use
- Ensuring the expertise of users of plant protection products
 - Compulsory training for persons who use plant protection products professionally
 - Adaptation of the curriculum of the agricultural college in Hohenems to the specifications of Directive 2009/128/EC
 - Information for persons who use plant protection products in the allotments sector in community newsletters, at events of the fruit-grower and horticultural associations, through the Fachverband der Baumwärter (tree wardens' association) and at garden shows
 - Further training for professional users is also open to all other interested parties
 - Development of an Internet portal in cooperation with the other Länder
- Plant protection equipment
 - Surveys on the actual number of tractor-drawn and tractor-driven plant protection equipment in use in Vorarlberg and their technical equipment and possibilities for retrofitting
 - Compulsory inspection of tractor-drawn and tractor-driven plant protection equipment every three years
 - Priority for advice on the subject of filling and cleaning plant protection equipment

- Externalisation of the monitoring of the use of plant protection products by an appropriate body
- Call to refrain from plant protection products with hazardous properties in public areas.

When formulating the individual measures, the attempt has been made to use generally comprehensible expressions and to keep the comments as brief as possible, which at times has been at the expense of technical provision.

6. Public participation

According to § 9b of the Plant Protection Act, on preparation and on each amendment of the Action Plan, a public consultation must be held.

According to paragraph 1, the draft Action Plan is to be made available for public inspection by the Land Government at the Land Government offices during office hours for at least four weeks and is to be published on the Land homepage. The public disclosure at the Land Government offices and the reference on the Internet are to be announced in the Official Gazette of the Land of Vorarlberg.

After the period of disclosure, the Land Government has to make available for inspection by the general public the Action Plan it has adopted and a summary explanation of how the observations submitted have been taken into consideration and to keep it accessible for the general public to download on the Land Internet homepage. The disclosure at the Land Government and the Internet reference are to be announced in the Official Gazette of the Land of Vorarlberg.

The announcement was made in the Official Gazette of 3 November 2012.

The disclosure period started on 5 November 2012 and ended on 3 December 2012.

The Land Action Plan on Plant Protection Products was adopted by the Land Government on 12 February 2013 and promulgated in the Official Gazette of the Land of Vorarlberg on 23 February 2013.

7. Summary of the consideration of the observations received on the Action Plan of the Land of Vorarlberg on responsible use of plant protection products

During the time of the official disclosure, observations were received from the Chamber of Agriculture of Vorarlberg, the Environmental Protection Department (IVe), the Business Law Department (VIb), the Vorarlberger Imkerverband (Vorarlberg Beekeepers' Association) and the Egger Imkerverein (Egg Beekeeping Association) by the competent Agriculture Department (Va). Observations by Biene Österreich on the NAP (National Action Plan) were reported and submitted to the Agriculture Department (Va) by the Vorarlberger Imkerverband (Vorarlberg Beekeepers' Association).

Thanks are expressed at this point for the efforts of these organisations to improve the Action Plan through critical assessment. The majority of the observations were preceded by formulations which assess the aims of the Action Plan and confirm that it is 'heading in the right direction'.

The critical remarks were examined and – as far as was possible – taken into consideration and this is commented upon as follows:

Concerning the observations by the Chamber of Agriculture of Vorarlberg

The term 'chemically synthesised plant protection products' was replaced by the expression 'plant protection products with hazardous properties'. How hazardous a plant protection product is cannot be based on the manufacturing process used.

Chapter 1: The use of beneficial organisms is a measure in both integrated production and organic farming to protect a crop from harmful organisms. The delimitation was changed.

Chapter 3: Addition that before the use of plant protection products with hazardous properties, various information must be obtained and assessed to be able to estimate the potential damage and to choose the appropriate measure.

Chapter 4.3.1: An error in the text was corrected.

Chapter 4.6.1: The term 'introduction of a quality label' was changed to 'the further development of a quality label'.

Chapter 4.6.2: The order of the public areas in which no plant protection product with hazardous properties may be used any more was altered: starting with the areas with the highest risk to humans (children's playgrounds), followed by sports and leisure grounds to the areas with the lowest risks to humans (traffic islands). In addition, a paragraph on dealing with total herbicides (such as Roundup) in public areas was added.

Concerning the observations by the Business Law Department (VIb)

Chapter 4.2: Necessary coordination of the Land with the Federal authorities. In the opinion of the Business Law Department, coordination does not seem necessary. The original wording was amended.

Concerning the observations by the Vorarlberger Imkerverband (Vorarlberg Beekeepers' Association) communicated by its President, Dr Egon Gmeiner

Protection and sampling of the soil, groundwater, surface waters, silo waste water, slurry and products (maize, vegetables, cereals, milk, meat, etc.)

This approach is already implemented in the streptomycin monitoring (sampling of undergrowth, apples and honey) and in addition, contamination with seed dressings was investigated in bee colonies specially selected for research. Further research of this kind is to be carried out as warranted.

Improved initial and additional training

This important demand is met in accordance with the Plant Protection Act on the basis of Directive 2009/128/EC, which regulates initial and additional training for persons who use plant protection products professionally. Such persons must in future possess a plant protection product certificate, which is issued according to certified expertise. Persons who use toxic or highly toxic plant protection products already had to be in possession of evidence of expertise (2007 Plant Protection Act (*Pflanzenschutzgesetz 2007*)). Annex I to EU Directive 2009/128/EC lists the subjects to be covered in initial and additional training courses:

Some training subjects from the Directive are given as an example:

- legislation regarding pesticides and their use
- existence and risks of illegal plant protection products

- hazards and risks associated with pesticides to humans (operators, residents, bystanders) and to non-target plants, beneficial insects, wildlife, biodiversity and the environment in general
- Notions on integrated pest management and crop management strategies and techniques, organic farming principles, biological pest control methods
- Initiation to comparative assessment of pest management measures
- Measures to minimise risks to humans, non-target organisms and the environment
- Procedures for preparing pesticide application equipment for work and for its operation with minimum risks to the user, other humans, non-target species and the environment
- Use of pesticide application equipment and its maintenance
- Emergency action to protect human health and the environment
- Special care in protection areas
- Health monitoring and access facilities to report on any incidents or suspected incidents
- Record-keeping of any use of pesticides.

Furthermore, training and additional training are required under the following ÖPUL measures: organic farming, integrated production of fruit and wine (table in the Annex).

Improvement of information to all stakeholders by 100%

The Action Plan provides that the information for persons who do not use plant protection products professionally is to be promoted through leaflets, events, such as in fruit-grower and horticultural associations, in allotment clubs, through the Fachverband der Baumwärter (tree wardens' association) and at garden shows, that training measures for persons who use plant protection products professionally are also offered to other interested parties and that the initial and additional training courses offered should be accessible to all. The Action Plan contains as a further measure that information is additionally provided in the community newsletters on plant protection products with hazardous properties and that the risks of plant protection products in use in the hobby and garden sector are to be pointed out.

Checking the dosing and application systems

Tractor-drawn or tractor-operated plant protection equipment was already inspected before. A more detailed definition of the plant protection equipment to be inspected and the frequency of inspection will follow at regulation level. Under various ÖPUL measures, the equipment is inspected and on-site checks are carried out (by AMA, collection of samples and analyses for prohibited substances; test certificate from the equipment inspection is to be kept for 3 years) (table in Annex). Furthermore, checks are made of the equipment inspection by the Chamber of Agriculture of Vorarlberg under the Ländle quality programme (Ländle apple, Ländle vegetables and Ländle potato).

Checking the specifications for the filling and cleaning of application equipment

During training, instruction in correct, responsible behaviour when preparing spray mixtures, applying the plant protection products and cleaning the equipment has been and will continue to be intensified.

Application – protection of the neighbouring land

Protection of the neighbouring land is regulated in the Plant Protection Product Regulation, LGBI. No 18/2008. According to § 1(1)(b), point 3, the application of plant protection products is prohibited ‘in such areas, especially in residential or agricultural areas, if impairment of the health of the neighbour, the other persons staying there or the plants or plant products on the neighbouring land is to be expected’.

Maintenance of the plant protection equipment annually and immediately in the event of incidents

Article 8(1) of Directive 2009/128/EC requires an interval between inspections of five years by 2020 and of three years thereafter. However, in training courses it has already been pointed out in recent years that plant protection equipment is subject to heavy wear and tear and therefore after spraying 80 to 100 hectares should be subject to thorough inspection at a qualified workshop.

Crop rotation instead of seed coatings

Under 4.6.2, it is explained that a multiple crop rotation is the measure to be chosen as a priority as a preventive measure against harmful organisms. **The agricultural strategy ‘Organic Land of Vorarlberg’ pursues the aim of increasing self-supply with market**

fruits. This would lead to greater diversity of arable crops, thereby preventing the occurrence of harmful organisms.

Concerning the observations of Imkerverein Egg (Egg Beekeeping Association), communicated by spokesman Klaus Fink

Adaptation of the current support guidelines (maintenance of landscape features)

Maintaining the landscape features is already contained in some ÖPUL support measures (table in Annex). A BMLFUW working group currently exists in which work is carried out on the possibilities for maintaining and promoting landscape features in the new period. The Land of Vorarlberg supports the call to maintain landscape features and bee foraging areas (e.g. during the negotiations at the BMLFUW on the measures for the 2014-2020 programming period).

Additional training for farmers (as a condition for disbursement of support payments)

The funding measure ‘establishment of young farmers’ requires the beneficiaries to have obtained at least a relevant skilled worker qualification to be able to receive the support. In the case of ÖPUL measures ‘Integrated production’ and ‘Organic farming’, additional training is compulsory. For all persons who use plant protection products professionally, initial and additional training is also compulsory.

Evidence of expertise also necessary for hobby gardeners to be authorised to apply plant protection products

Persons wishing to use plant protection products authorised for professional use may purchase and use them only if they possess expertise and a plant protection product certificate.

In community newsletters attention will be drawn to a greater extent to the possible negative effects of plant protection products so as to promote the raising of awareness.

Moreover, the initial and additional training courses are to be accessible to all.

Concerning the observations of the Environmental Protection Department (IVe)

In general, the LAP is lacking objectives, measures, specifications, timetables which would reduce risks and negative effects of the use of plant protection products

The problem when drawing up this Action Plan according to the specifications at Federal level is that the field of pest management is an area of tension in which various interests are represented and pursued. Consumers demand products of the highest quality. Varieties characterised by greater resistance are not necessarily to the taste of the majority of consumers and products which fail to meet expectations are not purchased (apple scab, wireworm in potatoes, ‘wormy’ cherries from cherry fruit flies). There are only a very few plant protection products against certain harmful organisms. In organic farming too, plant protection products which may have negative effects on the environment are used in order to improve quality and therefore sales.

On the other hand, there are the farmers who are called upon to produce this food of flawless quality. The administrative burden increases still further through the requirements of trade. The demands do not always lead to the desired result (e.g. building up resistance by specifying the use of ‘a reduced quantity’ of a plant protection product).

The endeavours of nature conservation are to be recognised and verifiable. The reduction in the use of plant protection products is to be implemented successfully if effective alternatives are authorised. Vorarlberg has participated on several occasions in research projects and promotes the development of alternatives. A few examples:

- ‘Together against fire blight’, an Interreg project which investigated alternatives to streptomycin (contact with the project partners of the time still exists today);
- Information event for farmers on the promotion of the use of Melocont© (fungal pest control product) against white grubs in grassland;
- Further Interreg projects: programme which helps the farmer in the selection and dosing of the plant protection product and documents the use; research into harmful organisms and their control;

- Annual trials by the Chamber of Agriculture of Vorarlberg for alternatives against fire blight under BAES trial authorisations.

