



SCOTTISH EXECUTIVE

Environment and Rural Affairs Department

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To Scottish Industry Representative Bodies

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Your ref:
Our ref: SPP/51/1

19 July 2002

Dear Sir/Madam

POTATO CYST NEMATODE (PCN)

I am writing to seek your views on a European Commission (EC) review of controls against PCN. You may wish to note that a separate consultation exercise is being carried out in England, Wales and Northern Ireland.

In order to get the enclosed consultation document out promptly the Scottish Executive Environment and Rural Affairs Department (SEERAD) has adapted parts of the Department for Environment, Food and Rural Affairs (DEFRA) consultation document. Annex A & B are Scottish documents but in Annex C we have retained the DEFRA version and have added in italics additional text explaining the differing position pertaining to Scotland.

A number of Annexes are attached (A-D), which summarise the current position and indicate possible options for the future regulation of PCN. Annex A provides a summary of the current requirements for PCN and an indication of the possible options, and Annex B sets out some questions to help with your response. We would recommend that you also read the more detailed paper at Annex C and the draft Commission Proposal at Annex D. These will hopefully allow you to acquaint yourself with the issues involved before responding. You may wish to circulate the summary documents (Annexes A and B) to members of your organisation to seek their views.

You may also wish to note that a technical paper on PCN will be available shortly. If you would like a copy please contact me at the above address. (*Technical paper now available - [click here](#)*)

The documents referred to in this letter are available electronically on the Scottish Executive website at: <http://www.scotland.gov.uk/views/views.asp>.

DEFRA have also prepared a draft partial Regulatory Impact Assessment (RIA). If you should wish to refer to this document it is available electronically on the DEFRA website at <http://www.defra.gov.uk/corporate/consult/current.htm>.



I should be grateful if you would send any comments you may have on the EC proposals to me at the following address no later than 11 October. As well as this, I would welcome your initial views by 30 August, if possible, to contribute to the EC discussions which are due to commence in September.

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SEERAD would be happy to hold a meeting with Industry Representative Bodies to discuss the proposals before the end of August if this would be helpful.

In order to help inform debate on the issues covered by this consultation letter, SEERAD intends to follow its normal practice of making available to the public, on request, copies of the responses received. SEERAD will assume, therefore, that responses can be made publicly available in this way. If respondents indicate that they wish all, or part, of their reply excluded from this arrangement, **its confidentiality will be strictly respected.**

Copies of the responses made available to the public will be held on an "open file" held in the library at Saughton House, Edinburgh. Copies of documents from the "open file" will be forwarded to members of the public on request. A charge will normally be levied to cover the cost of copying.

Yours sincerely

JOHN SPEIRS
Plants, Horticulture and Potatoes

ANNEX A

SUMMARY PAPER: REVIEW OF POTATO CYST NEMATODE (PCN) CONTROLS

PCN controls are included in Directives 69/465 (the ‘Control Directive’), 66/403 (the ‘Seed Potatoes Directive’) and 2000/29 (the ‘Plant Health Directive’). Requirements are also imposed by some importing countries. The main requirements are summarised in the table below, with details of implementation in **Scotland**.

69/465	
Directive requirement	Implementation
Art.2 - seed potatoes for marketing to be grown only on plots recognised as uncontaminated by PCN	SEERAD (Agricultural Staff) take soil samples for stocks entered for certification under SPCS; non-chargeable and valid for up to 4 years or 1 potato crop. Other seed (e.g. farm saved seed) is not covered by this testing requirement
Art.3 - plots to be demarcated (‘scheduled’) if PCN is recorded	The only plots where PCN are likely to be detected are those where official testing is carried out, i.e. seed potatoes and plants/bulbs/potatoes for export (bulbs for certification); there is no requirement for notification when an advisory sample or field symptoms indicate the presence of PCN
<p>Art.8 - on demarcated plots potatoes may only be grown if:</p> <ul style="list-style-type: none"> - they are being used for scientific purposes, tests or selection; or - (ware only) they are a variety resistant to PCN; or - (ware only) they will be harvested before PCN cysts mature or the land has been disinfected 	<p>Scheduling means that a Statutory Notice is issued, placing restrictions on the growing of potatoes, or any plants for transplanting. If land is scheduled for the presence of <i>G. rostochiensis</i> only, ware potatoes of a resistant variety may be grown under licence. A licence may be requested to grow a ware crop of an early, non-resistant variety that will be lifted before the cysts mature (by 31 July) or if the land has been subjected to an approved soil treatment. (The latter option has yet to be used because of the limited efficacy of available nematicidal treatments.)</p> <p>Any sampling unit adjoining a scheduled area is classed as a ‘buffer zone’ in which only varieties resistant to the PCN species found in the scheduled area are accepted for seed classification.</p> <p>Survey information suggests that a substantial area of land used for ware potato production is infected with PCN, limiting the scope of these current restrictions.</p>

