

**National Action Plan
for the sustainable use
of plant protection products 2017 - 2021
(AUSTRIA)**

The National Action Plan has been coordinated by the Federal Ministry for Agriculture, Forestry, Environment and Water Management and joint representatives of the provinces. The expert input emerged from working group meetings involving the federal authorities, the provinces, interest groups and other stakeholders.

List of abbreviations

AGES	<i>Österreichische Agentur für Ernährungssicherheit</i> [Austrian Agency for Health and Food Safety]
AUVA	<i>Allgemeine Unfallversicherungsanstalt</i> [General Accident Insurance Institution]
BAES	<i>Bundesamt für Ernährungssicherheit</i> [Federal Office for Food Safety]
BGBI	<i>Bundesgesetzblatt</i> [Federal Law Gazette]
BLT	<i>Bundesanstalt für Landtechnik</i> [Federal Institute for Agricultural Engineering]
BMGF	<i>Bundesministerium für Gesundheit und Frauen</i> [Federal Ministry of Health and Women's Affairs]
BMLFUW	<i>Bundesministerium für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft</i> [Federal Ministry for Agriculture, Forestry, Environment and Water Management]
EIP	European Innovation Partnership
EEA	European Economic Area
CAP	Common Agricultural Policy
NGP	<i>Nationaler Gewässerbewirtschaftungsplan</i> [National Water Management Plan]
ÖAIP	<i>Österreichische Arbeitsgemeinschaft für Integrierten Pflanzenschutz</i> [Austrian Association for Integrated Plant Protection]
ÖPUL	<i>Österreichisches Programm für umweltgerechte Landwirtschaft</i> [Austrian Programme for Environmentally-friendly Agriculture]
PPP	Plant protection product
SVB	<i>Sozialversicherungsanstalt der Bauern</i> [Farmers' social security institution]
UBA	<i>Umweltbundesamt</i> [Federal Environment Agency]
EQS	Environmental Quality Standards
WRG	<i>Wasserrechtsgesetz</i> [Water Rights Act]

INTRODUCTION

The National Action Plan is based on Directive 2009/128/EC on the sustainable use of pesticides.

Under Article 4 of the Directive, Member States are to 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.

In accordance with the provisions of the Austrian Constitution regarding implementing legislation and the enforcement thereof, regulation of the use of plant protection products - in particular in agriculture - falls within the remit of the nine provinces. The Federal Government has responsibility only for the framework legislation. This has been in place since the enactment of Sections 13 and 14 of the *Pflanzenschutzmittelgesetz 2011* [2011 Plant Protection Product Act], BGBl. I No 10/2011, as amended in BGBl. I No 163/2015. Under Section 14 of the Act, the provinces are required to draw up provincial action plans as referred to in Article 4 of Directive 2009/128/EC, taking into account Section 2(2) of the Act, and to forward them to the BMLFUW.

In drawing up the Action Plan, the individual chapters were compiled jointly by representatives of the Federal Government, the provinces, interest groups and other stakeholders. This ensured the creation of a uniform, country-wide National Action Plan.

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1. Training

1.1 General

Plant protection products may be used only as intended and in the proper manner, in accordance with the principles of good plant protection practice and the precautionary principle. Professional users must follow the general principles of integrated pest management set out in Annex III to Directive 2009/128/EC on the sustainable use of pesticides.

Sufficient expertise in the field of plant protection is a basic requirement if plant protection products are to be used as intended and in the proper manner as part of integrated pest management. This is why ongoing training is essential to ensure that professional users, distributors and advisors have the expertise necessary.

Since 26 November 2015, plant protection products authorised for professional use may be supplied only to buyers who can produce a certificate demonstrating their expertise (certificate as referred to in Article 5(2) of the Directive). The vendor must have appropriate training as a distributor, and must check whether the buyer has a valid certificate under plant protection law at the time of purchase. Under the Austrian Constitution, the Federal Government is responsible for rules on the authorisation and marketing of plant protection products and for framework legislation on the use of such products, in particular in agriculture. The nine provinces have enacted implementing provisions in this regard. There is legislation at both federal and provincial levels governing the sale and use of plant protection products, training and the related certification system (including the procedure for the issue and withdrawal of certificates).