In the advice too, farmers are informed about using the products sparingly for ecological and economic reasons (plant protection products are expensive).

In addition, there are a large number of restrictions on use under legislation (§ 1(1)(b), points 1-3, of the Plant Protection Product Regulation, LGBI. No 18/2008) and subsidisation rules (table in Annex).

Lack of measures promoting IP or alternative methods

During the training, participants have been and will be taught to make comparative assessments of plant protection measures (ecological, economic, effective). In addition, the principles of organic farming are taught. In the advice sessions with farmers, reference is also made to using cultivation measures to take preventive action against harmful organisms, to giving preference to biological, physical and mechanical methods, to weighing up the use of plant protection products and applying them only if the injury threshold is exceeded.

Lack of indicators to monitor the use of plant protection products, which in particular contain active substances of concern

In order to be allowed to obtain and use highly toxic and toxic plant protection products, evidence of expertise hitherto had to be provided in order to be issued with authorisation to use toxic substances. In the future too, persons wishing to use plant protection products authorised for professional use must possess the expertise and be in possession of a plant protection product certificate. In the ÖPUL measure 'Integrated production', the applications of plant protection products are documented and on-site inspections take place. In addition, monitoring of the use of plant protection products is also laid down by law (§ 15(2) of the Plant Protection Act).

Ban on the use of plant protection products in all 'nature and landscape conservation areas of the Land'

The use of plant protection products has already been prohibited in wetlands, litter and meagre meadows or dry locations and in the 3 metre-wide strips of land bordering them. Plant protection products which do not display any hazardous properties as defined in the

1996 Chemicals Act (*Chemikaliengesetz 1996*) are exempt from this (§ 1(1)(b), point 1, and paragraph 2 of the Plant Protection Product Regulation, LGBI. No 18/2008).

Concerning 4.4.2: Information for persons who do not use plant protection products professionally is also to be published in the community newsletters

The suggestion was taken up in the Action Plan.

Concerning the observations of Biene Österreich (on the NAP)

The following observations arise on the basis of the present Action Plan:

Introduction of additional measures to protect pollinator insects, represented by honeybees

Legal provisions exist concerning the use of plant protection products which are harmful for bees (§ 7 of the Beekeeping Act (*Bienenzuchtgesetz*), LGBI. No 20/1990). Public awareness is also being raised through the nature conservation action ‘*Netzwerk Blühendes Vorarlberg*’ (Flowering Vorarlberg Network) and through the training courses which cover the hazardous nature of plant protection products for non-target organisms. In particular, the problem of plant protection products harmful to bees is dealt with and how these must be applied (flying times, etc.) in order to reduce the risk of negative effects for bees.

Consideration of the special position of honeybees in the authorisation of pesticides, non-authorisation of active substances of concern

The authorisation of plant protection products lies within the competence of the Federal Government.

Reduction of direct and indirect effects of plant protection products on non-target organisms

See above. According to § 1(1)(b), points 1-3, of the Plant Protection Product Regulation, LGBI. No 18/2008, the use of plant protection products is prohibited ‘in wetlands, litter and meagre meadows or dry locations and in 3 metre-wide strips of land bordering them, in the 3 metre-wide strips of land bordering forest or the tops of banks of surface waters and in other areas, especially residential or agricultural areas, if impairment of the health of neighbours, other persons residing there or plants or plant products growing on neighbouring land is to be expected’. Plant protection products which do not display any hazardous properties as defined in the 1996 Chemicals Act (*Chemikaliengesetz 1996*) are

exempt from this (§ 1(1)(b), point 1, and paragraph 2 of the Plant Protection Product Regulation, LGBl. No 18/2008).

Compulsory application of the principles of integrated pest management, prohibition of permanent monocultures, cultivation of resistant varieties with balanced crop rotation

In the training courses, the methods of integrated pest management are taught and promoted in various ÖPUL measures. Under 4.6.2, the problem of monocultures is entered into and crop rotation recommended as a cultivation measure against certain pests. **In addition, the planned increase in self-supply with market fruits, as described in the agricultural strategy ‘Organic Land of Vorarlberg’, leads to a more varied crop rotation.**

Harmful organisms must be monitored on the basis of appropriate systems for early warnings, forecasts and early diagnoses. Only after injury thresholds and objectively clear indications have been established are pesticides authorised.

The assessment procedure under integrated pest management was already explained in Chapter 3. In the case of plant protection products containing streptomycin, in so far as these were authorised by BAES in an emergency situation in accordance with Article 53 of Regulation (EC) No 1107/2009, release for application occurs only after a risk assessment by technical experts. The factors considered in this respect are:

- the daily risk of infection during the pome fruit blossoming, calculated from meteorological data according to the Maryblyt model (Moltmann)
- the value of the ‘epiphytic infection potential’ (EIP value)
- results of host plant sampling by the firm bioferm Research GmbH, Constance
- various weather forecasts
- the progress in the blossoming in the respective area
- the susceptibility of the crops concerned

- the warning services of neighbouring fruit-growing areas.

Only if the highest risk level is reached (of a 5-stage risk level plan), in which considerable economic loss through the fire blight pathogen is to be expected, may plant protection products containing streptomycin be used. On each occasion, use must be applied for to the competent District Commission and approved by the latter.

Application of the polluter pays principle and introduction of a 'pesticide levy'

The introduction of such a levy is not possible in the Land without the involvement of the Federal Government (similarity to turnover tax).

The bees as gauge of a species-rich environment

The Land of Vorarlberg has in the past taken part in research projects and trials (MELISSA, seed treatment monitoring with bee colonies) and will also participate in these in the future to reduce inputs of hazardous plant protection products as far as possible and as a result to improve the habitat conditions for bees.

8. Annex

Overview of a few ÖPUL measures in Vorarlberg and their effects

Measure	Area (ha)	Use of plant protection products			Spraying equipment inspection	Obligation to keep records of plant protection measures	Training, additional training compulsory	Control of plant protection product residues	Care of landscape features	Max. 2 uses on 5% of mowing area
		All authorised PPPs permitted	Treatment of individual plants only	PPPs permitted in organic farming						
Organic farming	6 148			x	x	x	x	x	x	x
Environmentally sound management of arable and grassland areas	6 825	x			x				x	x
Ban on yield-increasing inputs on grassland areas	19 132		x	x	x					x
Integrated production fruit	44	x			x	x	x	x		
Integrated production wine	7	x			x	x	x	x		
Nature conservation measures	6 718	Individual agreements on use of fertiliser, use of plant protection products, frequency of cutting, time of cutting; controls by Environmental Protection Department (IVe) and AMA								
Alpine pasturing and shepherding	40 475			x						
Mountain meadow management	78								x	Max. 1 mowing/year

Source: own presentation based on data from the Green Report 2012 and the Austrian Programme for Rural Development 2007-2013, BMLFUW.

Land Action Plan of Carinthia on the sustainable use of plant protection products 2012 – 2016

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1. Introduction

The implementation of pest management and especially the placing on the market and use of plant protection products are regulated comprehensively in Austria and at a high level of protection for humans, animals, groundwater and the natural balance. On the basis of the provisions on competence of the Austrian Federal Constitution, the Federal Government is competent for the placing on the market of plant protection products and the framework legislation in the field of pest management and plant protection products, whereas it is the responsibility of the Länder to adopt implementing Acts for the use of plant protection products.

The comprehensive specific legislation on pest management was established to protect crops against harmful organisms and at the same time to avoid risks potentially arising from the use of plant protection products or from other pest management measures, especially to human and animal health and the natural balance.

Directive 91/414/EEC, the predecessor to the current Directive 2009/128/EC, already referred to the principles of good plant protection practice and provided that, whenever possible, the principles of integrated pest control should be applied. The basic provisions of §§ 13 and 14 of the new 2011 Plant Protection Product Act (*Pflanzenschutzmittelgesetz 2011*), BGBl. I No 10/2011, require the implementing legislation of the Länder, with regard to the measures to transpose Directive 2009/128/EC, to regulate in particular the drawing up of Land Action Plans, taking into account the general principles of integrated pest management, the principles of good plant protection practice and the application of the precautionary principle.

The Land of Carinthia has carried out this task through the amendment of the Carinthian Land Plant Protection Product Act (*Kärntner Landes-Pflanzenschutzmittelgesetz – K-LPG*), which entered into force on 1 May 2012. On the basis of the distribution of competence, this regulated the Land Action Plan for Carinthia on the sustainable use of plant protection products; the Federal Government is competent (under the UNAPP project = implementation of National Action Plan on Pesticides) for drawing up the National Action Plan on Pesticides (= plant protection products + biocides).

Integrated pest management is the umbrella concept worldwide for sustainable pest management in conventional farming. In the Code of Conduct adopted by the Food and

Agriculture Organisation of the United Nations in 1985 (FAO Code of Conduct on the Distribution and Use of Pesticides), integrated pest management is already named as a key element of sustainable pest management. The Carinthian Land Plant Protection Product Act K-LPG has referred to this concept since 1991.

Integrated pest management represents an integral plant protection system on the holding, designed for the long-term, and pursues the objective of fulfilling ecological, economic and social requirements in equal measure by limiting the use of chemical plant protection products to the levels that are necessary in favour of non-chemical plant protection procedures. In addition, it requires careful deliberation processes for all decisions and sets high standards regarding the provision and use of technical information.

The 2012-2016 Land Action Plan for Carinthia specifically addresses risk mitigation and not flat-rate reductions in quantities. Flat-rate reductions in quantities of plant protection products sold do not take into account the properties of the substances and the risks associated with their use. For example, under a quantitative approach of this kind, the use of a higher-risk plant protection product, which is already effective in smaller quantities, would be considered more favourably than the use of a plant protection product with lower risk but having to be applied in larger quantities. The aim of the Land Action Plan for Carinthia is therefore not prohibition, but a sustainable approach to plant protection products.

One of the key aims of Directive 2009/128/EC, the Federal Plant Protection Product Act and the Carinthian Land Plant Protection Product Act is improved initial and additional training and technical knowledge for both professional and private users of plant protection products, as well as public information and awareness-raising. This need for information and public participation is met for this Land Action Plan for Carinthia in so far as, prior to adoption by the Carinthian Land Government, it was subject to a public participation procedure pursuant to § 4(8) of the Carinthian Land Plant Protection Product Act K-LPG, as last amended by LGBl. No 38/2012, during which, beyond the legally binding evaluation procedure when laws are enacted, the relevant wishes and suggestions of the citizens of Carinthia were taken into account.

2. Legal bases

1. The European Union has adopted new regulations governing plant protection products through two legal instruments:
 - a) Regulation (EC) No 1107/2009 of the European Parliament and of the Council concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC, OJ L 309 of 24 November 2009, p. 1;
 - b) Directive 2009/128/EC of the European Parliament and of the Council establishing a framework for Community action to achieve the sustainable use of pesticides, OJ L 309 of 24 November 2009, p. 71.

These new regulations create an entirely different legal framework for the implementing Acts of the Länder and the Federal Basic Plant Protection Act (*Pflanzenschutzgrundsatzgesetz*) of the Republic of Austria.

