

## EXECUTIVE NOTE

### THE PLANT HEALTH (SCOTLAND) AMENDMENT ORDER 2010

SSI 2010/206

#### Introduction

1. The above instrument is made by the Scottish Ministers in exercise of powers conferred by sections 2, 3 and 4(1) of the Plant Health Act 1967, as read with section 20 of the Agriculture (Miscellaneous Provisions) Act 1972, and section 2(2) of the European Communities Act 1972 and all other powers enabling them to do so. This instrument is subject to negative resolution procedure.

#### Policy Objective

2. The purpose of this Order is to amend the Plant Health (Scotland) Order 2005 ('the principal Order') in order to implement the requirements of Directive 2007/33/EC ('the new PCN Directive'), strengthening controls against Potato Cyst Nematode (PCN). PCN is defined in the principal Order as including both species (*Globodera pallida* Stone Behrens and *Globodera rostochiensis* (Wollenweber) Behrens).

#### Legislative background

3. The general Plant Health Regime of the European Community is established by Directive 2000/29/EC on protective measures against the introduction into the Community of organisms harmful to plants or plant products and against their spread within the Community ('the Plant Health Directive'). This is supplemented by specific Control Directives setting out detailed measures to be taken in respect of particularly harmful pests. PCN was one of the first organisms to be subject to a Control Directive, 69/465/EEC. The new PCN Directive, 2007/33/EC, repeals 69/465/EEC and replaces it with stronger control measures, taking account of developments in the understanding of the biology of PCN and changes in potato production methods in Europe.

4. The Plant Health Directive and associated Control Directives are implemented in Scotland by the Plant Health (Scotland) Order 2005. Specific requirements on PCN are contained in Schedule 15. Other measures to protect potatoes and related solanaceous species are set out in Article 39.

#### Consolidation

5. We are conscious that this is the seventh amendment to the principal Order. After consideration, it was thought impractical to consolidate the principal Order at the same time as making the extensive amendments required to implement the new PCN Directive. However, the Scottish Government intends to bring forward a consolidated Plant Health (Scotland) Order by 31 December 2010. We expect this also to include the transposition of amendments to the Plant Health Directive consequential to the introduction of the new PCN directive, which have not yet been agreed by the EU.

## Correction

6. Article 9 amends an entry in Schedule 2, part B, which was added by the Plant Health (Scotland) Amendment Order 2009. The words “intended for planting” were included in this entry in error when transposing the requirements of Directive 2009/7/EC.

## **Policy background**

7. PCN are serious pests of potato crops world-wide, and controls are in place in most potato-producing countries to limit their increase and spread. They feed on the roots of the plant and can cause significant loss of yield. They spread by being transported in soil attached to tubers or equipment, and the key method to prevent spread is to ensure that seed potatoes are grown in land which has been tested and found free of PCN.

8. Potatoes are an important crop for Scotland, which produces and markets seed potatoes of high health status and is recognised within the European Union as a Community Grade region for seed potato production. Maintaining the supply of seed potatoes free of PCN (and other quarantine diseases) is vital to the ware potato industry in Scotland, as well as for export sales. It is also in the interest of the industry to avoid the spread of PCN within Scotland, to maintain the supply of land for potato production.

9. Scottish Government scientific advisers were closely involved in the development of the new PCN Directive and we believe that the new requirements will significantly improve the control of this pest within Scotland.

## Testing requirements

10. Directive 69/465/EEC required that all seed potatoes intended for marketing must be produced on land which had been officially tested and found free of PCN. This was implemented in Scotland within the Seed Potatoes (Scotland) Regulations 2000, and article 39(3)(a) of the principal Order. The new PCN Directive extends this to all seed potatoes, including farm saved seed retained by the grower, and certain species of plants for planting which are hosts or can transport PCN. There is an exemption for potatoes and plants which are to be planted on the same “place of production” where they were produced. Following consultation, this will be interpreted in Scotland as the same holding, provided the land is within one agricultural parish or lies across a parish boundary. Parishes are widely used in agricultural statistics and subsidy schemes, and details of parish boundaries can be obtained from SG-RPID Area Offices and on the Scottish Government website.

11. Exemptions also apply to plants other than potatoes if these have been treated to remove as much soil as possible, reducing the risk of transporting PCN, if they are for retail sale, or if there is evidence that the land in which they were grown has been free of PCN or of host plants for 12 years. Where seed potatoes and plants are not grown in soil, for example those grown in compost or hydroponic systems, the requirements of the Directive do not apply.

12. Detailed requirements are set out for the timing of the soil test, and for the amount of soil to be sampled per hectare in different circumstances and for different sizes of “sampling unit”. This is based on statistical analysis to increase the probability of detecting any PCN which are present in the field, as well as harmonising test methods across the EU. The results of all official soil tests must be recorded.

