

THE GOVERNMENT OF THE GRAND DUCHY OF LUXEMBOURG

Ministry of Agriculture, Wine-Growing and Rural Development

(Ministère de l'Agriculture, de la Viticulture et du Développement rural)

Luxembourg, 16 August 2013

Transposition into national law of the Directive establishing a Community framework for the sustainable use of plant protection products

National Action Plan (NAP) for Luxembourg

1. NAP objectives

Luxembourg's NAP is based on the following general objectives:

- to reduce the risks to human health and the environment caused by the use of plant protection products;
- to promote safe, efficient and rational use of plant protection products.

Together with these general objectives, a number of secondary objectives will be pursued:

- to promote production systems involving reduced use of plant protection products in agricultural areas;
- to reduce, and make safer, the use of plant protection products in non-agricultural areas;
- to improve the competitiveness of agricultural holdings through more efficient use of plant protection products.

These objectives are to be achieved through measures set out in the NAP, which will be implemented in a way that is consistent with the 2014–2020 rural development plan, the national plan for sustainable development, the national water protection plan (protection of abstraction areas, etc.) and the national plan for the promotion of organic farming.

The various measures set out in the NAP can be divided into the following categories:

- maintaining and improving the regulatory framework for the use of plant protection products (aerial spraying, training certification, protection of the aquatic environment and of very sensitive areas);

- indirect incentive measures aimed at reducing the use of plant protection products (advisory systems, plant disease and pest monitoring and warning system, etc.);
- communication and awareness-raising.

Finally, the NAP will be monitored and evaluated with the help of indicators to be established at national level.

2. National priorities

The main priority is to protect the health of users of plant protection products. In order to fulfil this objective, we must continue to improve the level of training for professional users in the rational use of plant protection products and integrated management and raise awareness among non-professional users of the risks associated with plant protection products, making alternatives to the use of these products more widely known.

Secondly, widespread use of crop protection practices based on rational use of plant protection products needs to be established for both professional and non-professional users.

This is to be achieved, in particular, by encouraging the use of non-chemical alternatives to the use of plant protection products, such as organic farming methods.

In addition, improvements to structural aspects of the landscape, sustainable cultivation practices and crop rotation, as well as increased biodiversity in general, will contribute to achieving reduced, more efficient use of plant protection products.

Given the small size of the country and the limited number of agricultural holdings, the whole of the agricultural area is to be treated as a priority area.

3. Risk reduction objectives

The overall reduction in the risks associated with plant protection products is to be achieved through a quantitative reduction in the use of certain substances of concern or categories of substances of concern, as well as a number of indirect measures, such as better training for professional users, agricultural information and advisory measures, greater awareness-raising among non-professional users, and restrictions on application in certain more sensitive areas, for example in the vicinity of residential areas or in water protection areas.

Efforts will be especially focused on reducing the use of plant protection products containing active substances of particular concern, such as CMR substances (substances that are carcinogenic, mutagenic or toxic to reproduction), high toxicity class (class A) substances, priority substances under the Water Directive and active substances that are toxic to bees.

4. Training

Under the current rules in Luxembourg, the use of toxicity class A plant protection products is restricted to users in the authorised users category. Likewise, only authorised sellers¹ may sell toxicity class A plant protection products. Authorisation, in the form of an authorised user or authorised seller permit, is granted by the Minister for Agriculture on the basis of an opinion from ASTA (Administration des Services Techniques de l'Agriculture — Agricultural Technical Services Administration, www.asta.etat.lu) and of the applicant's qualifications and professional experience.

On the other hand, advisors and sellers serving only non-professional users currently do not have to undergo any specific training.

In future, professional users, distributors and advisors will have to undertake specific training, the content of which is set out in the Annex to the Plant Protection Products Law.

This training will be attested by a certificate.

The competent departments of ASTA and the IVV (Institut Viti-Vinicole — Institute for Wine-Growing, <http://www.ivv.public.lu/>) will set up and supervise further training courses, the running of which will be delegated to the Chamber of Agriculture (Chambre de l'Agriculture), the Chamber of Commerce (Chambre de Commerce), the Chamber of Crafts and Trades (Chambre des Métiers) or the mutual support association Cercle d'entraide agricole, depending on the target group (users, sellers, advisors). The content of the training will be tailored to the respective target group (users, sellers, advisors), taking account of their respective roles and responsibilities.