2. In response to this, in spring 2010, the Federal Government submitted a draft of an Act amending the Basic Plant Protection Act, BGBl. I No 114/1999, in the version of BGBl. I No 87/2005, for evaluation, which was confined to transposing the broad outlines of Directive 2009/128/EC on the framework for action on the use of pesticides.
3. In parallel to this, the Federal Ministry of Agriculture, Forestry, Environment and Water Management initiated the UNAPP project (= implementation of the National Action Plan on plant protection products) and also established two work packages in this context which involve Land competences:

Work package 2.1 under the UNAPP involved screening the existing Land legislation. The object of work package 2.2 was to draw up text modules for the implementing Acts of the Länder under the chairmanship of a staff member of the Federal Ministry of Agriculture, Forestry, Environment and Water Management. The procedure followed for this was that, on the basis of the screened existing Land legislation, the measures needed to transpose the Directive were ascertained and the representatives of the individual Länder provided text modules for the various fields, which were discussed jointly and consolidated by the chairman. The transitional provisions for the use of

plant protection products authorised under the old system were contributed by the Federal Ministry of Agriculture, Forestry, Environment and Water Management.

4. In parallel to work package 2.2, the procedure at the Federal Ministry of Agriculture, Forestry, Environment and Water Management was amended so that the concrete provisions are no longer regulated in a separate Basic Act, but the provisions of the Basic Plant Protection Act are divided according to specific subject-matter between a new 2011 Plant Protection Product Act (*Pflanzenschutzmittelgesetz 2011*) and a 2011 Plant Protection Act (*Pflanzenschutzgesetz 2011*). The new 2011 Plant Protection Product Act, BGBl. I No 10/2011, was passed on 15 February 2011. It contains the following essential basic provisions for the implementing legislation of the Länder in §§ 13 and 14:

'Use of plant protection products

§ 13. (Basic provision)

(1) The Land legislation shall provide for measures to implement Directive 2009/128/EC, except biocidal products under the Biocidal Products Act (Biozid-Produkte-Gesetz), BGBl. I No 105/2000, considering the general principles of integrated pest management, the principles of good plant protection practice and the application of the precautionary principle, in particular with regard to

- 1. Use of plant protection products and cleaning of plant protection equipment,*
- 2. Restrictions or bans on the use of plant protection products with regard to the risks associated with use under certain conditions or in certain areas,*
- 3. Training for professional users and advisers for the use of plant protection products in connection with the introduction of a certification system including mutual recognition,*
- 4. Public information and awareness-raising, in so far as it is not already provided for in other legislation,*
- 5. Inspection of plant protection equipment already in use in connection with the introduction of a certification system,*
- 6. Reduction in the risks and the quantity of plant protection products used,*

7. Development and introduction of integrated pest management and alternative methods or procedures and

8. Indicators for monitoring the use of plant protection products.

(2) The Land legislation shall provide that reports are to be drawn up and forwarded to the Federal Ministry of Agriculture, Forestry, Environment and Water Management, with regard to

1. the implementation of the inspection measures under Article 8 of Directive 2009/128/EC,

2. the integrated pest management under Article 14 of Directive 2009/128/EC,

3. the results of the evaluations under Article 15 of Directive 2009/128/EC and

4. the controls of the use of plant protection products in accordance with the first subparagraph of Article 68 of Regulation (EC) No 1107/2009 by 31 May of the year following that to which the report relates.

(3) The Land legislation shall provide that – considering the grace period and § 3(2), point 2 – only the products entered in the plant protection product register may be applied. The use covers the consumption, application and spreading, as well as the use, storage, keeping in stock and transport within the business premises of plant protection products for the purposes of application.

(4) The Land legislation shall impose penalties for infringements of the provisions established in the Land implementing Acts.

Land Action Plans and National Action Plan on plant protection products

§ 14. (Basic provision)

(1) For the purposes of drawing up and consolidating a National Action Plan on plant protection products at Federal level and its amendments, Land legislation shall provide, in accordance with the specifications under Article 4 of Directive 2009/128/EC and considering § 2(2), that Land Action Plans are drawn up and also amended, where appropriate, in which, to reduce the risks and the effects of plant protection product use on human health and the environment, the baseline situation and the measures already introduced and to be carried out are surveyed and

documented and targets are established by means of timetables. The Land Action Plans shall also describe the implementation of the measures listed in § 13(1).

(2) Land legislation shall provide that the Land Action Plans as referred to in paragraph 1 are to be forwarded to the Federal Ministry of Agriculture, Forestry, Environment and Water Management for the first time by 30 April 2012.

(3) Land legislation shall provide that Land Action Plans shall be reviewed and updated at least every five years and that the provisions on public participation in accordance with Article 2 of Directive 2003/35/EC providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation Council Directives 85/337/EEC and 96/61/EC, OJ L 156 of 25 June 2003, page 17, shall apply for drawing up or amending the Land Action Plans.'

5. The Carinthian Land Plant Protection Product Act K-LPG, as last amended by LGBI. No 38/2012, serves to implement the basic legal provisions of the 2011 Plant Protection Product Act, BGBl. I No 10/2011, (Section 4, § 13) and Directive 2009/128/EC of the European Parliament and of the Council establishing a framework for Community action to achieve the sustainable use of pesticides, OJ L 309 of 24 November 2009, p. 71.
6. Specific contents of the Directive (Articles 6, 9 and 10) have not been included in the Action Plan because they are already covered in full by existing Federal or Land legislation.

3. Objectives of the Land Action Plan of Carinthia

The aims of the measures defined below are as follows:

1. to maintain the fundamentally environmentally sound, high level in plant protection;
2. to mitigate additional risks, arising especially through the application of chemical plant protection products, to humans, animals and the environment and to reduce the intensity of application of these plant protection products to a reasonable level.
 - The number of applications of chemical plant protection products which exceed the levels that are necessary within the meaning of integrated pest management is to be reduced and - where possible -
 - a significant proportion of chemical plant protection measures are to be replaced by non-chemical measures, such as preventive, biological and mechanical plant protection measures;
3. to further mitigate the risk caused by plant protection product residues in agricultural products and thereby to make an additional contribution to precautionary consumer protection;
4. to secure and promote regional production and the supply of the population with high-quality food;
5. to improve the conditions of use (application, storage, compliance with the authorisation requirements) by non-professional users, including by avoiding unnecessary applications of plant protection products;
6. to further mitigate the risk of pollution of soil, groundwater and surface waters by plant protection products and their relevant breakdown products and to support remediation.

During the implementation of the package of measures of this Land Action Plan, it is expected, according to expert evaluation, that risks potentially arising from the application of plant protection products to humans, animals and the environment will already be reduced during the first period or the basis for effective risk mitigation measures will be created. This excludes measures necessary to eradicate quarantine pests in accordance with Directive 2000/29/EC.

4. Measures under § 13(1) of the 2011 Plant Protection Product Act in conjunction with Articles 5 to 15 of Directive 2009/128/EC

4.1 Use of plant protection products and cleaning of plant protection equipment (Article 13 of the Directive)

4.1.1 Use of plant protection products

Status quo

The regulation of the use of plant protection products is assigned to the Länder under the Austrian Federal Constitution.

In Carinthia, the Carinthian Land Plant Protection Product Act contains a large number of detailed provisions covering this field. Inspection of users is undertaken by the Carinthian Land Government and/or by an institution to which this task has been delegated.

In addition, there are currently:

Cross-compliance provisions on the use of plant protection products;

SVB (Social Insurance Institution for Farmers) and AUVA (General Accident Insurance Institution) brochures for the safe application of plant protection products;

ÖAIP (Austrian Working Group for Integrated Plant Protection) brochure ‘*Umweltgerechter Pflanzenschutz nur mit funktionierenden Geräten*’ (environmentally sound pest management only with equipment that works).

Measure

The Land of Carinthia will work towards devising, in cooperation with the Federal Government, harmonised dosing and application systems for the application of plant protection products in various crops (including organic farming).

- Sub-measure in arable farming

The Land of Carinthia commits to the promotion of low-drift application techniques, e.g. air-assisted nozzles.

- Sub-measure in vertical crops

The Land of Carinthia commits to the promotion of loss-minimising application, e.g. tunnel spray machines in orchards and vineyards.

Measure:

The Land of Carinthia will work towards ensuring worker and user protection in floriculture (glasshouse, cold nebulisation).

4.1.2. Filling and cleaning of plant protection equipment

Status quo:

As for use, there are detailed regulations in the K-LPG to ensure proper filling and cleaning.

In addition, there is currently:

the ‘*Handbuch für den Sachkundenachweis*’ (manual for the certificate of competence) issued by the Austrian Working Group for Integrated Plant Protection (ÖAIP), on which, alongside the Federal Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW), the Austrian Agency for Health and Food Safety (AGES), the Land Chambers of Agriculture, plant protection product firms, plant protection equipment manufacturers and farmers are also represented;

cross-compliance provisions on the filling and cleaning of plant protection equipment, Austrian Chamber of Agriculture (LKÖ) information leaflet on the filling and cleaning of plant protection equipment.

Measures

The Land of Carinthia recommends the retrofitting of hand-washing and clear water tanks to clean the plant protection equipment in the field and the fitment of continuous internal cleaning systems for plant protection equipment already in use. This allows possible impurities for succeeding crops and chemical reactions in the tank to be avoided.

The Land of Carinthia, in cooperation with the LKÖ, is making the filling and cleaning of plant protection equipment a focal point for advice (e.g. add-on kits for clear water tanks and internal cleaning nozzles).

4.2. Restrictions or bans on the use of plant protection products with regard to risks associated with use under certain conditions or in certain areas (Articles 11 and 12 of the Directive)

Status quo

In implementation of § 13 of the 2011 Plant Protection Product Act, the Länder have to provide in their implementing Acts that the Land Government must adopt restrictions or bans (e.g. by means of protected area regulations) on the use of plant protection products with regard to the risks associated with use under certain conditions in certain areas. This requirement was already taken into account in the K-LPG.

The existing legal framework also includes:

1. Water Act (WRG) – Handling in protected and closed areas, general conditions for the designation of observation areas and areas for prospective measures

Under § 34(1) WRG, to protect water supply systems from pollution or from impairment of their capacity, the water authorities may impose special orders by decision concerning the cultivation or other use of land and corresponding protected areas.

Under § 34(2) WRG, to protect the general water supply, the Governor must provide by regulation that in part of the catchment area, measures which may jeopardise the water quality, capacity or level are to be notified to the water authority or require authorisation or are permissible only in a certain way.

Under § 35 WRG, this is also possible to secure a future drinking water and industrial water supply.

Under § 33f WRG, the Governor, if the thresholds are exceeded not just temporarily in a body of groundwater, must designate observation areas and, where the legal conditions are met, establish areas for measures to be taken.

2. The National Water Management Plan (March 2010) was adopted in implementation of the Water Framework Directive. It includes the inventory (current water status analysis), the summary of the monitoring results and the generally binding programmes of measures to achieve good water status. These may include remediation, maintenance and precautionary measures.

The topic of plant protection products is also dealt with in the National Water Management Plan. It describes the effects on surface waters and groundwater and existing measures, such as, for example, the adaptation of protected and closed areas or the Austrian Programme for Environmentally Sound Agriculture (ÖPUL) are

summarised. Furthermore, more far-reaching measures are established concerning groundwater, such as, for example, the Groundwater Status Monitoring Regulation (*Grundwasserzustandsüberwachungsverordnung – GZÜV*), special measuring programmes or the research project ‘GeoPEARL Austria’ with the aim of supporting the planning of measures to avoid potential pollution of groundwater by pesticides or their relevant metabolites. It is pointed out that, in implementation of Directive 2009/128/EC, Land legislation on the use of plant protection products can be established on the basis of the Basic Plant Protection Act to protect the aquatic environment and the drinking water supply. These are to serve as support for the specifications of the Water Framework Directive.