13. Information for Growers on Soil Testing for PCN is provided for the Committee's information and is available online at [www.scotland.gov.uk/potatocystnematode](http://www.scotland.gov.uk/potatocystnematode). Copies of this leaflet will be sent annually to all potato growers known to the Scottish Government.

#### Land found infested with PCN

14. Where PCN have been found in a sampling unit during an official test, a notice will be served setting out the restrictions that apply. In general, no potatoes or other host plants may be planted, and none of the other listed species unless they have been washed or brushed to remove soil.

15. At present, a licence can be issued under Article 40 to grow potatoes for ware (consumption or processing) of a variety resistant to the species of PCN found. The new PCN Directive broadens this dispensation, to allow ware potatoes to be grown in land officially recorded as infested provided they are subject to an official control programme aiming at suppression of the PCN in the field (ie, reduction of the population or its maintenance at a manageable level) which is notified to the European Commission in terms of Article 9(2) of the Directive.

16. The Official Control Programme for Scotland is set out in Guidance for Growers and Landowners, which will be provided to the applicant and landowner with the notice recording that the sampling unit is infested. Copies are provided for the Committee, and are available at [www.scotland.gov.uk/potatocystnematode](http://www.scotland.gov.uk/potatocystnematode). The detailed measures to be applied in a specific sampled unit will be agreed between the grower and the Scottish Government, in accordance with the guidance, and set out in a further notice.

17. The provisions of articles 34 to 38 of the principal Order apply to notices served under the new Schedule 15, giving inspectors powers to enforce the requirements of the notices and take remedial action if necessary. Under Article 45(1)(b) it is an offence to contravene or fail to comply with the terms of such a notice.

#### Timing

18. The current Order comes into force on 1 July 2010, in the middle of the potato growing season. The measures apply to the planting of potatoes, and therefore will not affect this year's crop. They will come into effect for the 2011 growing season, and for pre-planting testing carried out after 2010 crops have been harvested. To avoid confusion and ensure conditions can be enforced, licences to grow ware crops on land where PCN has been found will continue in force until 31 December 2010. Anyone wishing to plant a ware crop in such land in 2011 will need to establish a control programme in line with the new requirements.

## **Consultation**

19. The following consultation has taken place in preparing this instrument:

- The Scottish Government consulted stakeholders on the detailed implementation of the new PCN Directive between March and May 2009. All potato growers known to the Scottish Government, both seed and ware, were informed about the consultation with details of how to access the full papers.
- A further consultation, seeking views on charging for PCN testing and on a partial Regulatory Impact Assessment, was issued in the same way on 18 December 2009 and closed on 31 March 2010.
- A Scottish Government Advisory Group comprising scientists and industry representatives met between September 2009 and April 2010 to develop the control programme for land officially recorded as infested with PCN.

20. Copies of the consultation papers and responses, and minutes of the Advisory Group meetings, can be accessed via the Scottish Government website at [www.scotland.gov.uk/PotatoCystNematode](http://www.scotland.gov.uk/PotatoCystNematode) .

21. The Information for Growers leaflet, setting out the details of the new PCN testing regime will be sent to all potato growers in May 2010, and placed on the SASA website. Scottish Government staff will provide face-to-face advice to growers at various events during the summer, and subsequently individual advice will be available from Area Offices and from SASA.

## **Regulatory Impact Assessment**

22. A Regulatory Impact Assessment has been carried out, covering the implementation of the new PCN Directive including the current instrument, the Plant Health Fees (Scotland) Amendment Regulations 2010 and non-statutory changes to the operation of PCN testing.

Scottish Government  
Rural and Environment Directorate

May 2010

## TRANSPOSITION NOTE

### THE PLANT HEALTH (SCOTLAND) AMENDMENT ORDER 2010

This transposition note shows how the main elements of Council Directive 2007/33/EC of 11 June 2007 on the control of potato cyst nematodes (PCN) and repealing Directive 69/465/EEC have been implemented by the Plant Health (Scotland) Amendment Order 2010.

<b>Provision in 2007/33</b>	<b>Purpose</b>	<b>Implementation in the Plant Health (Scotland) Amendment Order 2010</b>
Article 3	Member states to define a “field” for the purposes of PCN testing.	Article 3(b). To avoid confusion with the usual definition of “field”, the term “sampling unit” has been used for the purposes of PCN testing.
Article 4(1)	Requiring an official investigation for PCN to be carried out on fields in which seed potatoes, or plants for planting listed in Annex 1, are to be produced.	Article 7(b), inserting new articles 39(8) and 39(10)(a)(ii) and (iii). Seed potatoes and plants for planting listed in new Schedule 15A may not be planted unless the land on which they were produced was subject to an official soil test.
Article 4(2)	Specifying the timing of the official investigation for PCN.	Article 7(b), inserting new article 39(9). A time limit of four years prior to the planting of the crop has been added. This is in line with previous practice in Scotland and is considered a reasonable period during which it can be assumed no PCN have been introduced to the field with soil on machinery etc.
Article 4(3)	Accepting previous soil tests as evidence that no PCN has been found.	Article 10 inserting new Schedule 15, setting out the sampling and testing requirements. Paragraph 3 of Schedule 15 allows the results of previous official tests to be used as evidence that no PCN has been found.