Art.4 - plants for planting may not be grown or stored on contaminated plots	Scheduled land must be avoided.
Art.5 - PCN contaminated seed potatoes must be decontaminated before being distributed as seed	SEERAD do not permit the disinfection of infected seed potatoes. PCN contaminated seed potato lots are downgraded to ware and must not be used as stock feed. Subsequent lots from the same crop are subject to a further test on a tuber sample (chargeable), which if satisfactory, permits marketing as seed within the EU.
Art.6 – member states to revoke measures against PCN only when it is no longer present	The scheduling restrictions remain in force until an official soil test is found free from live cysts. A descheduling notice is then issued withdrawing the restrictions. - seed potato restrictions are lifted providing 6 years have elapsed since the last finding of PCN or 12 years since the last potato crop (or 6 years for a resistant variety grown under licence- nematicides are not accepted for decontamination of seed potato land because of their limited efficacy). - ware potatoes and nursery stock (inc. bulbs): retesting 12 months after PCN finding if fewer than 20 <i>G. rostochiensis</i> cysts found in original sample; after 3 years if fewer than 20 <i>G. pallida</i> cysts and after 6 years if over 20 cysts of either species originally found. Descheduling soil tests are non-chargeable

66/403	
Directive requirement	Implementation
Annex I - production ground for seed potatoes must not be infected by PCN	Covered by the soil test described above
Annex II - lots of seed potatoes must be free from PCN	Covered by the soil test described and checked by visual inspection of the growing plants during classification. Consignment (tuber sample) test provided on request.

2000/29	
Directive requirement	Implementation
Annex I AII – further spread of PCN within the Community is banned	This is a general requirement (including ware production). PCN are only likely to be detected if official testing is carried out, which only applies in limited cases as described above. This provision also allows interceptions of consignments in trade when PCN are detected.

Directive requirement	Implementation
Annex IV A I – potatoes for planting from outside the Community must be accompanied by an official statement that they originate from a field known to be free of PCN; an official statement is also needed for plants for planting that they originate from a place of production known to be free of PCN	Required as part of phytosanitary certification for imports
Annex IV A II - potatoes for planting from within the Community must be accompanied by an official statement that they originate from a field known to be free of PCN; evidence is required that plants for planting must originate from a place of production known to be free of PCN	SPCS soil test provides evidence for seed potatoes. PCN testing is not carried out for farm saved seed. For plants for planting, evidence is generally based on the fact that no potatoes have been grown on the land for 10 years, or confirmatory soil testing.
Annex IV B – seed potatoes being moved within a Protected Zone must be accompanied by an official statement that 69/465 has been complied with	Not applicable in UK for PCN

Export requirements	
Some countries require PCN freedom in export consignments of seed potatoes; nursery stock (including bulbs); and ware potatoes	In such cases a chargeable Consignment (tuber sample) test is carried out to determine the absence of PCN cysts. See 69/465 Art. 5 for comments on action taken if viable PCN are found. If non-viable cysts are found in the sample, the grower will be advised against proceeding with the proposed export to a PCN-sensitive country. The land is not scheduled following a positive result at a consignment test.

An EC review of PCN controls is underway, which is looking at four main options. These are described below with an indication of, what are likely to be, the main pros and cons for growers in Scotland. For all options it is assumed there will be no changes to the requirements of the Seed Potatoes Directive.

Pros	Cons
<i>Option 1: Status quo</i>	
<ul style="list-style-type: none"> • no impact on current procedures • only limited amount of land scheduled and therefore only limited number of growers affected and limited restrictions on planting for ware/plant/bulb production 	<ul style="list-style-type: none"> • does not reflect the true position, where PCN incidence is likely to be widespread on non-scheduled land, but no official testing has been carried out • increasing risk of challenge from Commission/other MS about 'light' implementation of Directive • same flexibility also available to other MS, resulting in varying degree of controls across the Community
<i>Option 2: Maintain or refine current provisions in 2000/29, but modify the Control Directive (draft at Annex D)</i>	
<ul style="list-style-type: none"> • increased controls should reduce the spread of PCN • new flexibility to grow plants for planting on contaminated land – providing decontamination measures are carried out 	<ul style="list-style-type: none"> • requirement for an official survey (and increased testing) may identify more contaminated land thus increasing the area of land under restrictions • plants (inc. bulbs) grown on contaminated land would need to be decontaminated before marketing • derogation to grow ware on contaminated land if early harvesting/disinfection takes place may be revoked
<i>Option 3: Consider PCN as a non-quarantine organism; revoke the Control Directive and amend 2000/29 to protect against non-European PCN populations only</i>	
<ul style="list-style-type: none"> • protection for seed potatoes would continue with pre-crop soil tests • flexibility for the industry to determine own controls • PCN free areas could still be protected through PZs • protection against non-European populations maintained (as options 1& 2) • reflects the true position for much of the Community 	<ul style="list-style-type: none"> • removal of EC restrictions on scheduled land could facilitate PCN spread (but see Annex C) • industry measures would need to be self controlled • PCN freedom requirement for movements of seed/ware/plants to PZs • difficult to distinguish between European/non-European populations