Alongside the National Water Management Plan, the Austrian Programme for Environmentally Sound Agriculture (ÖPUL) has existed since 1995, which contains special instructions for the use of plant protection products. Partial financial compensation is granted to cover the extra cost of implementation caused as a result.

Measures

The Land of Carinthia ensures the necessary coordination with the Federal authorities regarding adaptation of the water legislation for protected and closed areas in the case of threshold values being newly exceeded or other risk situations, as well as to check compliance with the water regulations on protected and closed areas.

The Land of Carinthia adopts temporary, localised, objective or quantitative restrictions on use where the conditions are met in implementation of § 13 of the 2011 Plant Protection Product Act and § 11 K-LPG.

4.3. Training for professional users and advisers for the use of plant protection products in connection with the introduction of a certification system including mutual recognition (Article 5 of the Directive)

4.3.1 Ensuring user expertise

Status quo

There are regulations in Carinthia on conditions to achieve expertise in the use of plant protection products. At present, the user can meet the conditions of expertise by means of certain vocational training or competence courses.

Measures

The Land of Carinthia introduces measures to ensure the expertise, coordinated with the Chamber of Agriculture for Carinthia, other educational establishments and private and official plant protection advisers.

The Land of Carinthia adapts the curricula of the agricultural technical and vocational colleges and other existing initial and additional training concepts to the requirements of Annex I to Directive 2009/128/EC and develops these further.

The Land of Carinthia ensures a corresponding supply of training events and thereby enhances the knowledge of users.

The Land of Carinthia transfers the existing regulations on expertise to the new certification system in accordance with Directive 2009/128/EC. The certification system is to be introduced by the Chamber of Agriculture of Carinthia by 26 November 2013 at the latest. From 26 November 2015, only professional users may still purchase and use plant protection products authorised for professional users.

4.3.2. Boosting of plant protection advice

Status quo

There are currently plant protection advisers in Carinthia operating on behalf of the Land in the Chamber of Agriculture for Carinthia. In addition to advice on application and prevention, they are also involved in initial and additional training.

Measures

The Land of Carinthia provides decisive support for the content of the Land Action Plan by building up and extending the official advice.

The Land of Carinthia prepares information materials in cooperation with the BMLFUW, AGES and the other Länder, and ensures efficient dissemination by means of modern media.

The Land of Carinthia advocates boosting of advice which is independent of economic interests, thereby sustainably ensuring the economic success of agricultural production and the security of supply of high-quality food.

The Land of Carinthia supports the carrying out of plant protection trials to ensure the quality of advice.

The Land of Carinthia supports the establishment and development of forecasting and warning systems with precise timing and thereby ecological optimisation of plant protection measures.

4.3.3. Additional training events on the use of plant protection products

Status quo

In the Land of Carinthia, there are ongoing events in this field (technical meetings).

Measure

The Land of Carinthia ensures that the educational measures for professional users are also available to all interested parties.

4.4. Public information and awareness-raising, in so far as it is not already provided for in other legislation (Article 7 of the Directive)

4.4.1 Developing an Internet portal for plant protection

Status quo

In Austria, there is a high level of public awareness concerning the use of plant protection products.

Measures

The Land of Carinthia, in cooperation with the other Länder, supports the establishment and maintenance of a plant protection Internet portal for effective communication in terms of quality and quantity of technical information and generally comprehensible information for ‘non-professional’ users and other interested parties. This is to be built up on existing, established information sources for individual user groups, such as the homepage of AGES, the ÖAIP, the Agranet of the Chambers of Agriculture, the Infoportal of the Sozialversicherungsanstalt der Bauern (Social Insurance Institution for Farmers – SVB), the guidelines for golf courses, community newsletters and magazines of allotment clubs, such as ‘*Kleingärtner*’.

The Land of Carinthia supports events to boost understanding of the need for plant protection measures (open days, presentations, etc.).

The Land of Carinthia ensures that the information is objective and well-founded.

4.4.2. Information and training for ‘non-professional’ users

Status quo

In various Länder (Vienna, Upper Austria), there are already compulsory training measures in the allotment sector; in all Länder, such training is available to the general public.

Measure

The Land of Carinthia supports the information for ‘non-professional’ users through leaflets, events, such as for example in fruit-grower, winegrower and horticultural associations.

4.5. Inspection of plant protection equipment already in use in connection with the introduction of a certification system (Article 8 of the Directive)

4.5.1 Further development of plant protection equipment and introduction of new technologies in practice

Status quo

At present, for plant protection equipment in use the 2009 ÖAIP guidelines ‘*Nur mit funktionierenden Pflanzenschutzgeräten*’ (Only with plant protection equipment that works), for new plant protection equipment the provisions of the Machinery Directive (2010 Machinery Safety Regulation (*Maschinen-Sicherheitsverordnung 2010*)) and for both categories of equipment the BMLFUW Decree of 2001 on equipment technology to reduce drift are applicable. Under ÖPUL measures, the regular inspection of plant protection equipment in use is mandatory.

Measure

The Land of Carinthia supports the practical introduction of new plant protection equipment and new technologies, which contribute to reducing loss (drift and dripping losses) and to economic and efficient application of plant protection products. The regular inspection of trailed, mounted and self-propelled plant protection equipment in use has to take place for the first time by 26 November 2016.

4.6. Reduction in the risks and the quantity of plant protection products used (Article 12 of the Directive)

4.6.1 Reduction in the application of plant protection products

Status quo

The structure of the farming system in Austria, consisting of small farms by European standards, gives a patchwork appearance to the cultivated landscape. A voluntary reduction in pest management measures has already been brought about since 1995 through ÖPUL measures (organic farming, IP). As a result, optimum adaptation of the concrete plant protection measures is possible.

Measures

The Land of Carinthia advocates the establishment of voluntary renunciation of plant protection products in existing promotion programmes (ÖPUL, etc.).

The Land of Carinthia supports the use of environmentally-friendly plant protection products that spare beneficial organisms in the context of integrated pest management, as this can lead to a reduction in chemical pest management measures.

The Land of Carinthia advocates exhausting the saving potential in the non-agricultural sector (e.g. golf courses and sports grounds).

4.6.2. Hot Spot Management

Status quo

Seed treated with insecticide is currently used to eradicate the corn root worm, in addition to control by means of compulsory crop rotation. Improper handling of the seed or improper distribution of the seed may harm bee populations.

Measure

The Land of Carinthia is intensifying targeted inspections in arable farming.

Status Quo:

Invasive plant species (neophytes) such as ragweed, Japanese giant knotweed and Himalayan balsam, for example, represent a major problem for allergy sufferers and biodiversity in Carinthia.

Measure

The Land of Carinthia supports the health, environmental and nature conservation authorities in drawing up effective, environmentally-compatible control methods.

Status quo

Incorrect filling and cleaning of plant protection equipment may lead to localised groundwater pollution.

Measure

The Land of Carinthia recommends the establishment of suitable handling areas and the development of strategies to avoid localised pollution.

Status quo

Intensive plant protection measures are used on golf courses to maintain the greens.

Measure

The Land of Carinthia carries out systematic inspections of the plant protection product records at golf courses.

Status quo

The soil is enriched by active substances contained in plant protection products which are largely non-degradable.

Measure

Where the legal conditions are met, the Land of Carinthia limits the regional use of certain plant protection products in accordance with the results of scientific research.

The Land of Carinthia supports farmers in the choice of suitable crops and crop rotations.

Status quo

The groundwater is enriched by active substances contained in plant protection products and relevant metabolites.

Measure

The Land of Carinthia supports users in the choice of suitable plant protection products for the location.

The Land of Carinthia supports farmers in the choice of suitable crops and crop rotations.

If the conditions are met, in implementation of § 13 of the 2011 Plant Protection Product Act and of § 12a K-LPG, the Land of Carinthia adopts temporary, localised and objective restrictions on use.

The Land of Carinthia, in cooperation with the Chamber of Agriculture of Carinthia, promotes official advice.

4.7. Development and introduction of integrated pest management and alternative methods or procedures (Article 14 of the Directive)

4.7.1 Promotion of integrated pest management procedures and organic farming under promotion programmes

Status quo

In Austria, the promotion of integrated pest management and organic farming takes place under ÖPUL 2007-2013.

Measures

The Land of Carinthia advocates the provision of sufficient financial resources for a corresponding environmental programme after 2013 and gives due consideration to integrated pest management procedures and organic farming in promotion and research programmes.

4.7.2. Drawing up of crop and sector-specific guidelines for integrated pest management

Status Quo:

At present there are the IP guidelines under ÖPUL in Austria, which are designed to encourage voluntary participation by professional users. The attempt is made to offset the anticipated reduced yields or management difficulties by a fixed compensatory payment.

Measures

The Land of Carinthia advocates the continuation of these programmes, subject to maintaining competitiveness (compensation for lower yields).

The Land of Carinthia, together with the other Länder and the Federal agencies, is continuing the technical development of the current IP guidelines, as defined in Annex III to the Directive, for all crops.

4.7.3. Establishment of untreated control areas (spraying windows)

Status quo

No general evaluation of plant protection measures is in progress at present.

Measure

The Land of Carinthia recommends the establishment of ‘spraying windows’, when harmful organisms occur in certain annual crops, to check the plant protection measure (identification as control area).

The Land of Carinthia uses the findings obtained from this to optimise advice.

4.8. Indicators for monitoring the use of plant protection products (Article 15 of the Directive)

4.8.1 Collection of statistical data on the use of plant protection products

Status quo

On the basis of Regulation (EC) No 1107/2009, keeping records of plant protection products has been compulsory for professional users since 14 June 2011. The compulsory keeping of these records is established in the K-LPG. Under IP, more comprehensive records of the use of plant protection products are kept on a voluntary basis. The Federal Office for Food Safety (BAES) has at its disposal the quantities of active substances of

plant protection products (quantities of registered products) placed on the market in Austria.

Measures

The Land of Carinthia, in coordination with the other Länder, is developing standardised documentation.

Status quo

The expenditure on plant protection products is also included in the annual raw data collection by the Landwirtschaftliche Buchführungsgesellschaft (LBG) for the preparation of the Green Report.

Measure

On the basis of the data collected, the Land of Carinthia observes the change in the use of plant protection products in individual crops and organises spot checks where abnormalities arise.

4.8.2. Monitoring of the behaviour of plant protection products in the environment

The Federal Government is competent for this (groundwater analyses, preventive project GeoPearl).

5. Summary

The Land of Carinthia is concerned to limit the use of chemical plant protection products to the levels that are necessary under the legislation in favour of non-chemical plant protection procedures.

This Action Plan contains measures which commit the Land of Carinthia itself to making a contribution to the implementation of this project. There are measures of both a private-sector nature, such as the granting of aid and the holding of training courses, and a public-sector nature, such as the adoption of regulations.

When formulating the individual measures, the attempt has been made to use generally comprehensible expressions and to keep the comments as brief as possible, which at times has been at the expense of technical precision.

6. Public participation

According to § 4(8) of the K-LPG, on preparation and on each amendment of the Action Plan, taking into account § 2(2) of the 2011 Plant Protection Product Act, a **public consultation** must be held in accordance with §§ 8 and 10 of the Carinthian Environmental Planning Act (*Kärntner Umweltplanungsgesetz*) with the proviso that the provisions on the environmental report and cross-border consultations are not applicable.