Article 4(4)	<p>Providing exemptions from the official investigation for:</p> <p>(a) Annex I plants to be used within the same place of production;</p> <p>(b) Seed potatoes to be used within the same place of production;</p> <p>(c) Annex I, point 2 plants if subject to measures to remove PCN and soil.</p>	<p>(a) and (b) – Article 7 inserting new article 39(10)(a)(i);</p> <p>(c) – Article 7 inserting new article 39(10)(b). The provision for “disinfestation” in Annex 3 section III(A)(1) has been omitted because we are not aware of any existing methods that would be considered effective. The ‘Annex I, point 2’ plants have been divided into 2 tables, B and C, for clarification as plants are only included in the latter table if they have not been ‘washed or brushed etc’.</p>
Article 4(5)	<p>The results of official investigations must be officially recorded.</p>	<p>Article 10 inserting new Schedule 15, paragraph 7.</p>
Article 5	<p>Specifying the methodology for official investigations for:</p> <p>(1) Seed potatoes and plants listed in point 1 of Annex 1;</p> <p>(2) Plants listed in point 2 of Annex 1.</p>	<p>(1) Article 10 inserting new Schedule 15, paragraphs 1 to 6.</p> <p>(2) As above, and article 7 inserting new article 39(10)(b) and (c).</p>
Article 6	<p>Providing for official survey of fields used for production of ware potatoes.</p>	<p>Not transposed, since this places obligations only on the Scottish Government.</p>
Article 7	<p>The results of official investigations which do not find PCN must be officially recorded.</p>	<p>Article 10 inserting new Schedule 15, paragraph 7(b).</p>
Article 8(1), (2) & (3)	<p>The results of official investigations which find PCN must be officially recorded, and potatoes or plants from those fields or which have come into contact with infested soil will be designated as contaminated.</p>	<p>Article 10 inserting new Schedule 15, paragraph 7. The term “contaminated” is not used, but the restrictions applying to such materials are implemented by paragraph 11.</p>
Article 9(1)	<p>Restricting what may be planted in a field officially recorded as infested.</p>	<p>Article 10 inserting new Schedule 15, paragraph 8.</p>

Article 9(2)	Permitting ware potatoes to be grown in fields officially recorded as infested, subject to an official control programme aimed at suppression of PCN.	Article 10 inserting new Schedule 15, paragraphs 9 and 10.
Article 10	Placing restrictions on material designated as contaminated: (a) seed potatoes and host plants listed in point 1 of Annex 1; (b) potatoes intended for industrial processing or grading; (c) plants listed in point 2 of Annex 1.	Article 10 inserting new Schedule 15, paragraph 11.  (b) requires the potatoes to be delivered to a plant with waste disposal procedures for which it has been established that there is no risk of the potato cyst nematode spreading. We are content that all potato grading and processing plants in Scotland meet this requirement, therefore no specific restriction is imposed for potatoes from infested land.
Articles 11, 12	Specifying methods for determining resistance of potato varieties to PCN, and requiring any newly identified resistant species to be notified to the Commission.	Not transposed, since this places obligations only on the Scottish Government.
Article 13	Providing for restrictions on infested fields to be revoked following a further test in which PCN was not found.	Article 10 inserting new Schedule 15, paragraph 12.
Article 14	Permitting derogations from articles 9 and 10 for trial or scientific purposes and for work on varietal selections.	Article 41 of the principal Order provides for licences to be granted for these purposes.

# IMPLEMENTATION IN SCOTLAND OF DIRECTIVE 2007/33/EC ON CONTROL OF POTATO CYST NEMATODES

## REGULATORY IMPACT ASSESSMENT (Ref 2009/36)

### 1. Title of proposal

1.1 Implementation in Scotland of Directive 2007/33/EC on control of Potato Cyst Nematodes (PCN)

### 2. Purpose and intended effect

#### Objectives

2.1 To fully implement the Directive by the deadline of 1 July 2010, in order to both comply with our European obligations and improve the control of PCN within the Scottish potato industry. This will involve amendments to legislation and to the rules of the Scottish Seed Potato Classification Scheme (SPCS), the introduction of controls on non-classified seed potatoes, and changes to the controls on land officially known to be infested.

2.2 Scottish Ministers have also agreed that the additional costs of the new regime will be covered by the introduction of charging for PCN testing. This RIA sets out the proposed level of charges and assesses the impact on businesses.

#### Background

2.3 Potato cyst nematodes (PCN), *Globodera rostochiensis* and *Globodera pallida*, are serious pests of potato crops world-wide. They feed on the roots of the plant and can cause significant loss of yield. Controls are in place in most potato-producing countries to limit the increase and spread of PCN.