The detailed design of the training courses, as well as training for trainers from the Chamber of Agriculture, the Chamber of Commerce or the Chamber of Crafts and Trades, will be in the hands of CRP-Lippmann, in cooperation with ASTA and the IVV and IBLA (Institut fir Biologësch Landwirtschaft an Agrarkultur — Institute for Organic Farming and Agronomy, www.ibla.lu).

Public funding will be provided for the organisation and implementation of these training courses.

The full training programme will be offered over a five-year period, in order to enable some 3 000 participants to take part (farmers/wine-growers, landscape gardeners, nurserymen, market gardeners, municipal technical services staff, staff of the Luxembourg railway company C.F.L. (Société Nationale des Chemins de Fer Luxembourgeois) and of the highways authority (l'Administration des Ponts & Chaussées), sellers, advisors, etc.).

The relevant certificate will be valid for a period of seven years. Subsequently, a more limited further training programme will be offered for the purpose of extending or renewing certificates.

¹ **Translator's note: 'revendeur', which I have translated throughout this document as 'seller', refers to those (e.g. retailers) selling to users.**

Syllabuses for specific initial training courses, in particular those provided within secondary-level agricultural education, will be adapted in order to meet the requirements of the Plant Protection Products Law. In future, those obtaining a leaving certificate in agricultural studies will automatically qualify to receive the relevant certificate. Those with other qualifications will be able to obtain the certificate, if necessary after taking additional courses.

A minimum level of training will be provided for certain categories of sellers, such as florists or garden shops, that sell only to non-professional customers, provided that they sell only plant protection products in the lowest (class C) toxicity class.

A grand-ducal regulation setting out all of these provisions and procedures will be adopted during 2013.

5. Inspection of spreading equipment

Regular inspections of plant protection product application equipment are already carried out in Luxembourg on all farms and vineyards participating in agri-environmental schemes (payments for maintaining the landscape and the natural environment and specific agri-environmental measures (cross-compliance plus)). Under the current system, inspections (conducted by ASTA) are already carried out every three years.

Around 80% of holdings therefore already have equipment that complies with the requirements of the Directive, under which inspections of all application equipment have to be carried out at regular intervals of not more than five years (from 2020, not more than three years). The remaining 20 % of agricultural holdings, as well as non-agricultural businesses, will have to be incorporated into the existing inspection system before November 2016.

A regulatory framework laying down the obligation to inspect spreading equipment will be adopted. Any equipment that does not comply will be prohibited from being used.

An information programme will be launched in cooperation with the Cercle d'entraide agricole, in order to encourage pooling of spreading equipment that complies with the requirements.

There will be a lighter inspection regime, with inspections every six years, for handheld sprayers and sprayers for small-scale use, used mainly in vineyards and orchards.

Equipment used for aerial spraying of vineyards is already required to be inspected annually.

6. Promotion of organic farming and production systems with low inputs of plant protection products

Integrated management of crop pests and rational use of plant protection products have been promoted for the past 20 years in Luxembourg by the agricultural association FILL (Fördergemeinschaft Integrierte Landbewirtschaftung — Association for the Promotion of Integrated Farm Management), with support from the Ministry of Agriculture. The

FILL is a member of EISA, the European federation of associations for the promotion of these types of plant protection practices. In the wine-growing sector, the OIV guidelines are used as a reference.

A number of FILL projects have been based on the principles of integrated management and rational use of plant protection products, and a large number of holdings are therefore already familiar with these approaches.

Plots and demonstration and experimental fields, managed, among others, by ASTA, the LTAE (Lycée Technique Agricole Ettelbruck — Ettelbruck Agricultural Technical College, www.lta.lu) and the IVV, already include plots dedicated to integrated management and rational use of plant protection products, thereby helping make such methods more widely known. Guided tours, organised regularly during the season, always attract a high level of interest from producers of all ages.

In the wine-growing sector, demonstration vineyards are planted by the IVV in order to test alternative methods with a view to reducing the use of plant protection products. Part of the State vineyard is managed using organic methods.

Under this National Action Plan, the IVV has commissioned the CRP (Centre de Recherche Public) Gabriel Lippmann (Gabriel Lippmann Public Research Centre, www.crp.gl.lu) to carry out an extensive research project in order to

- monitor the resistance of fungal diseases to chemical substances;
- monitor Grapevine flavescence dorée and its vector;
- conduct a series of trials aimed at reducing the use of plant protection products.

In addition, the 2007–2013 Rural Development Programme includes agri-environmental programmes focusing on integrated management and a reduction in the use of plant protection products, which will be continued in the period 2014–2020.