1.2. Training for professional users, distributors and advisors

1.2.1. Background

The obligatory training subjects referred to in Annex I to Directive 2009/128/EC regarding the use of plant protection products have been introduced in Austria, taking account of the particular focus of the different regions. The initial training course for professional users and advisors comprises between 8 and 20 teaching modules, depending on their previous training. Taking into account sector-specific and region-specific considerations, additional training comprises at least five teaching modules. Attendance at specialist plant protection product events can to a certain extent count as additional training hours.

For distributors, a training system has been established comprising 16 hours of initial training and eight hours of additional training.

The competent authorities at both federal and provincial levels issue a credit-card sized certificate once the necessary training has been completed. This serves as evidence as referred to in Article 5(2) of Directive 2009/128/EC.

The competent authorities are:

- for distributors, the Federal Office for Food Safety
- for professional users and advisors, the provincial governments, district administrative authorities, and chambers of agriculture

1.2.2. Further steps

Maintenance and development of sufficient training opportunities at all levels and in as many fields as possible, taking into account sector-specific and region-specific particularities.

1.2.3. Quantitative objectives, targets and timetables

Targets	Attainment
Continuing to offer and develop sufficient training capacity	Ongoing
Additional training for professional users, distributors and advisors who already have a certificate	Ongoing
Uniform evaluation of hours of attendance at specialist events to count towards training	End of 2018
Adaptation of training content in line with scientific and technical advances	Ongoing
Ensuring adequate advice on plant protection and corresponding information material to publicise the content of the National Action Plan	Ongoing
Publication of training offer	Ongoing

2. Information and Awareness-Raising

2.1. Information for professional users

2.1.1. Background

Austria has implemented the requirements of Directive 2009/128/EC on the sustainable use of plant protection products by professional users. Comprehensive advice is available for this target group.

Important information on the subject of plant protection is currently available on the websites of the Federal Government, the provinces, statutory interest groups, associations and clubs (e.g. www.warndienst.at, www.ages.at, <http://www.baes.gv.at/baes/>, www.rebschutzdienst.at, www.bmlfuw.gv.at).

2.1.2. Further steps

The comprehensive advice for professional users is to be continued and stepped up. The information already available online is to be pooled, further developed with a target-group focus, and kept up to date. A common plant protection internet portal with its own domain, from which all the websites currently in existence are accessible, is to be developed. There will be links to additional services (e.g. ÖAIP, SVB, AUVA, *Vergiftungsinformationszentrale* [Poisons Information Centre], etc.).

2.1.3. Quantitative objectives, targets and timetables

Targets	Attainment
The comprehensive advice is to be continued and, where necessary, stepped up	Ongoing
Development of a common internet portal	2018
Updating and expansion of the offer	Ongoing
Increasing the numbers of hits	Annual

2.2. Information for non-professional users

2.2.1. Background

Because expert knowledge is not required by law for the use of plant protection products in the home and private gardens, specific requirements have been laid down for their authorisation and supply in this field. These include in particular the suitability of the products and the nature and size of their packaging. This ensures that these products are also used safely in this field.

Providing information on the correct use of plant protection products is also important with a view to reducing risk in the home and private gardens. All the provinces have courses that are open to the general public.

2.2.2. Further steps

The common internet portal is intended to help raise awareness among both professional and non-professional users. For non-professional users too, access to comprehensive information is an important element in reducing the risks to and impact on health and the environment arising from the use of plant protection products. Guidelines on integrated pest management, folders, events and open days in particular will all be used to reinforce the information available. Steps are also to be taken to ensure that basic and refresher courses on the correct use of plant protection products are also open to non-professional users.

2.2.3. Quantitative objectives, targets and timetables

Targets	Attainment
Reinforcing advisory and information activities	Ongoing
Drafting of guidelines on integrated pest management for non-professional use too	2020
Expanding the information available on the Internet for non-professional users	2018

2.3. Information for the general public

2.3.1. Background

Various bodies (e.g. BAES, UBA, the chambers of agriculture, teaching establishments) produce publications containing comprehensive information for the general public on plant protection products, and in particular on the risks and possible impact of their use on health and on the environment.

As a result, there is considerable interest among the public in Austria on the ecological and health risks of the use of plant protection products.

As part of the ‘*Zukunft Pflanzenbau*’ [Growing plants in the future] strategy, a discussion process was started involving all relevant stakeholders from the field - from agriculture, processing, trade, testing stations, interest groups, NGOs, industry and science. The aim was to arrive at modern solutions for plant cultivation as a whole and ensure the safety of farmers, consumers and the environment.