Option 4: Consider a particular species of PCN (Globodera rostochiensis) or particular pathotypes of that species as non-quarantine organisms; consider Protected Zones and a Control Directive for those aspects which remain under quarantine control

<ul style="list-style-type: none">• reflects differences in distribution of species and pathotypes throughout the Community• areas free from particular species and pathotypes of PCN could have additional protection through PZs	<ul style="list-style-type: none">• identifying particular pathotypes is difficult and costly• similar to previous option but more difficult to monitor/enforce
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ANNEX B

PCN CONSULTATION: KEY QUESTIONS

No conclusion has been reached on the best solution for a future regime to control the spread of PCN and EC discussions are due to commence in September on the available options. Your responses to the questions below will help to determine a UK line for these meetings. You may also wish to refer to the Commission's draft Proposal for a new Control Directive (Annex D) and any comments on this document, which are not covered by the questions below, would be welcome.

General

- Do you have any general views on the appropriateness and effectiveness of the current statutory regulations for the control of PCN?
- What are your views on the possibility of revoking all statutory controls on PCN (except pre-crop PCN testing for certified seed potatoes)?
- What are your views on the possibility of increasing statutory measures to control the spread of PCN, e.g. requiring farm-saved seed to be grown on PCN-free land; or scheduling ware land where PCN is present?

Seed Potatoes

- Should scheduling be retained as a safeguard to protect land used for the production of certified seed?
- Are current arrangements sufficient to safeguard seed potato growing land and seed potatoes, or should additional controls be considered?

Farm-Saved Seed Potatoes

- Are current arrangements sufficient to safeguard land used for the production of farm-saved seed, or should additional controls be considered? e.g. pre-planting (chargeable) testing for non-certified (farm-saved) seed.

Ware Potatoes

The present control regime only has an impact upon a limited amount of scheduled land used for ware production, and even on this land it is possible to grow resistant varieties or lift early.

- Are there any statutory controls that should be applied when PCN is present on ware land?
- How important is the ability to grow ware potatoes on PCN scheduled land, and on such land, which option is more important - resistant varieties or early lifting? How important are the currently available methods for disinfection of soil?

Plants for planting (including bulbs)

At present, there are differing requirements for pre-planting soil testing for PCN according to the genera of plants grown. However, such plants may not be planted on scheduled land.

- What are your views on a pre-planting assessment of PCN freedom by a soil test (chargeable or non-chargeable) or confirmation of a non-potato cropping history for a specified period?
- What are your views on the possibility of planting on scheduled land, providing plants are decontaminated (i.e. removal of soil by washing or brushing) before marketing?

Decontamination

- What are your views on the requirements listed (Annex V of the Commission Proposal) for potato processors, to minimise the risk of infection spreading through contaminated waste?

ANNEX C

DETAILED PAPER ON REVIEW OF PCN CONTROLS

Introduction

1. PCN is listed in the Plant Health Directive (2000/29) as a quarantine organism. There is also a Control Directive (69/465), which outlines requirements to prevent the spread of PCN. Directive 66/403, on the marketing of seed potatoes, includes a requirement that seed potatoes must be grown on land not infected by PCN and that seed potatoes must be free of PCN. A summary of the main provisions in these Directives is at Annex A. Annex B includes a list of questions to assist you in formulating your response to this consultation exercise in association with the information provided in this paper.

2. As the Control Directive has been in force for over 30 years, a review is being carried out by the Commission and Member States to consider what improvements are necessary to reflect changes in the distribution of the pest, a better understanding of the biology of PCN and developments within the potato industry over this period. In particular, the pest is likely to have become more widespread across the EU over time, which requires an evaluation of whether it is still appropriate for it to be considered as a quarantine organism. Depending on the outcome of the review, there are a number of options for controlling PCN in the future. These include:

- maintain the status quo
- maintain or refine current provisions in 2000/29, but modify the Control Directive
- consider PCN as a non-quarantine organism; revoke the Control Directive and amend 2000/29 to protect against non-European PCN populations only
- consider a particular species (*Globodera rostochiensis*) or particular pathotypes of that species as non-quarantine organisms; consider Protected Zones and a Control Directive for those aspects which remain under quarantine control

3. To assist discussion the Commission has produced a draft Proposal for an amended Control Directive. This is attached at Annex D and a comparison with Directive 69/465 is attached as an Appendix to this paper. The draft is an early one and so will undoubtedly change, but is being circulated now so your views can be taken into account when discussions start. The intention is for member states to meet in September to discuss the Commission's draft Proposal, together with the other options available.

Implementation of Current Control Directive

4. Directive 69/465 has been implemented in Great Britain by the Plant Health (Great Britain) Order 1993. The main provisions are those referred to in the Appendix. In implementing these controls a deliberately light regime was adopted to provide maximum flexibility, particularly for ware and plant/bulb growers. This decision was taken in the context of the age of the Directive which was adopted when PCN was not so widespread as it is now. The main impact of this approach is that official testing for PCN is restricted to the Seed Potato Classification Scheme and for plants/bulbs/ware intended for export. Furthermore, the current requirements for soil testing offer some scope for flexibility. For instance, the results of private sampling of ware land are not taken into account in assessing

whether land should be scheduled. The requirement in Directive 2000/29 for plants for planting to originate from places of production that are free of PCN is also usually assessed without the need for an official test; relying instead on a potato free cropping history for 10 years.