Finally, in the wine-growing sector, integrated management practices to control grape worm with the help of pheromone diffusers for disruption purposes are used on 90% of the area under vines, and go hand-in-hand with specific recommendations by the IVV.

The NAP aims to improve the way in which these types of approach, and the general principles of integrated management as set out in Annex 3 to the Plant Protection Products Law, are implemented in practice by professional users.

The Action Plan will draw on the existing recommendations and guidelines drawn up by the FILL on winter crops (cereals and rape seed), maize, summer crops (cereals, legumes, potatoes, fodder beet), and temporary and permanent pasture, which, if necessary, will be supplemented by standards to be adopted at the EU level. These recommendations will be incorporated into the compulsory training for professional users.

Luxembourg will establish a network of reference holdings that apply integrated management practices, methods based on rational use of plant protection products or other practices designed to reduce inputs of plant protection products. Public funding will be allocated, and advisory support will be provided by a professional organisation. It will be possible to visit one of these holdings as an integral part of the training referred to in point 4.

The Luxembourg Government will set up, with the help of public funding and in cooperation with the Chamber of Agriculture, advisory structures for professional users covering integrated management and rational use of plant protection products.

Under the 2014–2020 Rural Development Programme, Luxembourg will maintain and develop its agri-environmental programmes focusing on integrated management and a reduction in the use of plant protection products.

In the wine-growing sector, the 2014–2020 Rural Development Programme will also include the following measures:

- planting of melliferous species in vineyards that have not been treated with insecticides, in order to attract more pollinating insects;
- banning of certain plant protection products that are toxic to biological control agents.

In addition, the organic farming programme will be improved and backed up by promotion measures at various levels of the production and processing chain, in order to further encourage holdings to convert to this type of production.

7. Monitoring and warning systems

Luxembourg currently already has various monitoring and warning systems in place for plant diseases and/or pests affecting major crops, fruit-growing or wine-growing. These systems are managed by CRP-G. Lippmann (www.crppl.lu), ASTA (www.asta.etat.lu; www.agrimeteo.lu), the Institute for Wine-growing Research of the German Rural Services Centre in Oppenheim (Dienstleistungszentrum Ländlicher Raum, www.dlr-rnh.rlp.de), and the IVV (www.ivv.etat.lu).

They provide information on the development of plant diseases or crop infestation, as well as advice on plant protection treatment, based on a forecasting model.

They currently cover the control of cryptogamic diseases in cereals, protection against insect pests and fungal diseases in rape seed, the control of apple scab, and the control of fungal parasites (downy mildew and powdery mildew) and pests (grape worm) in vineyards. A model system for the control of black rot of grapes is being developed.

These systems will be maintained, developed and extended to include other crops. Apart from the monitoring of diseases and pests and recommendations for treatment, the SENTINELLE 2013–2015 harmful organism monitoring and warning system programmes

(<http://www.wetter.rlp.de/dienststellen/oppenheim/html/am/LUAM/index.htm>) will also assess possible resistance and its management.

Compulsory participation by all professional users concerned in the CRP-G. Lippmann forecasting systems, e.g. via a requirement to subscribe to an electronic newsletter, could be envisaged within the context of the future payment for maintaining the landscape and the natural environment (*PEEN — Prime à l'Entretien du paysage et de l'Espace Naturel*).

8. Requirements relating to the sale of plant protection products

Under the current rules, only sellers with an authorised seller permit may sell toxicity class A plant protection products.

In future, all persons employed in the sale of plant protection products to professional users will have to hold a professional seller certificate.

In addition, any company engaged in the sale of plant protection products will have to have sufficient staff with an authorised seller certificate to ensure that such persons are available at the time of sale to provide customers with relevant information on the use of, and risks posed by, the products in question.

However, derogations will apply to, for example, staff of supermarkets or specialist garden shops, and florists/market gardeners, provided that they sell only products authorised for non-professional uses and belonging to toxicity class C.

9. Handling, storage and recycling of plant protection products

National legislative provisions on safety standards for the storage of plant protection products have already been adopted under the regulations on classified establishments (*commodo-incommodo* (public inquiry) procedures).

In addition, under the current rules, surplus product, together with washing water from the rinsing of packaging and equipment and tools used in the application of products, is required to be diluted in water by plant protection product users and spread on the treated area.

Finally, there are also special recycling arrangements for plant protection products and their packaging. Voluntary recovery and recycling procedures, based on a network of collection points, are already in place. In the case of non-professional users, these collection and recycling networks are funded by the State ('Superdrecksäsch', www.sdk.lu) and, in the case of professional users, by distributors ('Phytophar-Recover', www.phytofarrecover.eu/) .