Discussions in this connection in particular have shown that there is a need to improve the provision of objective information for the general public.

2.3.2. Further steps

Objective information on plant protection measures is to be made available to the general public, to resolve the current gaps in information provision. There will be a particular focus on the economic, ecological and social benefits of plant protection and on the risks and possible impact of the use of plant protection products on health and on the environment. One particular outcome of the discussions around the ‘Growing plants in the future’ strategy is that regular exchanges among stakeholders are also to be facilitated through a ‘round table’ on topical subjects relating to plant protection. The results of the round tables will be published. Information will also be made available on the internet and other suitable media.

2.3.3. Quantitative objectives, targets and timetables

Targets	Attainment
Producing information for the internet and	Ongoing

other publications and keeping it up to date	
Holding a 'round table'	Several times a year
Organising open days, presentations	Ongoing

3. Inspection of plant protection equipment

3.1. Background

The requirements of Directive 2009/128/EC on the inspection of plant protection equipment in use and the introduction of a certification system (for the verification of inspections) have been transposed into Austrian law in the relevant plant protection product legislation and the implementing regulations pursuant to that legislation.

The requirements regarding verification were transposed on the basis of Annex II to the Directive. Requirements have been laid down for the accreditation of workshops (inspection stations) that inspect plant protection equipment in use, the design of the verification sticker (inspection sticker) and the content of verification reports (inspection reports). Only hand-held plant protection devices, and equipment that can be carried over the shoulder or on the back are exempt from the verification obligation. Such equipment has to be serviced regularly by professional users.

Valid verification/inspection certificates from other provinces, other EU Member States and EEA states are recognised in Austria.

The training of the staff of accredited workshops (inspection stations) is currently in the hands of the Mold training workshop and the Technical Section of the *Verband Steirischer Erwerbsobstbauern* [Association of Styrian Commercial Fruit Growers] in cooperation with BLT Wieselburg.

Before the entry into force of the above provisions, the regular verification of plant protection equipment was already compulsory in Salzburg and Vorarlberg, and had been required since 2001 under the Austrian programme to promote an environmentally friendly, extensive form of agriculture that protects natural living space (ÖPUL). In addition, since the end of the 1980s plant protection equipment has been verified by the ÖAIP.

3.2. Further steps

Accreditation of further workshops (inspection stations).

Verification of the accredited workshops (inspection stations) to ensure they comply with the requirements (regarding technical equipment, trained staff required) for the inspection of plant protection equipment in use. Ensuring the regular training of inspection staff, taking into account scientific and technical advances.

Monitoring of the requirement that from 27 November 2016 professional users may use only verified application equipment.

Provision of information on inspection requirements and on accredited workshops (inspection stations) for professional users.

Coordination between authorities and various specialist organisations (e.g. ÖAIP) that seek to ensure the safe use of plant protection equipment.

3.3. Quantitative objectives, targets and timetables

Targets	Attainment
Accreditation of (further) workshops (inspection stations) as necessary	Ongoing
Inspection (verification) of the accredited workshops (inspection stations)	Ongoing
Ensuring the regular training of inspection staff	Ongoing
Monitoring of the requirement that only verified application equipment may be used.	Ongoing
Provision of information on inspection requirements and on accredited workshops (inspection stations).	Ongoing

4. Measures to protect the aquatic environment and drinking water

4.1. Background

As part of the authorisation of plant protection products, specific requirements and conditions have been established to protect the aquatic environment and drinking water. Plant protection authorisation procedures already include such requirements and conditions, e.g. minimum distances from surface waters, ban on direct use on sealed surfaces and surfaces with a high risk of run-off. In addition, where necessary, authorisations also prohibit use in water protection and water conservation areas.

Where necessary, more radical measures can be taken under water legislation to prevent plant protection products entering waters with a view to water protection. Under Section 34(1) WRG, the water rights authorities may adopt decisions containing special arrangements for the exploitation or other use of land and corresponding protected areas, in order to protect water supply facilities from contamination or a reduction in water yield.

Under Section 13 of the 2011 Plant Protection Product Act, the provinces have to include in their implementing legislation provisions indicating that under certain conditions or in particular areas the provincial governments must limit or prohibit the use of plant protection products on account of the risks associated with their use. Restrictions on use in river basins used by water supply facilities may also be considered.