Furthermore, it is necessary to take into account:

1. the health, social, economic and environmental impacts of the planned measures,
2. the specific ecological, climate, geological, water management and agricultural conditions in Carinthia and
3. all relevant stakeholder groups within the meaning of point (c).

The public disclosure of the Land Action Plan was announced in *Kärntner Landeszeitung* No 42 of 25 October 2012.

The draft was published on the Internet by Department 10 (Competence Centre for Agriculture and Forestry) of the Carinthian Land Government Office and made available for inspection at Department 10 (Competence Centre for Agriculture and Forestry), Environment Department Agricultural Law, of the Carinthian Land Government Office.

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Action plan of the Land of Salzburg on the sustainable use of plant protection products

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Note:

The 2013 Salzburg Plant Protection Product Act (*Salzburger Pflanzenschutzmittelgesetz 2013*) is currently in the form of a Consultation Draft and will in all probability enter into force in the second half of 2013. References to the 2013 Salzburg Plant Protection Product Act are therefore followed by the term ‘(*Consultation Draft*)’.

After the entry into force of the legal basis, the public participation procedure provided for in § 13 of the Consultation Draft for the preparation of the Land Action Plan can be launched and after possible incorporation of the results, a draft Land Action Plan will be submitted to the Land Government for adoption.

The present document therefore represents only a

Draft

drawn up at the level of the Salzburg Land Government Office and the Official Plant Protection Organisation established at the Chamber of Agriculture and Forestry in Salzburg. This draft, in the present opinion of the two services, contains measures which appear reasonable. It cannot be precluded that, in the course of the further development of the draft, especially in the context of the coordination with other operators or on the basis of specifications on the part of the political decision-makers, amendments will be made in relation to the present preliminary draft.

Situation at 25 March 2013

Publishing information:

Owner, editor and publisher: Salzburg Land Government Office

Natural Resources and Energy Department

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List of abbreviations

AGES	Österreichische Agentur für Gesundheit und Ernährungssicherheit (Austrian Agency for Health and Food Safety)
BAES	Bundesamt für Ernährungssicherheit (Federal Office for Food Safety)
BMLFUW	Federal Ministry of Agriculture, Forestry, Environment and Water Management
IP	Integrated pest management
LBG	Landwirtschaftliche Buchführungsgesellschaft (agricultural accounting firm)
LFI	Ländliches Fortbildungsinstitut (rural training institution)
LKÖ	Landwirtschaftskammer Österreich (Austrian Chamber of Agriculture)
NGP	Nationaler Gewässerbewirtschaftungsplan (national water management plan)
ÖAIP	Österreichische Arbeitsgemeinschaft für integrierten Pflanzenschutz (Austrian Working Group for Integrated Plant Protection)
ÖPUL	Österreichisches Programm für umweltgerechte Landwirtschaft (Austrian Programme for Environmentally Sound Agriculture)
OGV	Obst- und Gartenbauverein (fruit and gardening association)
SVB	Sozialversicherungsanstalt der Bauern (Social Insurance Institution for Farmers)

1. Introduction

The implementation of pest management and especially the placing on the market and use of plant protection products are regulated comprehensively in Austria and at a high level of protection for humans, animals, groundwater and the natural balance. On the basis of the provisions on competence of the Austrian Federal Constitution, the Federal Government is competent for the placing on the market of plant protection products and the framework legislation in the field of pest management and plant protection products, whereas it is the responsibility of the Länder to adopt implementing Acts for the use of plant protection products. The comprehensive specific legislation on pest management was established to protect crops against harmful organisms and at the same time to avoid risks potentially arising from the use of plant protection products or from other pest management measures, especially to human and animal health and the natural balance. Directive 91/414/EEC, the predecessor to the current Directive 2009/128/EC, already referred to the principles of good plant protection practice and provided that, whenever possible, the principles of integrated pest control should be applied. The basic provisions of §§ 13 and 14 of the 2011 Plant Protection Product Act (*Pflanzenschutzmittelgesetz 2011*), BGBl. I No 10/2011, require the implementing legislation of the Länder, with regard to the measures to transpose Directive 2009/128/EC, to regulate in particular the drawing up of Land Action Plans, taking into account the general principles of integrated pest management, the principles of good plant protection practice and the application of the precautionary principle.

The Land of Salzburg has carried out this task by issuing the new 2013 Salzburg Plant Protection Product Act (*Salzburger Pflanzenschutzmittelgesetz 2013*), LGBl. .../2013 (currently in the form of a consultation draft – situation at 11 March 2013). The following Land Action Plan on the sustainable use of plant protection products for the Land of Salzburg is drawn up on the basis of §§ 11 *et seq.* of the 2013 Salzburg Plant Protection Product Act (Consultation Draft). The Federal Government is responsible for compiling the individual Land Action Plans in a Federal National Action Plan on Plant Protection Products, in accordance with § 14(1) of the 2011 Plant Protection Product Act.

Integrated pest management is the umbrella concept worldwide for sustainable pest management in conventional farming. In the Code of Conduct adopted by the Food and Agriculture Organisation of the United Nations in 1985 (FAO Code of Conduct on the Distribution and Use of Pesticides), integrated pest management is already named as a key element of sustainable pest management. Integrated pest management represents an integral plant protection system on the holding, designed for the long-term, and pursues the objective of fulfilling ecological, economic and social requirements in equal measure by limiting the use of chemical plant protection products to the levels that are necessary in favour of non-chemical plant protection procedures. In addition, it requires careful deliberation processes for all decisions and sets high standards regarding the provision and use of technical information.

In **organic farming**, chemically synthesised plant protection products may not be used. The measures to minimise the risk of occurrence of diseases and pests include tougher preventive techniques (selection of varieties, seed and location, fertilisation, tillage, crop rotation, etc.) and mechanical, thermal, biological and in emergencies chemical procedures, in which the selection of chemical products and their field of application are restricted as far as possible. As in integrated pest management, predatory mites, gall midges, wasps, traps and mating disruption techniques (for example, as a result of messenger substances applied, males and females no longer find one another) are used for pest control. Substances such as copper hydroxide, sulphur, ferric phosphate and fatty acid potassium salt may be used, according to the EU provisions (Regulation (EC) No 889/2008). However, such substances also sometimes have negative side-effects, so the search continues in organic farming too for alternatives to the use of plant protection products. The aim of organic farming is to promote and maintain natural regulatory mechanisms and to use them *ad hoc*.

Biodiversity is promoted by various measures (hedges, tillage, crop rotation) as a result of which harmful organisms are contained. A reduction in or ecologically less onerous use of plant protection products with hazardous properties is possible only in connection with integrated or biological pest management. Directive 91/414/EEC, the predecessor to the

current Directive 2009/128/EC (Directive of the European Parliament and of the Council establishing a framework for Community action to achieve the sustainable use of pesticides), already referred to the principles of good plant protection practice and provided that, whenever possible, the principles of integrated pest control should be applied.

Fig. 1: Biological pest management is particularly important in Salzburg on account of the particularly large number of organic farmers and the established public awareness. The promotion of beneficial organisms, such as insects, spiders and small mammals, helps to economise on plant protection products.

The **Land of Salzburg** is in a unique situation within Austria with regard to the importance of pest management in agriculture and forestry. On account of geographical (predominantly a region of High Alps and Alpine foothills, a less-favoured mountain area), climatic and historical factors, grassland management dominates, accounting for over 97% of utilised agricultural area, of which two thirds as extensive grassland (Grüner Bericht Salzburg 2007-2009, p. 17). Forestry is on an equally important scale. In these farming systems, the use of plant protection products plays a minor role. Preventive pest control takes place by means of plant cultivation or forestry crop management or predominantly using mechanical or biological measures. In Salzburg, over 6 800 (83%) of the practising farmers (of whom 45% are organic farmers with 51% of the utilised agricultural area) have decided under ÖPUL in favour of renouncing yield-increasing inputs, which includes renouncing extensive use of plant protection products (IACS data 2012).

About 70% of the arable land is farmed as arable grassland (Grüner Bericht Salzburg 2007-2009, p. 10). Cereals account for about a quarter. Maize covers an area of about 750 ha, oilseed (mainly winter rape and soya beans) is cultivated by only a few holdings on about 50 ha (Agricultural structure survey, Austrian Statistics Office 2010). Potato-growing (about 380 holdings with about 150 ha) and vegetable and ornamental plant cultivation (fewer than 100 holdings and about 170 ha cultivated area) are niches, which are concentrated in the two cultivation areas of Lungau ('Lungauer Eachtling' potato) and Walserfeld ('Walser Gemüse' vegetables). Fruit-growing is confined essentially to the rural, extensive scattered orchards. Permanent crops without extensive fruit plantations,

which are predominantly tree nurseries and Christmas tree plantations, are grown on about 40 holdings on 58 ha (Agricultural structure survey 2010).

[For pie chart, please refer to original text]

Utilised agricultural area of Salzburg (total 195 154 hectares)

(Derived from: Agricultural structure survey 2010, Austrian Statistics Office)

Mähweiden, -wiesen mit zwei und mehr Nutzungen 42% = pasture, meadow for cutting with two or more uses

Dauerweiden 2% = permanent pasture

Einmähdige Wiesen, Hutweiden, Streuwiesen, GLÖZ G 9% = meadows cut once, rough pastures, litter meadows, GAEC Act

Almen und Bergmähder 44% = Alpine pastures and Alpine meadows

Ackerland (ohne Wechselwiesen) 2% = arable land (without temporary pastures)

Wechselwiesen 1% = temporary pastures

Dauerkulturen 0.03 % = permanent crops

Haus- und Nutzgärten 0.06 % = kitchen gardens

Fig. 2: Breakdown of utilised agricultural areas in the Land of Salzburg

In the Land of Salzburg, regional and especially organic products are highly valued.

This goes hand in hand with a critical attitude to the use of chemical plant protection measures. The existing fruit-growing and gardening associations organise events throughout the Land on the subject of ‘biological pest management’. In the local media (e.g. ORF Salzburg), pest management topics are in principle mentioned only with biological or mechanical alternatives.

The Land took part in the ‘Melissa’ research project carried out by the AGES in 2009-2011 (‘Investigations into the occurrence of bee mortality in areas in Austria where maize and oilseed rape are cultivated and possible links with bee diseases and the use of plant protection products’). In this study, it was shown that in Salzburg no harm to bees occurs through the use of plant protection products.

Overall, plant protection products are used only to a very limited extent in the Land of Salzburg. The Land Action Plan therefore pursues the aim primarily of maintaining the high standard and responsible use of plant protection products in Salzburg in the future.

The 2013-2018 Land Action Plan for Salzburg specifically addresses risk mitigation and not flat-rate reductions in quantities. Flat-rate reductions in quantities of plant protection products sold do not take into account the properties of the substances and the risks associated with their use. For example, under a quantitative approach of this kind, the use of a higher-risk plant protection product, which is already effective in smaller quantities, would be considered more favourably than the use of a plant protection product with lower risk but having to be applied in larger quantities.