All of the existing measures will be maintained. Information campaigns on recycling facilities are planned in order to further increase the recovery percentage.

10. Rules on aerial spraying

Under the current rules, aerial spraying is subject to strict controls at national level in Luxembourg, and may be carried out only with the prior authorisation of the Minister for Agriculture, following an opinion from ASTA.

Aerial spraying is used systematically in Luxembourg only in vineyards in the Moselle region. It is used, exceptionally, in forests in the event of major plant-health risks.

Under the current administrative procedures, helicopter operators operating on behalf of wine growers' cooperatives submit in advance a forward plan for spraying for the season, which has to be validated by ASTA and authorised by the Minister for Agriculture.

The relevant authorisations set out all of the precautions, requirements and restrictions relating to aerial spraying with which the operator must comply. There are currently no restrictions on use based on topological factors in vineyards.

Information for the public on dates and locations of aerial spraying operations are published by the municipal authorities concerned.

For a number of years, plant protection products authorised for use in organic farming have also been used in aerial spraying.

In order to limit the risks of adverse effects on human health and the environment from, in particular, spray drift, aerial spraying of products will continue to be subject to strict controls.

In view of the advantages of aerial spraying for vineyards planted on slopes, an annual derogation for aerial treatment may be granted if one of the following conditions is met:

- the mean slope of the vineyards on which treatment is planned to be carried out is greater than, or equal to, 10%;
- the vineyards are laid out in the form of terraces;
- the topography and relief of the vineyards are such as to prevent access by land-based equipment;
- it is shown that there is no viable alternative or that aerial spraying has advantages in terms of health and the environment compared with land-based application.

An annual derogation may be granted only if a forward plan for treatment has been submitted and the precise location of the vineyards has been specified on a topographic map.

Aerial spraying of vineyards on alluvial plains or plateaus will therefore not be permitted, except in extreme weather conditions that prevent access to vineyards by vineyard tractors.

In forests, aerial spraying may be carried out only under the responsibility of the authority in charge of the forestry sector and following authorisation from the Ministry of Agriculture.

Aerial application of insecticides or acaricides will generally not be permitted.

A one-off derogation may be granted in extreme circumstances, in particular in the event of a major phytosanitary risk requiring rapid intervention, or in severe weather conditions that prevent access to vineyards by vineyard tractors. There must be a clear lack of alternatives to aerial spraying as a means of control.

In the wine-growing sector, requests for one-off derogations must be submitted to the IVV not later than five working days before the planned date of the aerial spraying operation, except in emergencies duly substantiated by the applicant.

From 2014, all helicopters authorised to be used in aerial spraying in Luxembourg will have to be equipped with injector nozzles designed to minimise losses caused by spray drift.

In addition, pilots carrying out aerial spraying must have a professional user certificate, and the responsible company must be specifically authorised to carry out aerial treatment.

Plant protection products used will have to be specially authorised for use in aerial spraying, following a specific assessment of the risks associated with this form of application.

If a minimum safety distance has not been specified in the approval dossier for the plant protection product(s) to be used in aerial treatment, a minimum safety distance of 20 m must be observed in the vicinity of sensitive areas. If necessary, the operator must increase this safety distance in order to prevent spray drift from plant protection products in the following sensitive areas:

- schools, crèches, children's play areas;
- parks and public spaces;
- game parks, national parks and nature reserves (Natura 2000 areas);
- water points suitable for human and animal consumption; areas used for drinking water abstraction;
- fish-farm and aquaculture ponds;
- homes and private gardens;
- rivers and streams;
- standing water.

11. Improved protection of the aquatic environment

Under measures transposing the Water Framework Directive, water protection areas with restrictions on certain cultivation practices have been established.

An advisory system, co-run by the water supply companies (*syndicats des eaux*), the municipal authorities and the Chamber of Agriculture, has been established in some of these areas, providing advice, in particular, on practices based on rational use of fertilisers and plant protection treatments (taking account of specific risk indicators, including water protection, ecotoxicology, etc.). This advisory system will be strengthened in order to meet the growing demand that will be generated by the forthcoming establishment of new water protection areas.