Under Section 34(2) WRG, provincial governors may, to protect general water supplies, introduce regulations stipulating that, in a part of the basin, activities which might jeopardise the nature, water yield or water level of the area must be notified to the water rights authorities, will require approval or may be permitted only in a specific manner. Under

Section 35 WRG, such regulations may also be introduced to ensure that future water needs can be met.

Under the WRG, additional conditions may be attached where necessary to the use of plant protection products in water protection and water conservation areas, and their use may be prohibited. The specialist principles that exist in Austria for designating protection and conservation areas (*Österreichische Vereinigung für das Gas- und Wasserfach (ÖVGW)* [Austrian Association for the Gas and Water Industries] - Guidelines W72, '*Schutz- und Schongebiete*' [Protection and Conservation Areas]) are to be applied in this connection.

The first *Nationale Gewässerbewirtschaftungsplan (NGP)* [National Water Management Plan] (March 2010) was adopted to implement Directive 2000/60/EC (Water Framework Directive). In the meantime, a draft for a second NGP has been issued (January 2015). The NGP includes, among other things, mapping (analysis of the existing water situation), a summary of monitoring findings, and the generally binding programme of measures to ensure the good chemical and quantitative status of groundwater and the good chemical status and ecological status/potential of surface waters. It contains remedial measures and measures to prevent the current status worsening (maintenance and precautionary measures).

The plan also deals with plant protection products. Their possible impact on surface waters and groundwater is described, and a summary provided of existing measures, such as those under federal and provincial legislation on plant protection products, and of the *Nationale Aktionsplan Pflanzenschutzmittel* [National Plant Protection Product Action Plan], the adaptation of protection and conservation areas, inspections, ÖPUL 2015-2020, advisory services, etc.

The NGP also makes the point that plant protection product measures in recent years have already resulted in a clear reduction in groundwater pollution. Contaminants still present are largely attributable to substances or their metabolites that at the time were used lawfully but are now prohibited.

Expert advice to users includes assistance in the selection of crops and crop rotation, and of suitable plant protection measures for the particular land in question, especially with a view to protecting the aquatic environment and drinking water.

Provincial legislation on the use of plant protection products includes provisions allowing the use of plant protection products to be restricted or prohibited under certain conditions or in certain areas.

Some provinces have also introduced additional conditions for the use of such products (e.g. the Upper Austria Pesticides Strategy 2015).

4.2. Further steps

The targeted expert advice to users in the selection of crops and crop rotation, and of suitable plant protection measures for the particular land in question, especially with a view to protecting the aquatic environment and drinking water, will be further developed.

Information will be made available on the characteristics of plant protection products whose active substances and relevant degradation products are particularly important in terms of protecting the aquatic environment and drinking water.

Where necessary, the provinces will introduce restrictions in terms of time, location or content on the use of plant protection products under the relevant legislation.

Continuing inspections by the water supervisory authorities in accordance with Section 130 WRG. In particularly sensitive areas, the water supervisory authorities will take leaf and soil samples, primarily from land in water protection and conservation areas, and carry out on-the-spot inspections of farms in those areas.

It may be necessary in certain circumstances to adopt or adapt restrictions or prohibitions under water legislation on the use of plant protection products in river basins used by water supply facilities (protection/conservation areas).

4.3. Quantitative objectives, targets and timetables

Targets	Attainment
Targeted advice by experts	Ongoing
Information on the characteristics of plant protection products, their active substances and relevant degradation products	Ongoing
Adoption of restrictions in terms of time, location or content on the use of plant protection products	Where necessary
Continuing inspections by water supervisory authorities	Ongoing
Adoption and adaptation of restrictions or prohibitions under water legislation on the use of plant protection products	Where necessary

5. Reducing the risks and the quantities of plant protection products used

5.1. Background

The assessment and authorisation procedures currently in place for plant protection products have in recent years already considerably reduced the risks that can arise from the use of such products.

The conditions for an ongoing reduction in the amounts used emerged from routine reviews of existing authorisations and a concomitant more precise specification of indicators. As a result, the risks of the use of plant protection products and the risks to the environment were further reduced.

The vast majority of Austrian agricultural undertakings participate in the agri-environmental programme that forms part of the ÖPUL programme. ÖPUL contains a series of measures to reduce the use of plant protection products.

Pursuant to provincial legislation transposing Directive 2009/128/EC (Pesticides Framework Directive), plant protection products may be applied only using inspected plant protection application equipment.

In accordance with the principles of good plant protection practice and integrated pest management, professional users must follow crop and sector-specific guidelines intended *inter alia* to reduce the use of plant protection products.