One of the key aims of Directive 2009/128/EC, the 2011 Plant Protection Product Act and also the 2013 Salzburg Plant Protection Product Act (Consultation Draft) is improved initial and additional training and technical knowledge for both professional and private users of plant protection products, as well as public information and awareness-raising. This need for information and public participation will be met in preparing this Land Action Plan in so far as, prior to adoption by the Salzburg Land Government, it is subject to a public consultation procedure in accordance with § 13 of the 2013 Salzburg Plant Protection Product Act (Consultation Draft), during which anyone can submit observations on the draft made available for public inspection which will be assessed in the final preparation of the version presented to the Salzburg Land Government for adoption.

In the implementation and evaluation of the Land Action Plan, the Land of Salzburg avails itself of the services of the Official Plant Protection Organisation established at the Chamber of Agriculture and Forestry in Salzburg (below: Chamber of Agriculture of Salzburg) and the Salzburg soil protection advisory service.

2. Legal bases

Union law:

1. The European Union has adopted new regulations governing plant protection products through two legal instruments:
 - a) Regulation (EC) No 1107/2009 of the European Parliament and of the Council concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC, OJ L 309 of 24 November 2009, p. 1;
 - b) Directive 2009/128/EC of the European Parliament and of the Council establishing a framework for Community action to achieve the sustainable use of pesticides, OJ L 309 of 24 November 2009, p. 71.

These new regulations create an entirely different legal framework at Union level for the Federal plant protection product legislation of the Republic of Austria, including the Federal basic legislation concerning the use of plant protection products and the implementing Acts of the Länder to be adopted on this subject.

Federal law:

2. In response to this, in spring 2010, the Federal Government submitted a draft of an Act amending the Basic Plant Protection Act, BGBl. I No 114/1999, in the version of BGBl. I No 87/2005, for evaluation, which was confined to transposing the broad outlines of Directive 2009/128/EC on the framework for action on the use of pesticides.
3. In parallel to this, the Federal Ministry of Agriculture, Forestry, Environment and Water Management initiated the UNAPP project (= implementation of the National Action Plan on plant protection products) and also established two work packages in this context which involved Land competences:

Work package 2.1 under the UNAPP comprised screening the existing Land legislation. The object of work package 2.2 was to draw up text modules for implementing Acts of the Länder under the chairmanship of a staff member of the Federal Ministry of Agriculture, Forestry, Environment and Water Management. The procedure followed for this was that, on the basis of the screened existing Land legislation, the measures

needed to transpose the Directive were ascertained and the representatives of the individual Länder provided text modules for the various fields, which were discussed jointly and consolidated by the chairman. The transitional provisions for the use of plant protection products authorised under the old system were contributed by the Federal Ministry of Agriculture, Forestry, Environment and Water Management.

4. In parallel to work package 2.2, the procedure at the Federal Ministry of Agriculture, Forestry, Environment and Water Management was amended so that the concrete provisions are no longer regulated in a separate Basic Act, but the provisions of the Basic Plant Protection Act are divided according to specific subject-matter between a new 2011 Plant Protection Product Act (*Pflanzenschutzmittelgesetz 2011*) and a 2011 Plant Protection Act (*Pflanzenschutzgesetz 2011*).

The new 2011 Plant Protection Product Act, BGBl. I No 10/2011, was passed on 15 February 2011. Its basic provisions for the implementing legislation of the Länder are contained in §§ 13 and 14 of the 2011 Plant Protection Product Act and are worded as follows:

‘Use of plant protection products

§ 13. (Basic provision)

(1) The Land legislation shall provide for measures to implement Directive 2009/128/EC, except biocidal products under the Biocidal Products Act (Biozid-Produkte-Gesetz), BGBl. I No 105/2000, considering the general principles of integrated pest management, the principles of good plant protection practice and the application of the precautionary principle, in particular with regard to

- 1. Use of plant protection products and cleaning of plant protection equipment,*
- 2. Restrictions or bans on the use of plant protection products with regard to the risks associated with use under certain conditions or in certain areas,*
- 3. Training for professional users and advisers for the use of plant protection products in connection with the introduction of a certification system including mutual recognition,*
- 4. Public information and awareness-raising, in so far as it is not already provided for in other legislation,*

5. *Inspection of plant protection equipment already in use in connection with the introduction of a certification system,*
6. *Reduction in the risks and the quantity of plant protection products used,*
7. *Development and introduction of integrated pest management and alternative methods or procedures and*
8. *Indicators for monitoring the use of plant protection products.*

(2) The Land legislation shall provide that reports are to be drawn up and forwarded to the Federal Ministry of Agriculture, Forestry, Environment and Water Management, with regard to

1. *the implementation of the inspection measures under Article 8 of Directive 2009/128/EC,*
2. *the integrated pest management under Article 14 of Directive 2009/128/EC,*
3. *the results of the evaluations under Article 15 of Directive 2009/128/EC and*
4. *the controls of the use of plant protection products in accordance with the first subparagraph of Article 68 of Regulation (EC) No 1107/2009 by 31 May of the year following that to which the report relates.*

(3) The Land legislation shall provide that – considering the grace period and § 3(2), point 2 – only the products entered in the plant protection product register may be applied. The use covers the consumption, application and spreading, as well as the use, storage, keeping in stock and transport within the business premises of plant protection products for the purposes of application.

(4) The Land legislation shall impose penalties for infringements of the provisions established in the Land implementing Acts.

Land Action Plans and National Action Plan on plant protection products

§ 14. (Basic provision)

(1) For the purposes of drawing up and consolidating a National Action Plan on plant protection products at Federal level and its amendments, Land legislation shall provide, in

accordance with the specifications under Article 4 of Directive 2009/128/EC and considering § 2(2), that Land Action Plans are drawn up and also amended, where appropriate, in which, to reduce the risks and the effects of plant protection product use on human health and the environment, the baseline situation and the measures already introduced and to be carried out are surveyed and documented and targets are established by means of timetables. The Land Action Plans shall also describe the implementation of the measures listed in § 13(1).

(2) Land legislation shall provide that the Land Action Plans as referred to in paragraph 1 are to be forwarded to the Federal Ministry of Agriculture, Forestry, Environment and Water Management for the first time by 30 April 2012.

(3) Land legislation shall provide that Land Action Plans shall be reviewed and updated at least every five years and that the provisions on public participation in accordance with Article 2 of Directive 2003/35/EC providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation Council Directives 85/337/EEC and 96/61/EC, OJ L 156 of 25 June 2003, page 17, shall apply for drawing up or amending the Land Action Plans.'

Salzburg Land law:

The 2013 Salzburg Plant Protection Product Act, LGBl. .../2013 (Consultation Draft) serves to implement the basic legal provisions of the 2011 Plant Protection Product Act, BGBl. I No 10/2011, (Section 3, §§ 13 and 14) and Directive 2009/128/EC of the European Parliament and of the Council establishing a framework for Community action to achieve the sustainable use of pesticides, OJ L 309 of 24 November 2009, p. 71.

Article 6 of Directive 2009/128/EC concerns the sale of plant protection products, the regulation of which lies exclusively within the competence of the Federal Government, so no comments are contained in the Action Plan of the Land of Salzburg on this subject. Aerial spraying is not customary in the Land of Salzburg. Article 9 of Directive

2009/128/EC is therefore transposed exclusively by § 4 of the 2013 Salzburg Plant Protection Product Act (Consultation Draft). However, in the absence of any practical relevance, further comments on this subject are redundant in the Action Plan.

3. Objectives of the Land Action Plan of Salzburg

The aims of the measures defined below are as follows:

1. to maintain the fundamentally environmentally sound, high level in plant protection in the field of agricultural production, with extensive renunciation of the use of chemical plant protection products;
2. to mitigate further the remaining risks, which could arise through the application of chemical plant protection products, to humans, animals and the environment and to reduce the intensity of application of these plant protection products to a reasonable level.
 - The number of applications of chemical plant protection products which exceed the levels that are necessary within the meaning of integrated pest management is to be reduced and
 - where possible, a significant proportion of chemical plant protection measures are to be replaced by non-chemical measures.
3. to further mitigate the risk caused by plant protection product residues in agricultural products and thereby to make an additional contribution to precautionary consumer protection.
4. to secure and promote regional production and the supply of the population with high-quality food;
5. to improve the conditions of use (application, storage, compliance with the authorisation requirements) by non-professional users, including by avoiding unnecessary applications of plant protection products.

During the implementation of the package of measures of this Land Action Plan, it is expected, according to expert evaluation, that risks potentially arising from the application of plant protection products to humans, animals and the environment will be kept at the

present level during the first period and at best be reduced. This excludes measures necessary to eradicate quarantine pests in accordance with Directive 2000/29/EC.

4. Measures under § 13(1) of the 2011 Plant Protection Product Act in conjunction with Articles 5 to 15 of Directive 2009/128/EC

4.1 Use of plant protection products and cleaning of plant protection equipment (Article 13 of the Directive)

4.1.1 Use of plant protection products

Status quo

The regulation of the use of plant protection products is assigned to the Länder under the Austrian Federal Constitution. § 3 of the 2013 Salzburg Plant Protection Product Act (Consultation Draft) contains basic provisions covering this field; additional detailed provisions can if necessary be adopted by regulation pursuant to § 21(1), point 1, of the 2013 Salzburg Plant Protection Product Act (Consultation Draft). In principle, the District Commission is responsible for monitoring the use of plant protection products. The latter may call on the Official Plant Protection Organisation, recognised plant protection services or appointed plant protection bodies for some or all of the monitoring tasks (§ 14 of the 2013 Salzburg Plant Protection Product Act [Consultation Draft]).

In addition, there are currently:

- Cross-compliance provisions on the use of plant protection products;
- SVB (Social Insurance Institution for Farmers) and AUVA (General Accident Insurance Institution) brochures for the safe application of plant protection products;
- ÖAIP (Austrian Working Group for Integrated Plant Protection) brochure '*Umweltgerechter Pflanzenschutz nur mit funktionierenden Geräten*' (environmentally sound pest management only with equipment that works);
- Brochure '*Sachgerechtes Befüllen und Reinigen von Pflanzenschutzgeräten – Gute fachliche Praxis, besser Gewässerschutz*' (proper filling and cleaning of plant protection equipment – good professional practice, better protection of water) of the Austrian Chamber of Agriculture, the ÖAIP and the plant protection industry group.

Fig. 3: Under the certification for the *Walser Gemüse* region, in addition to traceability, quality standards are also guaranteed. This also includes the reduced application of plant protection products.

Measure

The Land of Salzburg, in cooperation with the Federal Government, will work towards drawing up recommendations from 2014 on harmonised dosing and application systems for the application of plant protection products in various crops (including for plant protection products authorised for organic farming).

The Land of Salzburg informs users of plant protection products about the latest state of technology.

The Land of Salzburg will work towards ensuring protection of workers and users in floriculture (glasshouse, cold nebulisation).

The Land of Salzburg commits to the use of low-drift application techniques, e.g. air-assisted nozzles, especially in field crops.

4.1.2. Filling and cleaning of plant protection equipment

Status quo

In this field, § 21(1), point 1(e), of the 2013 Salzburg Plant Protection Product Act (Consultation Draft) provides for the adoption of detailed rules by regulation.

Motorised plant protection equipment is used mainly in the cultivation of vegetables and potatoes in Salzburg. On account of the small number of arable areas, the bulk of the demand for plant protection equipment is met by service offerings by the machine pool of Salzburg.

Handheld application equipment and knapsack sprayers are used mainly in floriculture, as well as in tree nurseries.