2.4 Potatoes are an important crop for Scotland, which produces and markets seed potatoes of high health status and is recognised within the European Union as a Community Grade region for seed potato production. Maintaining the supply of seed potatoes free of PCN (and other quarantine diseases) is vital to the ware potato industry in Scotland, as well as for export sales. It is also in the interest of the industry to avoid the spread of PCN within Scotland, to maintain the supply of land for potato production.

2.5 Where PCN occurs, potato growers need to limit its impact on yield, but control measures are also costly. Key measures are to increase the length of rotation, which means more land is needed to produce the same volume of crops, planting resistant varieties, which may be less desirable to the market, and applying nematicides or planting non-productive crops which reduce PCN populations.

2.6 PCN, then known as Potato Cyst Eelworm, *Heterodera rostochiensis* Wollenweber, was one of the first plant pathogens to be subject to a European Control Directive, Council Directive 69/465/EEC. It is also listed as a quarantine organism in Annex I AII of the Plant Health Directive, 2000/29/EC, meaning that its introduction and spread within the EU is banned, and the Seed Potatoes Marketing Directive (2002/56/EC) requires that both the



production ground of classified seed potatoes and individual lots of classified seed potatoes are free of PCN.

2.7 These controls are currently implemented in Scotland by a range of legislative and other measures:

- Annexes 2 and 4 of the Plant Health (Scotland) Order 2005 implement the requirements of the Plant Health Directive in relation to the introduction and movement of PCN, seed potatoes and plants with roots intended for planting.
- Annex 15 of the Plant Health (Scotland) Order 2005 implements the requirements of the 1969 PCN Control Directive relating to land infested with PCN.
- Schedule 1 of the Seed Potato (Scotland) Regulations 2000 implements the requirements of the Seed Potatoes Marketing Directive that both the production ground of classified seed potatoes and individual lots of classified seed potatoes are free of PCN.
- The rules of the Scottish Seed Potato Classification Scheme (SPCS) require that crops entered for classification must be grown on land for which a certificate of PCN clearance is in force at the time of planting. They set out in detail the current arrangements for carrying out soil tests and the restrictions placed on a field when live or dead cysts of PCN are found. Although they are administered by the SPCS, the rules on infested land and contaminated soil and plant material also apply to ware potatoes, bulbs and other relevant plants.

Soil sampling and testing is carried out by the Scottish Government Rural Payments and Inspections Directorate (RPID), which now incorporates SASA (Science and Advice for Scottish Agriculture).

2.8 In recent years efforts have been made to update the 1969 Directive, to take account of changes in the understanding of the biology of the pest, its distribution across the EU and practices within the potato industry. The new PCN Control Directive, 2007/33/EC was adopted by the European Parliament on 11 June 2007 and will come into force on 1 July 2010, in preparation for planting in 2011. Its key provisions are to harmonise pre-planting soil sampling rates across the EU, to provide the same probability of finding PCN through official testing in all Member States, and to extend controls to farm saved seed potatoes, which currently pose a significant risk of spreading PCN. Controls on infested land are also amended to make them more effective but also more flexible<sup>1</sup>.

#### Rationale for Government intervention

2.9 The Scottish Government supports improved controls to prevent spread of PCN, which we believe will benefit the potato industry in Scotland. Scottish Government experts were closely involved in the development of the new Directive. Without these improvements PCN, particularly *G. pallida*, can be expected to continue to spread, reducing the amount of land suitable for seed potato production and imposing additional costs on growers of ware

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<sup>1</sup> The 2007 Directive applies controls on the production of plants for replanting of other PCN hosts in addition to seed potatoes. The species affected are *Capsicum* spp (peppers), *Lycopersicon lycopersicum* (L.) Karsten ex Farw. (tomato) and *Solanum melongena* (L.) (aubergine). Since there is little, if any, production of these plants in the field in Scotland, they are not considered in this Partial RIA.

potatoes. Scottish producers would also face difficulty in marketing their potatoes outside Scotland if they do not comply with European requirements.

2.10 The Scottish Government is required under the Scotland Act 1998 to fully implement all EU legislation that impacts on devolved matters. Scottish Ministers could be liable for any financial penalties imposed for failing to properly transpose the new PCN Control Directive.

### **3. Consultation**

#### Within government

3.1 The Scottish Government's approach to the new PCN Control Directive has been discussed in general terms with the departments responsible for its implementation in other parts of the UK. We have also had discussions with SEPA over the disposal of soil and potato waste infested with PCN.

#### Public consultation

3.2 Some of the provisions of the Directive are obligatory, but in others there is scope for flexibility in local implementation. The Scottish Government consulted stakeholders on these areas, and on related changes to SPCS rules, between March and May 2009. An analysis of responses to that consultation is available on the Scottish Government website at <http://www.scotland.gov.uk/potatocystnematode>.