5. One consequence of this limited testing is that relatively little land is scheduled because of PCN contamination (around 20,000 hectares currently), which has minimised the number of growers under restriction and the area of land where PCN restrictions apply for those growing ware potatoes or plants for planting. However, another consequence is that the area of land actually contaminated by PCN is likely to be very much greater than that which has been scheduled.

6. While such a light approach has not on the whole been challenged by the Commission (although the policy of not taking into account the results of private testing has been questioned), it is unlikely that this would be sustainable if it was decided to introduce a new Control Directive. In these circumstances the risk of challenge would be greater and the Commission would expect to see close adherence to any new rules agreed by member states.

Possible requirements of a new Control Directive

7. One of the options being considered is the introduction of a new Control Directive, as the 1969 Directive is clearly out of date and does not reflect changes in the distribution of PCN and industry practices since then. The draft produced by the Commission (at Annex D) is an early one but indicates the areas that are likely to be raised in discussions:

(i) seed potatoes

8. The marketing of seed potatoes is covered by Directive 66/403 which requires, amongst other things, that the production ground must not be infected by PCN (Annex 1). This requirement is met through soil testing and, together with rotation and limits on soil residues in the seed potatoes legislation, has been generally effective at maintaining PCN freedom in respect of seed potato production. Soil testing for seed potatoes is also a requirement under the Commission's Proposal. Given the importance of disease freedom in seed potatoes, there seems to be little alternative to the soil testing requirement at present.

9. Seed potatoes that are suspected of being contaminated with PCN as a result of post-harvest inspections may currently still be marketed in the EU as seed if they are suitably decontaminated. (*This option is currently not exercised in Scotland*). Under the Commission's Proposal this option would no longer be available and contaminated seed must either be sent for industrial processing or another use.

10. Annex VI of the Commission's Proposal includes criteria for declaring contaminated fields to be free of PCN. For seed potatoes (for production of certified seed) re-sampling of the field may take place 4 years after the positive finding or after the last potato crop was grown (this must be of a variety resistant to the pathotype of PCN detected). For seed potatoes (for the production of other seed) re-sampling may take place 12 years after the positive finding (or 6 years if an approved nematicide has been applied and potatoes resistant to the relevant PCN pathotype have been grown). These requirements already reflect those in England and Wales. *In Scotland only pre-basic or basic seed potatoes may be grown and the efficacy of available nematicides is currently not sufficient for use as a decontaminant on*

seed potato land. Under current testing arrangements the Commission's proposal may mean a minimum of 18 years between basic grade seed potato crops following a positive finding in a pre-crop soil test.

(ii) plants for planting

11. At present such plants may not be planted on known contaminated plots, but pre-planting soil testing is not obligatory. The requirements for a pre-planting assessment apply to plant passportable crops (but not bulbs) in England and Wales and offer the options of using a PCN free growing medium, or land that has not been used for potatoes/tomatoes for 10 years, or that has been treated with an approved nematicide, as alternatives to a soil test. In practice, because relatively little land is officially tested and scheduled, there are few restrictions on planting.

12. The Commission's Proposal includes a new requirement for soil testing or verification of a non-potato cropping history for a specified list of plants for planting (including bulbs) intended for professional use – see below for the genera covered. This would be an additional constraint on those growing transplanting crops, but would strengthen controls against the risk of contaminated soil attached to plants being transplanted into 'clean' fields. The requirement would apply to all plants listed in Annex 1 of the Commission's Proposal, including those covered by certification schemes. The plants covered are: (plants with roots, other than seeds of) *Allium porrum* L., *Beta vulgaris* L., *Brassica* spp., *Capsicum* spp., *Fragaria* L., *Lycopersicon lycopersicon* (L.) Karsten ex Farw., *Rubus* L., *Solanum melongena* L.; and (bulbs of) *Allium ascalonicum*., *Allium cepa*., *Gladiolus* Tourn. Ex L., *Narcissus* L., *Tulipa* L. grown in soil and intended for planting other than those intended for sale to non-professional final consumers.

13. At present, the Proposal is drafted so that plants for planting that are contaminated or grown on contaminated land may still be marketed for their intended use provided they are first decontaminated (disinfestation, or removal of soil by washing and brushing). Although bulbs are generally marketed free of soil, the other plants listed are usually not. For growers of such plants, choosing this option would therefore involve an additional cost.

14. Annex VI of the Commission's Proposal includes criteria for declaring contaminated fields to be free of PCN. For plants for planting, re-sampling may take place 12 months after the positive finding (or 6 months if an approved nematicide has been applied). This requirement already reflects those in England and Wales and *Scotland*.