In addition, there is currently:

- the '*Handbuch für den Sachkundenachweis*' (manual for the certificate of competence) issued by the Austrian Working Group for Integrated Plant Protection (ÖAIP), on which, alongside the Federal Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW), the Austrian Agency for Health and Food Safety (AGES), the Land Chambers of Agriculture, plant protection

product firms, plant protection equipment manufacturers and farmers are also represented;

- cross-compliance provisions on the filling and cleaning of plant protection equipment;
- Chamber of Agriculture for Upper Austria (LK OÖ) information leaflet on the filling and cleaning of plant protection equipment.

Measure

The Land of Salzburg recommends the fitting of hand-washing and clear water tanks to clean the plant protection equipment in the field and the fitment of continuous internal cleaning systems for plant protection equipment already in use. This allows possible impurities for succeeding crops and chemical reactions in the tank to be avoided.

These recommendations are made:

- in the course of appropriate guidance for professional users;
- through appropriate consideration of this topic during additional training for professional users.

The Land of Salzburg publishes a recommendation or guidelines on correct filling and cleaning of plant protection equipment and also makes corresponding information material available in cooperation with the Chamber of Agriculture of Salzburg.

The Land of Salzburg recommends the establishment of suitable handling areas to avoid localised pollution of the groundwater through incorrect filling and cleaning of plant protection equipment.

4.2. Restrictions or bans on the use of plant protection products with regard to risks associated with use under certain conditions or in certain areas (Articles 11 and 12 of the Directive)

Status quo

In implementation of § 13(1), point 2, of the 2011 Plant Protection Product Act, the Länder have to provide in their implementing Acts for measures concerning restrictions or bans on the use of plant protection products with regard to the risks associated with use under certain conditions or in certain areas. To this end, § 21(1), point 1, in conjunction with

paragraph 3 of the 2013 Salzburg Plant Protection Product Act (Consultation Draft) provides for the adoption of regulations by the Land Government.

The existing legal framework also includes:

1. 1959 Water Act (*Wasserrechtsgesetz 1959* – WRG) – Handling in protected and closed areas, general conditions for the designation of observation areas and areas for prospective measures

Under § 34(1) WRG, to protect water supply systems from pollution or from impairment of their capacity, the water authorities may impose special orders by decision concerning the cultivation or other use of land and corresponding protected areas.

Under § 34(2) WRG, to protect the general water supply, the Governor must provide by regulation that in part of the catchment area, measures which may jeopardise the water quality, capacity or level are to be notified to the water authority or require authorisation or are permissible only in a certain way. Under § 35 WRG, this is also possible to secure a future drinking water and industrial water supply.

Under § 33f WRG, the Governor, if the thresholds are exceeded other than only temporarily in a body of groundwater, must designate observation areas and, where the legal conditions are met, establish areas for measures to be taken. **These instruments take effect only if groundwater pollution has been established.**

2. The technical basis for designating protected and closed areas (*ÖVGW: Richtlinie W72 'Schutz- und Schongebiete'*) assumes correct application of authorised plant protection products. Furthermore, on account of geological vulnerability, provision may be made for plant protection product regulations in the water catchment area (recharge area of the groundwater system). These provisions are to be given the concrete form of protection orders in the decision on the designation as a protected or closed area. Protected and closed areas in each case cover only parts of the catchment areas of water supply systems.

3. The National Water Management Plan – NWMP (March 2010) was adopted in implementation of the Water Framework Directive. It includes the inventory (current water status analysis), the summary of the monitoring results and the generally binding programmes of measures to achieve good water status. These may include remediation measures, maintenance measures and precautionary measures. The topic of plant protection products is also dealt with in the NWMP. The effects on surface waters and groundwater are described in it and existing measures, such as, for example, the adaptation of protected and closed areas or the Austrian Programme for Environmentally Sound Agriculture (ÖPUL) are summarised. Furthermore, more far-reaching measures concerning groundwater are established, such as, for example, the Groundwater Status Monitoring Regulation (*Grundwasserzustandsüberwachungsverordnung* – GZÜV), special measuring programmes or the research project ‘GeoPEARL Austria’ with the aim of supporting the planning of measures to avoid potential pollution of groundwater by pesticides or their relevant metabolites. It is pointed out that, in implementation of Directive 2009/128/EC, Land legislation on the use of plant protection products can be established on the basis of the 2011 Plant Protection Product Act to protect the aquatic environment and the drinking water supply. These are to serve to support the specifications of the Water Framework Directive.

In addition to the NWMP, the Austrian Programme for Environmentally Sound Agriculture (ÖPUL) has existed since 1995, which contains special instructions for the use of plant protection products.

Under the observations for the groundwater survey pursuant to the Water Status Monitoring Regulation (GZÜV) (BGBl. II No 479/2006 in the current version), groundwater bodies in Salzburg are analysed at regular intervals for the presence of active substances of plant protection products. So far, there has been no evidence of large-scale contamination.

In the Land of Salzburg, there are currently 48 closed water areas and 2 906 protected water areas. Depending on the local risk potential, protected area designations contain restrictions on use of plant protection products, *inter alia*, for the narrower catchment area of water supply systems. In 19 closed areas, restrictions on use exist in the form of authorisation or notification obligations or general bans on use.

Fig. 4: In the Land of Salzburg, 48 closed water areas and 2 906 protected water areas have currently been designated.

Measures

Within the meaning of the support function of the measures provided for in Article 11(1) of Directive 2009/128/EC, the Land of Salzburg, in cooperation with the competent authorities for the implementation of the WFD and with the services competent for the technical interests of water protection, assesses the need for measures supplementing the instruments under water law on the basis of the 2013 Salzburg Plant Protection Product Act to protect the aquatic environment and the drinking water supply, for example by establishing local bans or restrictions on the use of plant protection products in the area surrounding protected or closed areas, and will adopt the necessary supplementary regulations as and when required.

4.3. Training for professional users and advisers for the use of plant protection products in connection with the introduction of a certification system including mutual recognition (Article 5 of the Directive)

4.3.1 Ensuring user expertise

Status quo

There were already regulations in Salzburg under the provisions of plant protection product law before the entry into force of the 2013 Salzburg Plant Protection Product Act (Consultation Draft) on conditions to achieve expertise in the use of plant protection products. At present, the user can meet the conditions of expertise by means of certain vocational training or relevant courses. The competence courses are offered by the Chamber of Agriculture and Forestry in Salzburg, as needed.

§ 5 of the 2013 Salzburg Plant Protection Product Act (Consultation Draft) transfers to the Chamber of Agriculture of Salzburg the implementation of the initial and additional training to be provided for pursuant to Article 5 of Directive 2009/128/EC to obtain sufficient knowledge in the fields laid down in Annex I to this Directive. Pursuant to § 21(1), point 3, of the 2013 Salzburg Plant Protection Product Act (Consultation Draft), further specifications can be laid down for these courses by Land Government regulation. Training courses provided for in other Länder, in accordance with the implementing provisions of the 2011 Plant Protection Product Act applicable there, are considered equivalent; other training courses can be recognised by regulation pursuant to § 21(4) of the 2013 Salzburg Plant Protection Product Act (Consultation Draft).

Measures

The Land of Salzburg, together with the Chamber of Agriculture of Salzburg, will stipulate, on the basis of the subject requirements set out in Annex I to Directive 2009/128/EC, the content of the initial and additional training courses, taking into consideration the climatic, ecological and agricultural conditions prevailing in the Land of Salzburg, and if necessary lay down specifications by regulation. The Chamber of Agriculture and Forestry in Salzburg will adapt the content and quantity of the training activities it already carries out to the intensified initial and additional training requirements.

Under the possibility of also recognising other training courses, the Land of Salzburg will examine, especially taking into account the officially recognised training on offer in the other Länder and in foreign countries near the border (Bavaria), the extent to which these are comparable to the training programme provided for for the Land of Salzburg and can be recognised by regulation. This is also possible in the case of training offered by private educational establishments if it is ensured that they guarantee a comparable level of training.

The Land of Salzburg adapts the curricula of the agricultural technical and vocational colleges to the requirements of Annex I to Directive 2009/128/EC and develops these further so that the knowledge communicated there can be recognised as basic training pursuant to Annex I to Directive 2009/128/EC. In this connection, the Land of Salzburg will also ensure the necessary additional training events relevant to plant protection for the teaching staff at the agricultural colleges.

The measures described will as a whole ensure a demand-oriented supply of training events for professional users.

The current regulations on expertise will be transferred to the new certification system in accordance with Directive 2009/128/EC. The certification system is to be introduced by 26 November 2013 at the latest.

4.3.2 Boosting of plant protection advice

Status quo

A plant protection advisory service has been established at the Chamber of Agriculture of Salzburg. This has been assigned the following tasks, among others:

- Initial and additional training in the plant protection field;
- The maintenance of the weather stations run by the Chamber of Agriculture of Salzburg
 - The Chamber of Agriculture of Salzburg has 5 weather stations at its disposal, producing data from which relevant findings can be obtained for reducing the use of plant protection products in potato-growing, e.g. data on the current intensity of infection;
 - Farmers growing potatoes are informed of the results of the data analysis by circular faxed by the Chamber of Agriculture of Salzburg, in order in this way to be able to better target the application of plant protection products;
- Plant protection advice in the specialised fields of vegetable-growing, fruit-growing and floriculture.

Furthermore, in the course of their advisory activities – even though in a secondary capacity timewise – specialists from the production areas (wood, forestry, grassland and field crops) act as plant protection adviser contacts for the holdings with regard to advice on cultivation with the selection and recommendation of the appropriate plant protection measures.

Fig. 5: In the Land of Salzburg, 5 weather stations are available for plant protection advice.

Measures

The Land of Salzburg advocates boosting of advice which is independent of economic interests, thereby sustainably ensuring the economic success of agricultural production and the security of supply of high-quality food and ecological management of green areas.

To this end, the Land of Salzburg supports, in particular,

- the official advisory service of the Chamber of Agriculture of Salzburg and thereby also the implementation of the contents of the Land Action Plan,
- the modernisation of the weather stations operated by the Chamber of Agriculture of Salzburg for the further guarantee of precise timing and thereby ecological optimisation of plant protection measures, and
- efficient dissemination of relevant information materials via modern media.

4.3.3 Additional training events on the use of plant protection products

Status quo

In the Land of Salzburg, ongoing events on the use of plant protection products are offered concerning specific agricultural and forestry crops and the non-agricultural sector (e.g. garden vegetable-growing) .

Measure

The Land of Salzburg ensures that the training measures offered in the Land of Salzburg for professional users are also available to all other interested parties.

4.4. Public information and awareness-raising, in so far as it is not already provided for in other legislation (Article 7 of the Directive)

4.4.1 Developing an Internet portal for plant protection

Status quo

In Austria, there is a high level of public awareness concerning the use of plant protection products.

Measures

The Land of Salzburg, in cooperation with the other Länder, supports the establishment and maintenance of a plant protection Internet portal for effective communication in terms of quality and quantity of technical information and generally comprehensible information for non-professional users and other interested parties.

This is to be built up on existing, established information sources for individual user groups, such as the homepage of AGES, the ÖAIP, the Agranet of the Chambers of Agriculture, the Infoportal of the Sozialversicherungsanstalt der Bauern (Social Insurance Institution for Farmers – SVB), the guidelines for golf courses, community newsletters and magazines of allotment clubs.

The Land of Salzburg, in cooperation with other Länder, ensures that the information is objective and well-founded.

4.4.2. Information and training of non-professional users

Status quo

For non-professional users too, comprehensive additional training is an important building block for ecofriendly use of plant protection products.