3.3 A second consultation was issued on 18 December 2009 and closed on 31 March 2010. This sought views on charging for PCN testing, and on a partial version of this RIA. The consultation paper took the form of a draft of the Leaflet for Growers which is issued each year, incorporating the detailed implementation arrangements agreed in light of the responses to the initial consultation. All respondents agreed with the Scottish Government's proposed options, and no comments were made on the RIA. The consultation papers and responses are available on the website at <http://www.scotland.gov.uk/potatocystnematode>.

3.4 Following the initial consultation an Advisory Group including industry representatives and scientists was formed to develop the detail of the official control programme for growing ware potatoes on land officially recorded as infested. The control programme will be published, in the form of guidance for growers, by 1 July 2010.

## 4. Options

4.1 This RIA considers the impact, in terms of costs and benefits, of the following options:

### Option 1: Do nothing

4.2 This would mean not implementing the new Directive, but continuing the current controls on PCN.

### Option 2: Implement the Directive without charging

### Option 3: Implement the Directive, charging the full cost of PCN testing to growers

### Option 4: Implement the Directive, charging the additional costs of the new regime to growers

4.3 The Scottish Government currently carries out pre-planting soil testing for PCN free of charge for all applicants, with no requirement even to show that the land will be used for seed potato production. The UK is in a minority within the EU in not charging for this service (although charges are levied for consignment or other additional testing required for exports). However, implementing the new Directive will require a significant increase in the amount of soil to be sampled and tested. We have therefore considered a range of options in relation to charging.

4.4 The Directive allows Member States flexibility in some aspects of implementation. These have already been addressed in the earlier consultation exercise. The costs and benefits of implementation considered in this RIA are based on the following approaches:

- Definition of a field – Member States have freedom to define a “field”, which is the area from which a sample will be taken for testing and on which any restrictions will be imposed if PCN are found. Sampling across a larger field allows a lower sampling rate to be used (with lower costs) but risks having a larger area taken out of production if PCN are present. In line with consultation responses, growers will be able to choose the area to be tested (within recognisable boundaries and with restrictions for areas less than 4ha), to balance the costs and risks as they wish.
- Farm saved seed – all potatoes to be planted must be grown on land which has been tested and found free of PCN, unless used “within the same place of production”. This requirement recognises that the movement of all seed potatoes, whether classified or not, presents a significant risk of spreading pests. The definition of “same place of production” determines how much additional land will need to be tested for farm saved seed which is not controlled by the current Directive. We have agreed that this will be defined as the same holding, and where holdings have been consolidated they must be in the same parish, or may be in adjacent parishes if the land is contiguous.
- Soil sampling is normally carried out without the applicant being present, therefore we do not anticipate any additional costs to the grower in terms of time spent on PCN testing.

- It is not possible to estimate the impact on growers of land being found infested with PCN, as there are several interacting factors involved. The higher sampling rate gives a greater probability of finding PCN at a given concentration, but since we have no data on current concentrations of PCN, we cannot predict how much land will be found positive. In addition, restrictions will be placed only on the area tested, no buffer zones will be required as they are under the current regime. Growers will have to wait longer before requesting a de-recording test, but will be able to grow seed potatoes sooner than under the current regime, or grow ware subject to a control programme which will permit a range of options at the grower's choice. Because of these variables, this RIA only considers the costs of testing, not the impact of positive results.
- An official survey of 0.5% of land in which ware potatoes have been grown must be carried out annually. In Scotland this constitutes around 60ha, which will be sampled in 4ha units from 15 fields. This activity will not be included in the costs to be covered by charging.
- SASA is introducing new soil extraction equipment and diagnostic methods to increase capacity and improve the efficiency of PCN testing. The figures in this paper are based on the estimated costs of the new system.

## **5. Costs and benefits**

### Sectors and groups affected

5.1 The proposals will affect all potato growers, unless they exclusively grow ware potatoes from classified seed. Seed growers will bear the highest costs, since all their land will need to be tested, but this will not involve any significant change to their business practices, and most seed land is likely to qualify for the lower sampling rate.

5.2 Growers of ware potatoes who use farm saved seed for planting on different holdings will need to have land officially tested which they may have not done before (although some may have had their land tested either officially or commercially). If this land has no history of official PCN testing and has been used for potato production in the previous seven years it will need to be sampled at the higher rate.

5.3 Ware growers who exclusively use classified seed may have their fields included in the ware survey. Fields will be selected at random and only one field will be sampled from any holding. Growers will not be charged for this sampling, but if a positive result is returned, the field will be recorded as infested and made subject to restrictions.

5.4 The Scottish Government will also be affected by the additional work required by the Directive. In addition to the increased volume of soil to be sampled and tested, additional work will be involved in considering and monitoring control programmes, searching records to determine whether a field is eligible for the lower sampling rate, and monitoring the origin of farm saved seed. The new testing system, and a new database now in use at SASA, will help in meeting these demands, but there are still concerns about capacity.