(iii) ware potatoes

15. The Commission's Proposal includes a new requirement to carry out a survey of ware production for PCN. This would help to establish the extent of PCN presence, but would result in restrictions on any land found to be contaminated. If a Control Directive is to be retained it is difficult to see how this could operate effectively without better knowledge about the distribution of PCN. The Proposal also includes a requirement (Art.6(2)) for an "integrated control management programme" to be implemented on scheduled land. The form of this is not specified, but there is likely to be a burden on both growers and the enforcement body (PHSI), (*SEERAD in Scotland*) in undertaking this requirement.

16. At present, ware potatoes may be planted on contaminated plots if they are of a resistant variety, or if they are to be harvested early, or if the land has been disinfected. This restriction has little practical impact because of the limited area of land scheduled for PCN. Under the Commission's Proposal, only the first of these options would be available. As only potato varieties resistant to *G. rostochiensis* are currently available, in areas where *G. pallida* is present this derogation would not be available. As indicated earlier, surveys have shown that *G.pallida* is the predominant species in England and Wales. *In Scotland G. pallida is increasing but G. rostochiensis still dominates.*

17. Annex VI of the Commission's Proposal includes criteria for declaring contaminated fields to be free of PCN. For ware potatoes, re-sampling may take place 12 months after the positive finding (or 6 months if an approved nematicide has been applied). This requirement already reflects those in England and Wales. *This is largely the position in Scotland (see Annex A).*

PCN's quarantine status

18. One of the questions which may help to determine if a new Control Directive is needed is whether PCN should remain a quarantine organism given its current distribution. However, it does not automatically follow that a Control Directive is needed if PCN retains its quarantine status; as indicated in the list of options in Annex A, controls could be restricted to those in the Plant Health and Seed Potatoes Directives alone. Eradication measures could be undertaken under national provisions, without relying on a Control Directive. Two issues to consider when assessing whether quarantine status should be maintained are that (i) the benefits and disadvantages associated with revocation of the Control Directive would apply equally to all member states and new applicant members (ii) changes to controls within the EU would need to be reflected in import requirements, unless there was an identifiable risk from distinct non-European populations of PCN, which could be adequately monitored and enforced; at present there is no clear genetic separation between such populations and therefore no methodologies for identifying individual groups. Nevertheless it remains important to have measures to protect against the introduction of PCN from outside the EU, and this would be a feature of controls based on Directive 2000/29 only.

19. PCN has been known to occur in the UK for nearly 100 years. Without doubt it is very damaging and if it was not present serious efforts would continue to exclude it. Although official surveys are not regularly carried out, ad hoc surveys together with industry surveys indicate that significant levels are present in ware growing areas of the UK, although the level of infection varies between areas. A survey reported by Minnis et. al. (Annals of Applied Biology, vol. 140, no.2, 2002) showed that PCN was present in 64% of sites sampled in potato growing areas of England and Wales. Of the populations detected 67% were *G. pallida*, 8% were *G. rostochiensis* and 25% contained both species. The survey showed an increase in the incidence of PCN since previous studies and confirmed a perceived shift towards *G. pallida* as the predominant species. There is good circumstantial evidence that the incidence of *G.pallida* tends to increase where varieties resistant to *G.rostochiensis* are grown.

In Scotland, data collected from 397 soil samples submitted by ware potato growers to the Scottish Agricultural College (SAC) during a twelve month period starting in November 1996 revealed an incidence of viable PCN infestation of 23% (Evans, 1999. Proceedings Crop

Protection in Northern Britain 1999 243-248). Of the populations detected 24% were G. pallida, 53% were G. rostochiensis and 23% contained both species. Such data should be used with caution as they were not collected as part of a structured survey and may not be representative of the true situation. Data collected at SASA from land intended for seed potato production prior to three growing seasons (20,535 statutory pre-crop samples, drawn from 67,450 ha between 1999 and 2001), revealed an incidence of viable PCN infestation of 2.5%. Of the populations detected 18% were G. pallida, 78% were G. rostochiensis and 4% contained both species.

20. The FAO definition of a quarantine pest is ‘a pest of potential economic importance to the area endangered thereby and not yet present there, or present but not widely distributed and being officially controlled’. It is difficult to see how PCN in the UK can satisfy this definition, but the situation across the EU needs to be assessed including the distribution of different species and pathotypes between member states. For instance, although PCN is widespread in England and Wales, in some other member states (e.g. Finland) its distribution is localised. Even if it is decided that PCN is sufficiently widespread in the EU to revoke quarantine measures, some degree of control will still be necessary to protect against the risk of contaminated material being imported from elsewhere. There would also be a need to maintain protection for those parts of the EU that are free from PCN, or from particular species or pathotypes. For instance, Finland has Protected Zone status for the species *G.pallida*. One possibility would be a regionalised solution, which recognised Pest Free Areas, Areas of Low Pest Prevalence and areas where there were no official controls except on seed potatoes.