They are supported in using such products in a targeted and needs-based manner through crop-specific alert services and advice on use.

In areas as referred to in Directives 2000/60/EC (Water Framework Directive), 2009/147/EC (Birds Directive), and 92/43/EEC (Habitats Directive), and in public parks and gardens, sports and recreation grounds, school grounds and children's playgrounds, and in the close vicinity of healthcare facilities, it is primarily at local authority level that measures are taken to ensure that the public suffer as little exposure as possible to the plant protection products used.

5.2. Further steps

Continuation of routine reviews of existing authorisations and the concomitant more precise specification of indicators to ensure a high level of protection for people, animals and the environment.

Continuation of measures under the ÖPUL programme, with a view to reducing the risks and the use of plant protection products.

Maintenance and further development of the alert service to optimise the use of plant protection products, and continuation of the advisory services.

Compliance with Directive 2009/128/EC (Pesticides Framework Directive) and provincial legislation on plant protection equipment in use and promoting the use of the most modern equipment.

Further development, where appropriate, of the principles of good plant protection practice and integrated pest management, making use of crop and sector-specific guidelines.

Courses, additional training and advice will be made available for professional and private users on the use of plant protection products in areas used by the general public or vulnerable groups.

5.3. Quantitative objectives, targets and timetables

Targets	Attainment
Continuation of routine reviews of existing authorisations	Ongoing
Continuation of ÖPUL with a view to reducing the risks associated with the use of plant protection products	Ongoing

Maintenance and further development of the alert service and reinforcement of advisory services	Ongoing
Inspection of plant protection equipment in use and promotion of the use of the most modern equipment	Ongoing
Further development of the principles of good plant protection practice and integrated pest management	Where necessary
Courses, additional training and advice for professional and private users regarding the use of plant protection products in specific areas (Article 12(a) and (b) of Directive 2009/128/EC)	Ongoing

6. Use of plant protection products and cleaning of plant protection equipment

6.1. General

The Federal Office for Food Safety is responsible for authorising plant protection products, which it does on the basis of Regulation (EC) No 1107/2009 and the 2011 Plant Protection Products Act. Under the Austrian Constitution, responsibility for legislation on the safe use (application and storage by using undertakings) of plant protection products, particularly in agriculture, lies with the provinces.

The plant protection legislation of the various provinces contains detailed requirements on the subject.

Only those plant protection products may be used that have been authorised in Austria pursuant to Regulation (EC) No 1107/2009 and the 2011 Plant Protection Products Act, or licensed in Austria, and only in accordance with the terms of the authorisation (requirements and conditions), in particular as they appear on labels.

6.2. Background

Taking into account the grace period and those plant protection products which are demonstrably only being stored with a view to disposal or return to the supplier, only plant protection products that appear in the Austrian Plant Protection Product Register may be used. Use includes preparation and application, as well as storage, and transport within undertakings of plant protection products for the purpose of application. Products authorised/licensed in Austria and entered in the Plant Protection Product Register are always given a register number. Professional users must apply plant protection products in accordance with the principles of integrated pest management, using specialist staff with the appropriate qualifications (Article 5, Directive 2009/128/EC).

Note: Under the 2011 Plant Protection Product Act, authorised products include parallel-licensed products ('parallel licences'). A parallel-licensed product has the same Austrian Plant Protection Product Register number as the product originally authorised in Austria, but with

an additional qualifier (additional digit). Such a product may, however, have a different trade name from the product originally authorised in Austria (as a rule, there will also be various licence holders for any given authorisation holder). These plant protection products are also listed in the Austrian Plant Protection Product Register.

‘Distribution extensions’ (*Vertriebserweiterungen*) constitute another special form of authorisation. A plant protection product with a distribution extension under Article 13 of the 2011 *Pflanzenschutzmittelverordnung* [Plant Protection Product Regulation] has the same Austrian Plant Protection Product Register number as the reference product that has already been approved in Austria, but with an additional distribution number (three-digit figure). A product with a distribution extension may be placed on the market under a different trade name. The designations of a plant protection product covered by the distribution extension are also to be found in the Register (<http://pmg.ages.at> or www.baes.at).

