Business and Regulatory Impact Assessment

Title of Proposal

Plant Health (Scotland) Amendment Order 2013

Purpose and intended effect

This Order amends the Plant Health (Scotland) Order 2005 which contains measures to prevent the introduction and spread of harmful plant pests and diseases. It builds on existing measures for one Member State and introduces these measures to others to address an increased risk of harmful organisms being brought in through potato consignments from certain EU Member States.

The Order is being introduced as a result of the severe weather and poor harvest in 2012 and the potential increase in potato imports being brought in to fill the likely gap between UK supplies and demand.

Background

Potato ring rot (**PRR**) is a bacterial disease caused by *Clavibacter michiganensis* subsp. *sepedonicus.* It is highly contagious and causes economic losses in both the growing potato crop and during storage. PRR is one of the most serious potato diseases in Asia, North America, and central and northern European countries. The disease causes the early death of plants, rotting of progeny tubers and extensive yield reduction in affected crops. PRR or its causal agent has never been found in Scotland. There had been no reported PRR outbreaks in the UK prior to a finding in Wales in November 2003.

The PRR bacteria spread largely via infected seed potato tubers. They can pass through one or more field generations without causing symptoms and non-systematic infected tubers are an important means of spreading the disease. Laboratory tests can detect latent infection in a sample, but small samples may miss low levels of infection.

There are two major routes of spread for PRR via infected machinery and materials:

- **Spread between stocks in the same location**: Using the same machinery without regular disinfection can spread infection from diseased to healthy stocks, particularly if the latter contains damaged tubers. Cutting, grading and handling of tubers is a potential route of spreading the ring rot bacterium within and between potato stocks on the same farm. Using equipment for grading of Scottish seed stocks which was previously used for imported ware potatoes poses a particularly high risk. This is an important threat as seed stocks are then likely to be planted in the field, traded to other farms or exported. The bacterium can survive for at least a month on machinery and much longer if the machinery dries rapidly and is kept under dry conditions after contamination. It survives for a much shorter time under moist conditions. Regulation 6 of the Seed Potatoes (Scotland) Regulations 2000 protects the health of seed potatoes from potentially devastating diseases by controlling their contact with farm saved seed and ware on the same farm.

- **Spread between different locations**: A second possible route is through

contact between seed potatoes and residual contamination from handling and storage of infected potatoes elsewhere. PRR bacteria can survive and remain infectious for several years on potato bags, boxes, machinery and other surfaces that have been contaminated by rotting ooze. Although these are not the main means of disease transmission, it can make eradication of the disease very difficult if the disease establishes itself in Scotland. The bacterium is able to overwinter in the soil, usually in association with groundkeepers (unharvested potatoes from the previous crop) and debris from infected crops. Infected groundkeepers lifted with an otherwise clean seed or ware crop can infect that crop. Contaminated potato waste is another possible source of infection. Sharing equipment and machinery that is used to harvest, grade or process seed and ware potatoes poses a very high risk of cross-infection between different growers.

- **Objective**

The Scottish Government recognises that the poor summer weather has had an impact on yield and quality across the country and we have sympathy for Scottish processors and businesses affected. In recognition of this we wrote to Scottish potato stakeholder organisations and related businesses on 1 November 2012 to raise awareness and to urge caution in considering where to source ware potatoes, as there are potential plant health risks in importing from certain countries. As a net exporter of potatoes, we have much to protect in Scotland's high health reputation for seed potatoes and our freedom from serious quarantine pests. This is a critical factor in the continuing increase and success in the export of Scottish seed potatoes around the world and the economic value this brings to the Scottish rural economy.

For example, 75% of the UK's seed potatoes are produced in Scotland, with the total value of Scotland's potato industry accounting for around £209 million and 8% of Scotland's total agricultural output. 95% of all seed potato exports outside the EU from the UK are from Scotland.

Unlike the rest of the UK, Scotland already had statutory pre-notification requirements for the import of Polish ware potatoes due to the risk of importing the PRR agent. This requires prior notification, which in turn allows for monitoring and targeted inspection and testing of imported potatoes. At this time we are not aware of any notifications having been received for Polish potato imports direct to Scotland. That said we must not be complacent. Poland and Romania together experienced 91% of the ring rot outbreaks in the EU in 2011 (with Poland experiencing 82%).