21. In the absence of quarantine controls, soil testing would still be required under seed potato legislation, but there would be no scheduling of land and no restrictions on ware potatoes being planted on contaminated land. Any other controls would need to be initiated by the industry. This may open up further options in relation to the land available for planting, but there would be a reduction in yield if planting was carried out on contaminated land and a loss of export and other marketing opportunities. There would also be a cost attached to any industry measures introduced. In considering whether industry measures should be introduced in such circumstances, account would need to be taken of the value placed on maintaining PCN free land, particularly for seed potato production. In addition, as indicated earlier, the distribution of species and pathotypes of PCN varies across England and Wales, and there would need to be consideration of the extent to which spread of species/strains into new areas should be prevented. *SEERAD is taking legal advice on whether in the absence of a PCN Control Directive, domestic plant health legislation may be used to allow the continued scheduling of land and restrictions on planting where PCN is found. Please consider this in response to the first question raised under “seed potatoes” in Annex B.*

22. There are other features of the Commission’s Proposal which have not been highlighted in this letter (e.g. measures on resistant varieties), but please feel free to submit comments on these measures should you wish to do so. For your information, a technical group with representatives from the UK, Netherlands, France, Greece and Spain has been established to examine particular aspects of the Proposal and report back to the main Working Group. The main issues to be examined are: methods to identify PCN pathotypes; methods to reduce PCN on contaminated land, particularly through the use of resistant varieties; methods of disinfecting contaminated plants.

APPENDIX TO ANNEX C: COMPARISON BETWEEN DIRECTIVE 69/465 AND THE COMMISSION'S DRAFT PROPOSAL

The Commission has produced a draft Proposal (SANCO/655/02rev2) to replace the current PCN Control Directive (69/465). The main differences from the 1969 Directive are described in the table below:

69/465	SANCO/655/02rev2
seed potatoes for marketing to be grown only on plots that have been recognised as uncontaminated from PCN	also applies to plants for planting (Art.2.1)
	member states to conduct official surveys for PCN in ware potatoes (Art.2.2)
	freedom from PCN to be determined by (for seed potatoes) a soil test; (for plants for planting) a soil test or verification of a non potato cropping history for 10 years or longer (Art.3)
plots to be demarcated if PCN is recorded. On such plots, potatoes may only be grown if: -they are being used for scientific purposes, tests or selection, or -they are of a variety resistant to PCN, or -(ware potatoes only) they will be harvested before PCN cysts mature or the land has been disinfested	- there is no longer a derogation for scientific purposes, tests or selection - the derogation for resistant varieties is retained for ware potatoes - there is no longer a derogation relating to harvesting prior to maturation of PCN cysts or disinfestation of the land (Art.6)
plants for planting may not be grown on contaminated plots	plants for planting may be grown in contaminated fields providing they are disinfested after harvesting and before movement (Art.6)
	contaminated fields to be subject to an “integrated control management programme” (Art.6)
seed potatoes contaminated with PCN must be decontaminated, if they are to be distributed as seed	contaminated seed potatoes may no longer be planted. Plants for planting must be decontaminated before movement (Art.7)
	contaminated potatoes intended for industrial processing, to be delivered to a processing plant with specified facilities (Art.7)
member states to revoke measures only once PCN is no longer present	the criteria for PCN freedom are listed in Annex VI (Art.8)
member states may introduce additional or stricter measures if necessary	this provision remains, with examples of the types of measures that may be introduced (Art.9)

EN

SANCO/655/02rev2

DRAFT PROPOSAL FOR A

COUNCIL DIRECTIVE

on the **control of potato cyst nematodes**

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 37 thereof;

Having regard to the proposal from the Commission¹;

Having regard to the opinion of the European Parliament²;

Having regard to the opinion of the Economic and Social Committee³;

Whereas:

(1) To be completed later.

HAS ADOPTED THIS DIRECTIVE:

Article 1

This Directive concerns the measures to be taken within the Member States against *Globodera pallida* (Stone) Behrens (European populations) and *Globodera rostochiensis* (Wollenweber) Behrens (European populations), hereinafter referred to as “potato cyst nematodes”, in order to:

- (a) determine their distribution;
- (b) prevent their spread and to control them;

Article 2

1. Member States shall prescribe that prior to the planting of the plants listed in Annex I, or to the planting of seed potatoes, for the production of seed potatoes, an official investigation for the presence of potato cyst nematodes shall be carried out on the field in which the seed potatoes and plants are to be held or grown.
- [2. The official investigation provided for in paragraph 1 is not applicable for the planting of seed potatoes as farm saved seed.

¹ OJC, , ,

² OJC, , ,

³ OJC, , ,

3. Member States shall conduct official surveys for the presence of potato cyst nematodes in potatoes other than seed potatoes with the aim of preventing the spread of potato cyst nematodes to places of production of plants listed in Annex I. The details and results of the official surveys provided for in paragraph 2 may be notified each year to the other Member States and to the Commission.]