### Costs

5.5 The estimated cost of sampling and testing a litre of soil in 2010 will be £70.81, based on the average costs over the past 3 financial years for soil sampling, and the estimated cost of the new testing system in the laboratory. Total administrative costs over the past 3 years have averaged around £127,000 per annum; this is not expected to change significantly under the new system.

5.6 The current sampling rate is 600ml of soil from an area up to 4ha. Taking small fields into account, the actual average is 187ml/ha. The amount of soil to be tested per hectare under the new regime is determined by the size and history of the field. The standard rate is 1500ml/ha, with a lower rate of 400ml/ha if the field has a history of PCN freedom or no potatoes have been grown for 6 years. Each of these rates can be reduced for larger areas; the standard rate to 400ml/ha after the first 8ha, and the lower rate to 200ml/ha after the first 4ha. When the new regime is introduced, the size of sampled area will be for growers to determine. For this impact assessment, costs are based on the average area of fields submitted for sampling in 2008, which is 8.3ha. The required sampling rate for this area is 1460ml/ha at the standard rate and 300ml/ha at the lower rate.

5.7 We expect that the majority of land tested for seed potato production will be eligible for sampling at the lower rate. Land which has previously been found infested with PCN will need to be sampled at the standard rate, as, probably, will land tested for production of farm saved seed, since this is less likely to have a history of official testing and more likely to have been used for recent potato production. Over the past 3 financial years, an average of 17790ha have been tested, of which 390ha had previously been found infested.

5.8 For farm saved seed, records show that around 50% of the area of ware grown in 2008 was planted from farm saved seed. An area roughly 10% of the area to be planted is required to produce sufficient seed, therefore for the total area of ware grown, almost 12000ha, around 600ha will be required to produce farm saved seed. Farm saved seed will only require PCN testing where it is to be planted on a different holding from the one on which it was grown. 80% of the area of ware was grown by growers who use more than one holding, and therefore have the potential to move their farm saved seed, so around 480ha will require to be tested at the standard rate for this purpose. (This is likely to be an underestimate, because growers may not grow dedicated crops for farm saved seed, so a larger area would need to be tested. However, on average around 5000ha more land is tested each year than is used for production of classified seed potatoes, therefore we assume some of the remainder is already used for farm saved seed.)

5.9 These figures give the following estimates for the costs of the new regime compared to the costs of the current regime with new testing methods:

	<b>Current regime</b>	<b>New regime</b>
Standard rate testing	17790ha @ 187ml/ha = 3327 litres	Previously infested 390ha Farm saved seed 480ha Total 870ha @ 1460ml/ha = 1270 litres
Lower rate testing	n/a	17400ha @ 300ml/ha = 5220 litres
Total litres	3327	6490
Cost of sampling and testing (£70.81 per litre)	£235,570	£459,580
Administration	£127,145	£127,145
<b>Total cost</b>	<b>£362,715</b>	<b>£586,725</b>

#### Option 1 – do nothing

5.10 This option has no direct costs to potato growers or to the Scottish Government. However, it also has no benefits and may have indirect costs in terms of the continued spread of PCN, reducing availability and therefore increasing the price of land suitable for potato production. Penalties are also likely to be imposed by the EC for failure to implement the Directive.

#### Option 2 – implement the Directive without charging

5.11 Options 2, 3 and 4 all have the benefits of meeting the objective, to implement the Directive, prevent the spread of PCN and maintain Scotland's high plant health status.

5.12 Implementing the Directive without charging would place all the direct costs of additional soil sampling and testing on the Scottish Government. The costs of the new regime are 60% more than those of the current system. No new resources are available for this activity, therefore staff would have to be diverted from other tasks, resulting in reduced levels of service, longer response times and reduced activity in monitoring and enforcement. Area Office staff are involved in a wide range of schemes including Single Farm Payment, Cross Compliance and Land Management Contracts, all of these could be affected by the additional demand on existing resources.

5.13 Implementation without charging would provide no incentive for growers to reduce the amount of testing required, by keeping land free of PCN, testing in larger units and testing only the amount of land required for growing seed potatoes. This option is therefore likely to result in the greatest amount of soil to be tested, further increasing the demands on limited resources.

### Option 3: Implement the Directive, charging the full cost of PCN testing to growers

5.14 Under this option, fees for an average grower are likely to be around £1600 per year, with a total burden to the industry of over £585,000.

5.15 In most cases, Scottish Government policy requires that fees for services meet full cost recovery, so that those who use the service bear the costs rather than the taxpayer. Option 3 would satisfy this requirement. It would enable PCN testing to be fully resourced out of the income from fees, freeing up resources currently spent on this activity for other tasks.

5.16 This option would provide an incentive for growers to minimise the amount of testing they request. This is a benefit where growers take action to prevent the spread and increase of PCN. However, if the fee is considered too high it could also be an incentive to try to evade the system and to trim the areas tested. This could mean that infestations go undetected, and are therefore likely to spread, and the Scottish Government has a less complete picture of PCN distribution across the country. It could also impact negatively on Scotland's high plant health status and reputation should PCN be found on such crops when they are marketed.