Under Regulation (EC) No 1107/2009, the grace period (period during which a plant protection product may still be used after expiry of authorisation) is limited and may not exceed six months for the sale and the distribution and an additional maximum of one year for the disposal, storage and use of existing stocks of the plant protection product concerned. Plant protection products whose authorisation/licence has expired but for which a grace period is still in place, can be found in the Plant Protection Product Register at <http://pmg.ages.at> via the link ‘New authorisations, withdrawals, changes of uses and grace periods for placing on the market’, where the precise grace periods are also indicated.

Since 26 November 2015, the authorisation system has distinguished between plant protection products for professional and those for non-professional users, the latter being described as being for ‘house and garden use’. There must be no concerns regarding the safety of users or the environment, and the products must be easy to use in the correct amounts (have a dosing device). They also have to be packaged in limited quantities (ready-to-use packs for no more than 500 m²) and must degrade rapidly. Plant protection products with certain hazardous characteristics may not be authorised for house and garden use. This helps to avoid non-professionals using products whose handling may involve risks.

In Austria, the aerial spraying of plant protection products is in principle prohibited, though individual licences may be issued upon request.

The essential provisions for safe use are included in the packaging labelling of plant protection products.

Distributors, statutory interest groups, and clubs (e.g. gardening clubs) provide information on how plant protection products should be stored, handled, used and disposed of safely. Professional users receive further information (including on the protection of users) as part of their training. Detailed information on fields of use, the amounts to be used, frequency of use, buffer zones, how to reduce risks (e.g. how to reduce spray drift), etc., can be found on the label of a plant protection product. The provincial authorities monitor continuously to ensure that professional users are storing, handling and using plant protection products in the proper manner. The federal authorities are responsible for monitoring the storage of such products when they are placed on the market.

There is specific provincial legislation governing the storage and disposal of residual amounts of plant protection products. Containers which have not been cleaned, empty or not, may be

returned to the distributor through special collection programmes or taken to municipal recycling centres. They are then disposed of professionally.

Only plant protection application equipment which is regularly inspected and serviced may be used. The relevant statutory provisions must be complied with regarding the filling and cleaning of the equipment. As a matter of principle, it should only be cleaned on the land where it is has been used. Under no circumstances may the water used for cleaning, or residues of the products used, get into surface waters, groundwater or the sewerage system. Point source emissions are to be avoided. The guidelines entitled ‘*Sachgerechtes Befüllen und Reinigen von Pflanzenschutzgeräten*’ [Filling and cleaning plant protection equipment] (published by *Landwirtschaftskammer Österreich, ÖAIP, Industriegruppe Pflanzenschutz*) serve as a basis. They include instructions on how properly to dispose of any remaining spray mixture and how to clean equipment after use, etc. The publication entitled ‘*Grundsätzen der Pflanzenschutzpraxis*’ [Principles of plant protection] (same publisher) also contains guidelines on integrated pest management. Sector-specific guidelines too describe the principles of filling and cleaning plant protection application equipment.

6.3. Further steps

Elaboration of additional information material on the proper use of plant protection products and the filling and cleaning of plant protection application equipment. Expansion/reinforcement of the training available. Ongoing updating of information on the whole subject of how to use equipment in such a way as to reduce drift.

Improved advice on the use of equipment so as to reduce drift, from the perspective of water protection, buffer zones around surface waters, and areas and organisms not targeted, and on the safe sowing of treated seed. Improved information/advice for all users on how to keep plant protection product residues to a minimum and dispose of them correctly.

6.4. Quantitative objectives, targets and timetables

Targets	Attainment
Making users aware of the importance of preparing the most precise amount possible of spray mixture, so as to keep residues to a minimum	Ongoing
Making users aware of the potential risks in terms of water protection, non-target areas and non-target organisms	Ongoing
Where necessary, reinforcing training for users in how to clean plant protection application equipment properly	Ongoing
Further development of the Plant Protection Product Register to make it more user-friendly	By 2018
Elaboration of various information material	Annual

on the correct use of plant protection products in various areas (publications etc.)	
Updating of relevant guidelines on the use and cleaning of plant protection application equipment	Ongoing

7. Further development of integrated pest management

7.1. Background

Agriculture in Austria is geared to using nature-based control measures and prioritises sustainable organic and other non-chemical methods.

Under the principles of integrated pest management, the use of plant protection products and other methods of control has to be kept to the minimum. These principles are enshrined in all legislation, at both federal and provincial levels. Targeted plant protection measures are taken, as needed and at the right time, on the basis of alert notifications and forecasts, taking into account good plant protection practice. Crop and sector-specific guidelines have also been drawn up. The chambers of agriculture and various organisations and clubs provide extensive advice on the available methods of pest management and the environmentally friendly use and handling of plant protection products, and on non-chemical alternatives.