Article 3

1. The official investigation or the official survey referred to in Article 2 shall involve:
 - (a) for [seed] potatoes
 - soil testing for potato cyst nematodes using the method set out in Annex II,
 - (b) for plants listed in Annex I
 - soil testing for potato cyst nematodes using the method set out in Annex II, or
 - verification that certain criteria have been met, as set out in Annex III.
2. If, as a result of the official investigation or the survey on the field referred to in Article 2 and as detailed in paragraph 1 no potato cyst nematodes are found, the responsible official bodies of the Member States referred to in Directive 2000/29/EC, shall declare the field as not contaminated with potato cyst nematodes.
3. Member States shall ensure that results of the official investigation referred to in paragraph 1 are also held in the official register established for producers under Article 6(5) of Directive 2000/29/EC⁴ and shall be accessible to the Commission on request.

Article 4

1. Without prejudice to the provisions of Article 16.1 of Directive 2000/29/EC, Member States shall ensure that the suspected occurrence or confirmed presence of potato cyst nematodes in potatoes for which resistance [or partial resistance] of the variety has been ineffective and thus a change in the composition of the species, pathotype or virulence group situation is suspected or has been identified, shall be reported to their own responsible official bodies. The details of these reports concerning the confirmed presence shall be notified to the other Member States and to the Commission.
2. For all cases reported under paragraph 1, Member States shall investigate and confirm the potato cyst nematode species, the pathotype or virulence group involved by an appropriate method.

⁴ OJ L 169, 10.07.2000, p9 Directive as last amended by Commission Directive 2001/32/EC (OJ L 127, 9.5.2001, p.42)

3. The following provision may be adopted in accordance with the procedure laid down in Article 18 of Directive 2000/29/EC:
 - the appropriate method provided for in paragraph 2.

Article 5

1. When an occurrence of potato cyst nematodes has been confirmed according to one of the methods referred to in Article 3 paragraphs (1a) and 1(b), the responsible official bodies of the Member States shall designate the field, in which the occurrence is confirmed, as contaminated.
2. In the case of confirmation of the occurrence of potato cyst nematodes in soil associated with seed potatoes or with plants listed in Annex I in accordance with Article 4(2), this material shall also be designated as contaminated by the responsible official bodies of the Member States.

Article 6

1. Member States shall prescribe that on a field designated as contaminated under Article 5(1):
 - no potatoes shall be planted for the production of seed potatoes, or
 - [no potatoes shall be planted for the production of ware potatoes, unless they belong to varieties resistant to the pathotype or virulence group of potato cyst nematodes known to occur in the field, or]
 - no plant intended for replanting and listed in Annex I shall be planted, stored in the soil or otherwise, unless appropriate officially supervised measures have been adopted in accordance with the provisions of Annex IV, such that there is no identifiable risk of the potato cyst nematodes spreading. After adoption of the said measures, Member States shall no longer consider the plant material as contaminated.
- [2. Member States shall prescribe that a field designated as contaminated under Article 5 (1) shall be subject to an integrated control management programme of which the details shall be notified to the other Member States and to the Commission].

Article 7

Without prejudice to the provisions of Article 6.1, second indent of Directive 2000/29/EC, Member States shall prescribe that potatoes and plants listed in Annex I which have been designated as contaminated under Article 5(2):

- (a) in the case of potatoes shall not be planted, or
- (b) [if intended for industrial processing, shall have been subject to the appropriate officially supervised measures adopted in accordance with the provisions of Annex V, such that they are no longer contaminated], or

- (c) in the case of plants listed in Annex I, and intended for replanting shall not be moved [marketed] until after they have been subject to the appropriate officially supervised measures adopted in accordance with the provisions of Annex IV, such that they are no longer contaminated.

Article 8

When a field has been designated as contaminated under Article 5(1) the responsible official bodies may consider the field no longer contaminated if the appropriate measures as specified in Annex VI, are taken.

Article 9

1. Member States may adopt in relation to their own production such additional or stricter measures as may be required to control potato cyst nematodes or to prevent them spreading in so far as they are in compliance with the provisions of Directive 2000/29/EC. Such measures may include additional restrictions on the planting of potatoes, the planting of only resistant or partially resistant cultivars for ware potato production with disinfestation of the ground as appropriate, or the growing of ware potato crops to be harvested prior to maturation of the cysts of potato cyst nematodes.

The details of these measures shall be notified to the other Member States and to the Commission.

2. The following provisions may be adopted in accordance with the procedure laid down in Article 18 of Directive 2000/29/EC:
 - the definitions of, and the appropriate methods to determine, resistant and partially resistant cultivars referred to in paragraph 1 of this Article.

Article 10

Amendments to the Annexes to this Directive, to be made in the light of developments in scientific or technical knowledge, shall be adopted in accordance with the procedure laid down in Article 18 of Directive 2000/29/EC

Article 11

With reference to the identification of virulence groups and pathotypes referred to in Article 4(2) and to the criteria laid down in Annex III, Member States shall communicate to the other Member States and to the Commission before 1st January each year the following information:

- details of all cases where the occurrence of a virulence group or pathotype of potato cyst nematodes previously unknown in that Member State or area of, has been confirmed.
- a list of all the varieties of potatoes accepted by them for marketing and which they have found by official investigation to be resistant to potato cyst nematodes. They shall state the pathotypes or virulence groups to which the varieties are resistant.