### Option 4: Implement the Directive, charging the additional costs of the new regime to growers

5.17 This option provides a compromise by sharing the costs of PCN testing between growers and Scottish Government. Scottish Government will bear the equivalent costs of the current regime, with the additional costs imposed by the new regime being covered by fees. Fees for an average grower will be around £615 per year, with a total burden to the industry of £225,000.

5.18 Option 4 would provide resources for more staff to carry out the additional soil sampling and testing required, avoiding any impact on other areas of work and ensuring a good level of service in PCN testing. This option would impose a new burden on industry, but we believe it is small enough to be acceptable, in order to provide robust plant health controls. A fee at this level is also expected to encourage growers to take steps to limit the amount of testing required, without going so far as to encourage evasion.

## **6. Small / Micro Firms Impact Test**

6.1 The majority of potato growers in Scotland are small firms, although there are also some very large businesses and divisions of international companies. The fees to be introduced for PCN testing will be charged according to the area of seed potatoes grown, therefore there will be no disproportionate impact on small firms. Businesses of all sizes may be affected by the new controls on farm saved seed where this is moved between holdings; large companies may own multiple holdings, but smaller firms are likely to grow on rented land in the local area as well as their own.

6.2 Small firms were given the opportunity to contribute to both consultation exercises in three ways:

- Letters were sent to all growers known to the Scottish Government, outlining the purpose of the consultation and giving both a web address and a telephone number to obtain the full papers if wanted;
- The full consultation package was issued to the main organisations representing potato growers, including the levy board, the Potato Council. These bodies publicised the consultation through their communications to members and, presumably, took their members' views into account in their responses;
- The Scottish Government participates in several committees and liaison groups with the potato industry, at which businesses of all sizes are represented. These groups have frequently discussed the implementation of the PCN Directive, helping to shape both the Scottish Government's proposals and the industry's responses to the consultations.

## 7. **Legal Aid Impact Test**

7.1 There are no legal aid issues to consider.

## 8. **Test run of business forms**

8.1 A change has been made to the layout of the existing application form for PCN testing, but only one additional piece of information is requested, on how the field should be divided into sampling units. The country of destination for potatoes grown for export can also be entered on this form, removing the need for a separate form. These minor changes are not expected to have any impact on businesses.

## 9. **Competition Assessment**

9.1 PCN testing affects growers of classified seed potatoes and growers of farm saved seed potatoes who move that seed between holdings. There are a large number of businesses in this market and none has a disproportionate share. The impacts of the changes to the PCN testing regime and the introduction of charges are related directly to the area of seed potatoes grown and will therefore affect all businesses equally, whether large or small. There are no set-up costs or new administrative requirements. In theory, growers of farm saved seed and new entrants may be more heavily affected because they may not be able to access the lower sampling rate. However, in practice we believe that much of the land used for farm saved seed has already been tested, since over 30% of land currently tested is not used for classified seed. They can also meet the criteria for the lower sampling rate by planting in land which has not grown potatoes for 6 years. On this basis we consider that the introduction of the new regime is unlikely to have any effect on competition in the market. The introduction of charging for PCN testing brings Scotland more into line with the rest of the EU and therefore reduces the risk of challenge on grounds of unlawful State Aid.



## 10. Enforcement, sanctions and monitoring

10.1 Compliance will be enforced by SG RPID, as part of their routine work in monitoring potato crops. There are three main areas for compliance:

- Classified seed potatoes may only be grown on land which has been tested and found clear of PCN. When an application to enter the SPCS is submitted, documentary checks are made to ensure that the land included in the application has a valid PCN clearance certificate. A minimum of two growing crop inspections are carried out, at which the inspector will check that the potatoes are growing in the correct area and there are no symptoms of PCN infestation. If these requirements are not met, the potatoes will not be classified.
- Ware growers are required to notify the Scottish Government of the crops they have planted, using form PP1, within 30 days of planting. This form includes the origin of the seed planted. A sample of ware crops will be traced back to check compliance with the requirements in relation to farm saved seed. This is likely to be done in conjunction with the routine inspection of 10% of ware crops, and any other investigations of ware crops that may take place. If any contraventions are discovered, appropriate action will be taken to prevent any increase or spread of PCN, depending on the circumstances of each case.
- Land officially recorded as infested will be identified on the database which holds SPCS and PP1 information, and any crops reported to be planted in such land will be flagged up. Inspectors may also discover such crops in their areas. Where a control programme is in place, inspectors will monitor compliance with the agreed actions. If any crop is found to be planted in infested land without a control programme or in contravention of the requirements of a control programme, appropriate action will be taken to prevent any increase or spread of PCN, depending on the stage of the crop and other circumstances.