Compulsory training for professional users ensures intensive knowledge transfer and that the use of plant protection products is always being made safer and more effective.

A combination of compulsory and voluntary CAP instruments has also helped Austria steadily to move agricultural production towards greater sustainability. Compulsory crop rotation and the creation of ecological focus areas (EFAs) were enshrined in the legislation when the CAP was last reformed. In complement to the provisions of the first pillar of the CAP, various measures are available under the Austrian rural development programme, and in particular the Austrian agri-environmental programme (ÖPUL), which are intended to generate a high, environmentally effective added value. The ÖPUL measures focus above all on maintaining and strengthening biodiversity and thus also protecting natural enemies of pests, and for example pollinators. They are also intended to help maintain soil fertility, prevent erosion and protect surface waters and groundwater.

In 2015, AGES set up a ‘round table’, where stakeholders and experts regularly meet for an open exchange of information and opinions on current plant cultivation topics.

7.2. Further steps

Measures to prevent the import of plants and plant products are to be stepped up, to reduce the risk of new pests being brought in and disseminated and to protect against invasive alien species.

The plant protection alert service, which monitors and forecasts, is an efficient and modern tool for optimising plant protection measures. It allows measures to be scheduled and carried out at the best possible time, making crop production more efficient. The service is therefore also an essential tool in protecting the environment and human and animal health. Until 2015, there were different alert services for each province and each crop, organised by the chambers

of agriculture or other organisations/clubs. Since then, there has been a common, country-wide alert service which ensures further synergies and greater efficiency.

Research is central to the further development of integrated crop management in all fields. The new BMLFUW research programme (PFEIL 2020) has a special focus on crop cultivation. Research projects focusing on plant protection are also promoted in cooperation between the federal and provincial authorities (*Bund-Bundesländerkooperation (BBK)*) However, a great deal of know-how is also available outside research establishments - from associations, clubs and farmers, for example. In order to be able to make better use of this know-how, greater support is to be provided for practical research projects as part of the European Innovation Partnerships (EIP) scheme.

In the future too, the flanking measures for integrated pest management will be further developed through CAP measures. Advice and targeted information on integrated pest management will be further developed, and greater value will be attached in particular to the use of natural enemies. The current ÖPUL also contains further measures for crop rotation systems and variation (e.g. limiting the most common crops to 66 % of arable land), as part of the ‘environmentally friendly and biodiversity-promoting management’ action plan. Insect pollinators are being attracted by targeted support for the cultivation of flowering crops, such as St. John's Wort, camomile, milk thistle, marigolds and echinacea. Various measures to reduce or eliminate completely the use of synthetic chemical plant protection products are also being supported, e.g. the ÖPUL measures ‘foregoing the use of insecticides in viticulture’, ‘limiting the use of inputs designed to increase yields’, ‘foregoing the use of fungicides and growth regulators’, ‘greening of arable land’ and ‘organic farming’.

Ensuring a broad range of active substances, to prevent the build-up of individual substances and avoid resistance becoming established, is of increasing importance. Work is being stepped up to ensure there are no gaps in coverage and to avoid treatment emergencies - including in particular through increased cooperation at EU level.

At EU level, the guidelines for the assessment of low-risk active substances and plant protection products should be further enhanced. In addition, alternative active substances are constantly being tested as replacements for substances that need to be substituted.

7.4. Quantitative objectives, targets and timetables

Targets	Attainment
Reinforcement of measures to prevent the import of plants and plant products (stricter import strategy)	2020
Reinforced monitoring of the occurrence and arrival in Austria of new pests (multi-year integrated control plan (<i>MIK</i>))	Ongoing
Further development and funding of a uniform national plant protection alert service	Ongoing/2019
Further work on and securing the funding for ensuring there are no gaps in coverage, and avoidance of treatment emergencies - strengthening of EU-wide cooperation	Annual

Deepening zonal/EU-wide harmonisation activities in the assessment and authorisation of plant protection products	Ongoing
Testing of alternative active substances for substitution purposes	Ongoing
Continuing 'round table' for regular exchanges among experts on topical subjects relating to plant cultivation	Several times a year
Gearing plant cultivation research towards issues of integrated pest management	Ongoing
Participation in ERA-Net C-IPM	Ongoing
Support for practical innovation projects as part of the European Innovation Partnership (EIP) scheme	Ongoing
Continuation of flanking measures under the CAP and ensuring their protection after 2020	Ongoing

8. Risk indicators

8.1. Background

The 2012-2016 National Action Plan contained no risk indicators because no harmonised indicators pursuant to Directive 2009/128/EC had then been published by the EU.