Distributed throughout the Land of Salzburg, there are a total of 44 fruit-growing and gardening associations which deal, *inter alia*, with plant protection measures for non-professional users.

§ 24 of the 2013 Salzburg Plant Protection Product Act (Consultation Draft) provides for an obligation for the Land of Salzburg to provide public education and information on the effects of the use of plant protection products.

Measure

The Land of Salzburg is establishing a 'plant protection' webpage on www.salzburg.gv.at, on which information on events relevant to plant protection and current topics on the subject of plant protection are published.

Furthermore, the Land of Salzburg supports the information for non-professional users through leaflets, seminars organised on demand or events, such as for example in fruit-grower and horticultural associations, as well as other events to improve the understanding of the need for plant protection measures.

The Land of Salzburg also supports establishing a telephone advisory service at the Chamber of Agriculture of Salzburg, which will provide information for non-professional users of plant protection products during the main application time of plant protection products, and reference will also be made to this on the 'plant protection' webpage to be established by it.

4.5. Inspection of plant protection equipment already in use in connection with the introduction of a certification system (Article 8 of the Directive)

4.5.1 Inspection of plant protection equipment already in use

Status quo

Provision was already made in the past by Land Government regulation (LGBI. No 86/1992) that towed or semi-mounted field spraying equipment was to be subject to regular inspection every three years, the results of which were contained in a written inspection report. If the inspection report was positive, an inspection sticker was to be affixed to the appliance. The inspections were organised by the Chamber of Agriculture of Salzburg using private inspection services.

Also under ÖPUL measures, regulator inspection of plant protection equipment in use is compulsory.

The majority of plant protection equipment used in the Land of Salzburg consists of handheld application equipment or knapsack sprayers.

Furthermore, in the Wals-Siezenheim area, there is mobile spraying equipment for use in vegetable and potato cultivation. The spraying measures for the few arable farmers are largely covered by services supplied by the machinery pool.

According to § 21(1), point 2, of the 2013 Salzburg Plant Protection Product Act (Consultation Draft), the inspection of plant protection equipment is to be regulated by Land Government regulation, in which in the future notably the recognition of inspections carried out in other Länder or in other Member States is also to be regulated.

Fig. 6: Trailed, mounted and self-propelled plant protection equipment in use must be inspected regularly.

Measure

The Land of Salzburg will adopt a regulation based on the 2013 Salzburg Plant Protection Product Act (Consultation Draft) in accordance with Article 8 and Annex II to Directive 2009/128/EC and thereby ensure the necessary recognition of inspections from other Länder or Member States.

The ‘plant protection’ webpage to be established by the Land of Salzburg will list the inspection bodies recognised for the use of plant protection equipment in the Land of Salzburg.

4.5.2. Further development of plant protection equipment and introduction of new technologies in practice

Status quo

At present, for plant protection equipment in use the 2009 ÖAIP guidelines ‘*Nur mit funktionierenden Pflanzenschutzgeräten*’ (Only with plant protection equipment that works), for new plant protection equipment the provisions of the Machinery Directive (2010 Machinery Safety Regulation (*Maschinen-Sicherheitsverordnung 2010*)) and for

both categories of equipment the BMLFUW Decree of 2001 on equipment technology to reduce drift are applicable.

Measure

The Land of Salzburg provides information on authorised plant protection equipment and new technologies, which contribute to reducing loss (drift and dripping losses) and to economic and efficient application of plant protection products.

4.6. Reduction in the risks and the quantity of plant protection products used (Article 12 of the Directive)

4.6.1 Reduction in the application of plant protection products

Status quo

The structure of the farming system in Salzburg, consisting of small farms by European standards, gives a patchwork appearance to the cultivated landscape. A voluntary reduction in plant protection measures has already been brought about since 1995 through ÖPUL measures (organic farming, IP). In conventional potato-growing, weather stations and forecasting and warning systems are used to achieve a reduction in the use of plant protection products.

The Land of Salzburg makes every effort to maintain the existing farm structures. In the context of these efforts, the provisions on transactions relating to agricultural and forestry plots, for example, provide that the existence of economically sound, small or medium-sized agricultural or forestry holdings is in the general interest of maintaining, reinforcing and creating an effective farming community (see § 1(2) and § 4(1) of the 2001 Act on the Acquisition and Sale of Land (*Grundverkehrsgesetz 2001*)).

Fig. 7: The use of weather stations in combination with forecasting and warning systems allows optimisation of plant protection measures, which reduces the proportion of plant protection products used.

Measures

The Land of Salzburg advocates the establishment of voluntary renunciation of plant protection products posing a high threat to groundwater in existing and future new promotion programmes (e.g. ÖPUL).

The Land of Salzburg supports the use of plant protection products that spare beneficial organisms in the context of integrated pest management.

The Land of Salzburg supports the establishment, development and maintenance of forecasting and warning systems with precise timing and thereby ecological optimisation of plant protection measures.

4.6.2. Hot Spot Management

Golf courses, sports and leisure grounds

Status quo

Intensive plant protection measures are used on golf courses to maintain and care for the greens. The use of plant protection products outside the lawful use of land for agricultural and forestry purposes (e.g. on areas used for sports purposes such as golf courses) represents a measure requiring authorisation pursuant to § 32 of the Water Act (WRG). It is compulsory to keep records of plant protection products. The use of plant protection products and the effects of the uses on groundwater and surface water are subject to regular monitoring by the water authorities of the Land of Salzburg.

Measure

The Land of Salzburg will ensure intensified cooperation between the water authorities and the services competent for monitoring water and the Official Plant Protection Organisation so that they have increased specialised technical knowledge available on plant protection and, if necessary, measures can be taken under plant protection product law, supplementing the instruments provided for under water law.

Recreation grounds and pathways

Status quo

Total herbicides (such as Roundup) are sometimes used to keep paved leisure areas and pathways weed-free.

Measure:

The Land of Salzburg will provide information on the properties and effects of total herbicides for community newsletters and call for renunciation.

Neophytes

Status quo

Aggressive new alien plant species, such as, for example, ragweed (*Ambrosia artemisiifolia*), Himalayan balsam (*Impatiens indicum*), giant hogweed (*Heracleum giganteum*) or Japanese knotweed (*Fallopia japonica*) represent a growing problem in Salzburg for allergy sufferers and biodiversity.

Fig. 8: Skin contact with giant hogweed (*Heracleum giganteum*) in combination with sunlight may cause serious burns.

Measure

The Land of Salzburg, in cooperation with the Chamber of Agriculture of Salzburg, prepares information material (e.g. leaflets) on effective and environmentally sound control methods.

4.7. Development and introduction of integrated pest management and alternative methods or procedures (Article 14 of the Directive)

4.7.1 Promotion of integrated pest management procedures and organic farming under promotion programmes

Status quo

In Austria, the promotion of integrated pest management and organic farming takes place under ÖPUL 2007-2013.

Measures

The Land of Salzburg advocates continuation of corresponding environmental programmes taking into account integrated pest management procedures and organic farming in the coming CAP programming period.

Fig. 9: Integrated pest management represents an integral plant protection system on the holding, designed for the long-term, and pursues the objective of fulfilling ecological, economic and social requirements in equal measure by limiting

the use of chemical plant protection products to the levels that are necessary in favour of non-chemical plant protection procedures.

4.7.2. Drawing up of crop and sector-specific guidelines for integrated pest management

Status quo

At present there are the IP guidelines under ÖPUL in Austria, which are designed to encourage voluntary participation by persons who use plant protection products professionally. The attempt is made to offset the anticipated reduced yields or management difficulties by a fixed compensatory payment.

Measures

The Land of Salzburg advocates the continuation of these programmes, with due regard to the competitiveness of IP (compensation for lower yields).

4.7.3 Establishment of untreated control areas (spraying windows)

Status quo

On account of the small scale of areas under arable crops, vegetables and potatoes and the low intensity of infestation, the establishment of untreated control areas was not necessary.

Measures

In the event of increased occurrence of harmful organisms or a decisive change in the use of land (arable), the Land of Salzburg will examine the establishment of spraying windows. The Land Salzburg will use the findings from this in any case to optimise the advice.

4.8. Indicators for monitoring the use of plant protection products (Article 15 of the Directive)

4.8.1: Collection of statistical data on the use of plant protection products

Status quo

Users of toxic or highly toxic plant protection products already in the past had to keep a spraying logbook for each calendar year separately (§ 4(11) of the Salzburg Plant Protection Product Act, LGBI No 79/1991). The authority was to be allowed to inspect this on request during controls (§ 9(2) of the Salzburg Plant Protection Product Act), but no provision was made for systematic statistical analysis of these data.

On the basis of Regulation (EC) No 1107/2009, keeping records of plant protection products became compulsory for professional users. These must in any case contain the name of the plant protection product, the time and the dose of application, the area and the crop where the plant protection product was used.

Under integrated production, records were already kept of the use of plant protection products.

The Federal Office for Food Safety (BAES) has at its disposal the quantities of active substances contained in plant protection products (quantities of registered products) placed on the market in Austria.

According to Regulation (EC) No 1185/2009 concerning statistics on pesticides, data on both the placing on the market and the use of pesticides are to be collected and to be detailed up to the level of the active substances, but a corresponding Federal Government implementing regulation has not yet been adopted.

Measures

The Land of Salzburg coordinates with the other Länder concerning uniform documentation for persons who use plant protection products professionally to enable a uniform record to be kept of the use of plant protection products.

Status quo

In Salzburg, 45% of farmers (according to IACS) currently engage in organic farming. Approximately 51% of the utilised agricultural areas of Salzburg are farmed organically.

Measure

The Land of Salzburg surveys the domestic areas under organic farming as a percentage, the number of ÖPUL participants (with sustainable use of plant protection products) in relation to non-participants and the proportion of utilised agricultural areas assigned to each of these two groups. A trend over the years is calculated from these data.

4.8.2. Model calculation for the behaviour of plant protection products in the environment

The Federal Government is competent for this (the GeoPearl project carries out seepage water analyses considering various parameters).

5. Public participation

According to § 13 of the 2013 Salzburg Plant Protection Product Act (Consultation Draft), the public is to be involved in the drawing up of the Action Plan and amendments to it. Accordingly, drafts are to be made available for public inspection at the Land Government Office and at the district administrative authorities during the public opening hours and the disclosure is to be announced in the '*Salzburger Landeszeitung*'. As far as technically possible, the draft is also to be published on the Internet. In addition, the draft is to be disclosed to the Salzburg Economic Chamber, the Salzburg Chamber of Labour, the Chamber for Agriculture and Forestry in Salzburg, the Chamber of Agricultural Workers for Salzburg and the Salzburg Environmental Ombudsman. Anyone may submit observations to the Land Government within six weeks of the announcement. When drawing up the Action Plan, the Land Government has to take the comments submitted into consideration.

6. Summary

In the Land of Salzburg, the use of plant protection products plays a minor role. The Land of Salzburg is concerned to limit the use of chemical plant protection products to the minimum levels that are necessary under the legislation in favour of non-chemical plant protection procedures. This Action Plan contains measures which are put forward by the Land of Salzburg to make a contribution to the implementation of this project. The measures are in particular to support systems which already exist, such as, for example, additional training events or the holding of training courses, and are if necessary to be supplemented by measures of an official nature, such as, for example, the adoption of regulations. When formulating the individual measures, the attempt has been made to use generally comprehensible expressions and to keep the comments as brief as possible, which at times has been at the expense of technical precision.