In addition, the 2007–2013 Rural Development Plan contains agri-environmental measures aimed at reducing the use of plant protection products in arable crops, which will be continued in the period 2014–2020. These voluntary measures, which may be applied in all regions, enable production methods less dependent on plant protection products to be introduced into the growing of arable crops, helping reduce the spreading of such products in surface water and groundwater. Under these measures, for example, the use of herbicides is replaced, in specified areas and crops, by mechanical weed control methods.

A differentiated approach will be taken to the authorisation of plant protection products in future, with tighter restrictions in water protection areas. The use of plant protection products identified as priority substances under the Water Framework Directive will be prohibited or restricted in these areas.

12. Establishment of areas with restricted use of plant protection products

At present, there is no specific legislation prohibiting or controlling the use of plant protection products in municipal public spaces or in the vicinity of schools and hospitals and clinics.

For a number of years, the Ministry of the Environment has been funding a promotion campaign aimed at reducing the use of plant protection products in municipal and national public spaces and on private land and gardens (see www.emwelt.lu/sanspesticides).

Around a quarter of municipal authorities have already given a political commitment to reduce (in the case of 23 authorities) or prohibit (in the case of 14 authorities) the use of plant protection products.

In the case of nature protection areas established by law, the use of plant protection products is controlled on the basis of the targets for the individual protection areas.

A sizeable proportion of the Natura 2000 agricultural areas is covered by programmes for the preservation of biodiversity, which, in general, impose a total ban on the use of plant protection products.

The use of plant protection products will be controlled in municipal public spaces, such as parks or other green spaces, and in the vicinity of schools and healthcare facilities. Only toxicity class C products will be authorised.

13. Raising public awareness

For a number of years, the Ministry of the Environment has been funding a campaign to raise public awareness of the risks associated with the use of plant protection products.

The campaign is essentially targeted at non-professional users, warning them of the potential dangers to human health and the environment, and making alternatives to the use of plant protection products more widely known.

In general, this awareness-raising campaign is launched each year with the help of a 'pesticide-free week' campaign.

An information campaign, involving the use of leaflets or other publicity material, targeted at the non-professional public and setting out all of the information available on the risks associated with the use of plant protection products and on the use of alternative methods, will be organised by the Ministry of Agriculture. These activities will be coordinated with those already organised by the Ministry of the Environment.

14. Information network on poisoning with plant protection products

The Luxembourg Government will set up, in cooperation with the Ministry of Health, a system for the collection of information on cases of acute poisoning with plant protection products and, if possible, on the development of chronic poisoning in persons regularly exposed to plant protection products. A grand-ducal regulation formalising all of the relevant measures and procedures will be adopted during 2014.

15. Monitoring indicators

The NAP will be monitored and evaluated with the help of indicators to be established by the Plant Protection Department of ASTA and the Agricultural Statistics, Agricultural Markets and External Relations Division of the SER (Service d'Economie Rurale — Rural Economic Affairs Service, www.ser.public.lu) in cooperation with CRP-G. Lippmann.

For the purpose of calculating the indicators, priority should be given to the use of statistical data required to be collected under Regulation (EC) No 1185/2009 concerning statistics on plant protection products and existing administrative data relating to the approval, sale and use of plant protection products. The evaluation and monitoring system will essentially be based on the methodologies currently used in other Member States, and will include the following indicators:

- use of plant protection products by professional agricultural users based on a 'number of dose units' indicator. For each active substance, the quantity of the substance used is measured against the 'dose unit' for the substance as established on the basis of approval specifications for plant protection products containing this active substance, and the values obtained are added together (for all active substances or for a group of active substances). The quantities of active substances used in agriculture are calculated on the basis of information collected from farmers via the Farm Accountancy Data Network (FADN) managed by the SER. The 'dose units' are calculated on the basis of information contained in the list — managed by ASTA — of authorised plant protection products. This indicator will have to be calculated annually. A multi-annual moving average should be calculated for the indicator in order to take account of year-to-year variations in parasite pressure and weather conditions. The indicator may be calculated for different groups of active substances, enabling information to be provided on the use of plant protection products by category of use of products (herbicides, fungicides, insecticides, etc.), by risk class of products (CMR, water protection, toxicity for bees, etc.), by crop, etc.;

- participation by professional users in the advisory system on rational use of plant protection products and integrated management;
- participation by agricultural holdings in a monitoring and warning network for plant diseases and pests;
- participation by agricultural holdings in specific agri-environmental measures (integrated management, reduction in use of plant protection products, etc.);
- percentage of UAA represented by organic farming;
- participation by farmers in the recycling system for empty plant protection product containers (Phytofar-Recover; www.phytofarrecover.eu).