10.2 Sanctions applied to the crop are normally most effective, both in preventing any further increase and spread of the pest and as a deterrent. However, prosecution can be considered, especially where deliberate or repeated contravention of the PCN requirements is suspected. The penalty for offences under the Plant Health (Scotland) Order 2005 is a fine not exceeding level 5 on the standard scale (currently £5000).

10.3 Implementation of the Directive also provides a monitoring function, as information on PCN findings in Scotland, and any increase or decrease, will be available from pre-planting soil tests and from the ware survey.

## 11. Implementation and delivery plan

11.1 The new regime will be introduced from 1 July 2010.

11.2 PCN sampling and testing is normally carried out by SG RPID throughout the year, but concentrated between September and January, in preparation for potato planting in March or April. Growers are encouraged to submit applications by 31 August for land they wish to plant in the following year, but results are valid for 4 years. To facilitate the change to the new regime, results from applications received after 31 December 2009, for planting in 2010,

will only be valid for 2010. Applications for planting in 2011 will not be processed until after 1 July.

11.3 Legislation to implement the new regime and introduce charging will be laid before the Scottish Parliament in May, to come into force on 1 July 2010. At the same time, a guidance leaflet will be issued to all potato growers known to the Scottish Government. Face-to-face events will also be arranged by SG RPID to explain the new regime to growers, and we will work with industry bodies to encourage and assist them in publicising the new arrangements.

11.4 SASA is responsible for implementing the new soil extraction and diagnostic methods. These projects are both on schedule, although on a tight timescale. In case the new methods are not fully operational by 1 July 2010, visual examination can still be used for the small number of samples expected in July.

11.5 SASA is also working closely with RPID Area Offices to modify the sampling methodology and equipment to meet the requirements of the new Directive, and to integrate PCN testing into the IT system used to manage all potato crop information. Guidance will be circulated to all Area Offices by the end of June and training will be arranged to ensure all Agricultural Officers are familiar with the new regime.

11.6 Throughout the planning for delivery of the new regime, a key driver has been to integrate processes and make the system as streamlined as possible. The methodology and equipment used for sampling in the field will ensure that samples can be entered to the extraction equipment with minimum additional handling; they will be automatically tracked throughout the process; and the IT system will automate the production of maps and sampling plans, as well as recording all applications and test results.

## **12. Post-implementation review**

12.1 As with all fees for plant health services, the actual costs of the new PCN testing regime will be assessed annually and fees will be adjusted as necessary, using the same calculation to identify the additional costs over the equivalent costs of the current regime. The Scottish Government also holds annual meetings internally and with industry representatives to discuss all activity relating to potatoes, and these will provide a forum to consider how the new regime is operating and any improvements that may be required. The new regime, combined with the ware survey will also provide better information than is currently available about the distribution of PCN in Scotland, which will help to inform future policy.

### 13. Summary and Recommendation

Please note: the financial costs covered in this summary relate only to the introduction of fees for PCN testing. Data is not available to assess the potential impact on growers of the new regime or of finding PCN on their land.

Option	Benefits	Costs
1 – Do nothing.	None	<ul style="list-style-type: none"> <li>• May be indirect costs:</li> <li>• spread of PCN leads to higher control costs and increases price of land;</li> <li>• possible EU sanctions.</li> </ul>
2 – Implement without charging.	<ul style="list-style-type: none"> <li>• Meets requirement to implement Directive.</li> <li>• Prevents spread of PCN.</li> </ul>	<ul style="list-style-type: none"> <li>• Impact on other Scottish Government services to farmers and rural areas.</li> <li>• Impact increased by lack of incentive to growers to manage PCN and reduce testing.</li> </ul>
3 – Implement and charge full costs to growers.	<ul style="list-style-type: none"> <li>• Meets requirement to implement Directive.</li> <li>• Prevents spread of PCN.</li> <li>• Provides new resources for PCN testing, freeing up resources for other tasks.</li> <li>• Incentive to growers to reduce testing by good management of PCN.</li> </ul>	<ul style="list-style-type: none"> <li>• Total annual cost to industry £585,000 (average fees per grower £1600)</li> <li>• May be incentive to evade system and minimise areas tested, weakening control of PCN.</li> </ul>
4 – Implement and charge additional costs to growers.	<ul style="list-style-type: none"> <li>• Meets requirement to implement Directive.</li> <li>• Prevents spread of PCN.</li> <li>• Avoids impact on other Scottish Government services.</li> <li>• Incentive to growers to reduce testing by good management of PCN.</li> </ul>	<ul style="list-style-type: none"> <li>• Total annual cost to industry £225,000 (average fees per grower £615).</li> </ul>

**Option 4 is the Scottish Government's preferred option.**

Agriculture and Rural Development Division  
April 2010

**Declaration**

I have read the impact assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy and (b) the benefits justify the costs. I am satisfied that the business impact has been assessed with the support of businesses in Scotland.

Richard Lochhead  
Cabinet Secretary for Rural Affairs and the Environment.