Article 12

Member States shall adopt and publish the provisions necessary to comply with this Directive. They shall forthwith inform the Commission thereof.

When Member States adopt those provisions, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made. Member States shall communicate to the Commission the text of the main provisions of National law, which they adopt in the field governed by this Directive.

Article 13

This Directive shall enter into force on the [...] day following that of its publication in the *Official Journal of the European Communities*.

Article 14

Directive 69/465/EEC is hereby repealed with effect from [.....]

Article 15

This Directive is addressed to the Member States.

Done at Brussels, [...]

For the Council
The President

ANNEX

ANNEX 1

List of plants referred to in Article 2, 3(1), 5(2), 6(1), 7 and Annex VII

(1) Plants with roots, other than seeds of:

Allium porrum L.,

Beta vulgaris L.,

Brassica spp.,

Capsicum spp.,

Fragaria L.,

Lycopersicon lycopersicum (L.) Karsten ex Farw.,

Rubus L.,

Solanum melongena L.,

(2) Bulbs of:

Allium ascalonicum

Allium cepa.,

Gladiolus Tourn. Ex L.,

Narcissus L.,

Tulipa L.,

grown in soil and intended for planting other than those for which there shall be evidence by their packaging or by other means that they are intended for sale to final consumers not involved in professional plant or cut flower production.

ANNEX II

The appropriate method for the soil testing referred to in Article 3(1) (a) and (b) shall be the method described in the 'Phytopathological Procedure for *Globodera pallida* and *Globodera rostochiensis*: Soil sampling methods' (EPPO standard 1998).

ANNEX III

With reference to Article 3(1)(b) second indent, the official investigation referred to in Article 2 shall verify that one of the following criteria have been met:

- establishment of a known non-potato cropping or no potato cyst nematodes history of the field

or

- establishment of a known cropping history in which no potatoes have been grown within 10 years

ANNEX IV

The officially supervised measures referred to in Article 6(1) second indent and in Article 7 (b), shall apply after planting, growth and lifting from the field of such plants for replanting and listed in Annex I but prior to their movement and shall be either:

- disinfestation by appropriate methods such that there is no identifiable risk of the potato cyst nematodes spreading. The responsible official bodies shall supervise such methods

or

- removal of soil by washing or brushing until practically free of soil such that there is no identifiable risk of the potato cyst nematodes spreading. The responsible official bodies shall supervise such methods.

[ANNEX V: to be further examined]

Potatoes that have been designated as contaminated under Article 5(2) shall, if intended for industrial processing, be delivered immediately to a processing plant with appropriate waste disposal facilities whereby:

- (a) potato waste (including rejected potatoes and peelings) and any other solid waste associated with the potatoes shall be disposed of by either:

- deep burial at a disposal site at which there is no risk of the waste being moved to agricultural land. The waste shall be conveyed directly to the site under containment conditions such that there is no risk of the loss of waste,

or

- incineration.

- (b) prior to disposal, liquid waste containing suspended solids shall be subjected to filtration or settlement processes to remove such solids. These solids shall be disposed of as set out in subparagraph (a).

The liquid waste shall be disposed of subject to official approval such that there is no risk that the waste could come into contact with agricultural land or water sources that could be used for irrigation of agricultural land.

ANNEX VI

The appropriate measures referred to in Article 8 shall be:

- (a) for ware potatoes and plants listed in Annex I official re-sampling of the contaminated field using one of the methods specified in Annex II, after a minimum period of 12 months following positive confirmation of potato cyst nematodes. This period may be reduced to 6 months if an approved nematicide has been applied.

- (b) for seed potatoes for the production of certified seed potatoes official re-sampling of the contaminated field using one of the methods specified in Annex II, after a minimum period of 4 years following positive confirmation of potato cyst nematodes or the growing of the last potato crop providing it was of a variety resistant to the pathotype of potato cyst nematode present within the field.
- (c) for seed potatoes for the production of seed potatoes official re-sampling of the contaminated field using one of the methods specified in Annex II, after a minimum period of 12 years following positive confirmation of potato cyst nematode. This period may be reduced to 6 years if an approved nematicide has been applied and potatoes have been grown which were of a variety resistant to the pathotype of potato cyst nematode present within the field.



[Suggestions to define the definitions referred to in Article 9, paragraph 2:

(a) for resistant cultivars:

‘A potato variety shall be regarded as resistant to a particular pathotype of potato cyst nematode if, when that variety is grown, a natural and annual decrease in the population of that pathotype is found to occur.’ Article 8(3), Directive 69/465/EEC

(b) for partially resistant cultivars:

‘A potato variety shall be regarded as partially resistant to a particular pathotype of potato cyst nematode if, when that variety is grown, an increase in the population of the pathotype is not found to occur.’ (based on information from Department of Agriculture and Rural Development Northern Ireland)

‘A potato variety shall be regarded as partially resistant to a particular pathotype of potato cyst nematode if, when that variety is grown, the population of the pathotype multiplies less than a potato variety susceptible to that pathotype.’ (based on information from Scottish Crop Research Institute)]

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