8.2. Further steps

The progress made in implementing the National Action Plan should be assessed and monitored using indicators. Mainly existing data are used for this purpose.

Integrated pest management	
Indicator	Description
Participation in agri-environmental programme (ÖPUL)	The agri-environmental programme helps support the environmentally friendly management of agricultural land.
Participation in the 'organic farming' measure	Austria has attached considerable value to the promotion of organic farming since the beginning of the 1990s. The proportion of agricultural land given over to organic farming is to be surveyed and published.
Participation in the 'environmentally friendly and biodiversity-promoting management' measure	Retention of landscape features, maintenance of grassland, at least 5 % biodiversity areas, maximum of 66 % of a single crop, training.
Participation in the 'foregoing the use of insecticides in viticulture	Foregoing the use of insecticides can reduce the use of plant protection products on crops that are treatment

and hop growing' measure	intensive.
Participation in the 'limiting the use of inputs designed to increase yields' measure	Foregoing the use of plant protection products on grassland and land under fodder crops, except for organic products, foregoing the spreading of nitrogen fertilisers, except for organic fertilisers.
Participation in the 'foregoing the use of fungicides and growth regulators' measure	Foregoing the use of fungicides and growth regulators on cereals.
Participation in the 'greening of arable land' measure	Foregoing the use of nitrogen fertilisers and plant protection products in revegetation.
Number of hits on the plant protection alert service website: www.warndienst.at	The independent national alert service will allow plant protection products to be used in an optimal manner and at exactly the right time.
Treatment frequency index	The treatment frequency index is used to describe the treatment intensity in the reporting year for each crop.
Plant protection equipment	The number of accredited types of drift-reducing and dust-drift-reducing plant protection equipment is being surveyed.

Water protection	
Indicator	Description
Surface waters	For selected plant protection products, the Austrian <i>Qualitätszieleverordnung Chemie Oberflächengewässer</i> [Quality targets (chemicals in surface waters) Regulation] sets environmental quality standards (EQS) for surface waters at European and Austrian levels. The indicator describes the pollution of surface waters by plant protection products for which breaches of the EQS can be established (the bodies of water in question thus do not have a good chemical status (plant protection products that are governed at EU level) or a good ecological status (products governed at Austrian level)).
Groundwater/drinking water	The indicator describes the pollution of selected bodies of groundwater by plant protection products for which concentrations above the groundwater threshold are established (as a rule 0.1µg/l; see Quality targets (chemicals in surface waters) Regulation or BMGF orders on non-relevant metabolites). If the groundwater threshold is exceeded at more than

	30 % or more than 50 % of the sampling points of a body of groundwater, that body of water is designated as an observation zone (>30 %) or as a prospective action zone (>50 %). The groundwater in a prospective action zone is not considered to have a good chemical status.
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Consumers and public health	
Indicator	Description
Number of maximum residue level breaches	The indicator shows the proportion of tested samples that exceed the permissible maximum levels for plant protection product residues pursuant to Regulation (EC) No 396/2005 in all food product groups examined using data that are representative for the Austrian market collected annually as part of the control programme.
Suspected cases of poisoning among professional users	Survey of suspected cases of poisoning caused by plant protection products.

Information, training and awareness-raising	
Indicator	Description
Certificates issued pursuant to Article 5 of Directive 2009/128/EC	Number of certificates issued to professional users, distributors and advisors.
Advice available	Hours of advice provided under a contract between the BMLFUW and the chambers of agriculture on pest management.
The quantity of the active substance on the market	Trends in the quantity of substances placed on the market each year are recorded.

Innovation, research and development	
Indicator	Description
Research expenditure in the field of integrated pest management	Research is crucial across the board to the sustainable use of plant protection products. It is to be evaluated via DaFNE (<i>Datenbank für Forschung zur Nachhaltigen Entwicklung</i>) [Database for Research for Sustainable Development].
Expenditure in support of	Farmers, advisors, researchers, undertakings, NGOs and

innovation in the field of integrated pest management	other stakeholders work together through EIP-AGRI on innovations in agriculture and forestry.
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