Epitrix (potato flea beetle) has been found on ware potatoes from Portugal and certain parts of Spain. *Epitrix* is potentially a very serious plant health threat to the UK potato industry, as it would be impossible to eradicate and have significant impacts on yield and export opportunities. There is existing emergency EU legislation (Commission Implementing Decision 2012/270/EU) in force to help to prevent the spread of this threat further across the EU. This action will back up the existing voluntary arrangements in the UK, which were agreed with the industry in 2011.

In the light of the evidence, the Scottish Government recommends to Scottish Ministers extending the statutory notification requirements to include ware potatoes from Romania, Spain and Portugal and to extend the Polish requirements to make it a legal requirement for the Polish potatoes to be accompanied by an official ring rot test certificate issued by the Polish Plant Health Authority.

- **Rationale for Government intervention**

Previous experience of PRR outbreaks in the UK is limited to a finding in Wales where infected potatoes were grown in three nearby fields in 2003, and two outbreaks in 2004. All outbreaks were linked to infected imported seed potatoes. The harvested crops were destroyed or processed and the affected fields put under controlled restrictions. No subsequent establishment of the pathogen occurred; therefore the disease was successfully eradicated in these localised cases. The cost of official sampling and testing for the Welsh ring rot outbreak was £107,000, although total costs were much higher, including other Government costs and costs to affected growers of affected potatoes – 164,000 tubers were involved. In case of an infection in Scotland, which unlike Wales is a worldwide exporter of seed potatoes, reputational damage would be considerable and could have a negative impact on export volume and price.

However, experience from USA, Scandinavian countries and Eastern Europe outbreaks suggest that if PRR was introduced in the UK and spread over a large area of the country it is unlikely that the eradication would be successful. In such eventualities, the impact on UK industry can be substantial. ADAS (2000) study concluded that the net economic benefits of the PRR exclusion (quarantine) measures for PRR in England are mostly likely to be around approximately £3 million per year. Cook et al (2006) estimated that the same measures yield a net of economic benefit to the UK of £2.6 million per annum. Both studies identified earnings from export as the greatest benefits from exclusion of disease. As Scotland exports the majority of potatoes from the UK, it is likely that these economic benefits largely fall to Scotland. In terms of impact on specific subsectors, Cook et al. used the damage estimates of Mumford et al. (2000) and Pemberton (1988), and assumed that a PRR establishment in the UK would cause a 10–48% reduction in ware potato exports revenue, a 0–5% reduction in processed potato export revenue, and a 20–95% reduction in seed potato export revenue. The latter would be almost entirely borne by Scotland as the main seed potato exporter.

The proposal may help contribute towards achieving the National Performance Framework indicators of “Increase exports” and “Improve Scotland’s reputation”, and to the Purpose target of “Increase Scotland’s Economic Growth”.

Consultation

Colleagues in the Scottish Government’s Science and Advice for Scottish Agriculture (SASA), the Rural Payments and Inspections Division (RPID), the Rural Environment and Science and Analytical Services Division (RESAS), the Northern Ireland Executive’s Department of Agriculture and Rural Development (DARD), the Food and Environment Agency (Fera) and the Department for Environment, Food and Rural Affairs (Defra)

- **Public Consultation**

Written communication with potato stakeholders who were all very supportive of the Scottish Government’s proposed actions.

- **Business**

Due to emergency nature of the legislation, no face to face discussions with businesses were held. However as noted above, written communication with appropriate stakeholders was undertaken.

Options

Given that the risks posed by imports from Poland threaten the integrity of the current UK quarantine measure and resulting disease-free status, the impact of three policy options on UK industry and government expenditure are assessed in terms of their ability to maintain and/or improve the effectiveness of the current quarantine measures.

Option 1- Do nothing

1. We would continue to have the existing statutory pre-import notification requirements provided in the Potatoes Originating in Poland (Notification) (Scotland) Order 2004. The risks posed by imports from Poland are proportional to the volume imported which in Scotland is currently zero. Imports from Romania and Portugal are also zero while from Spain it is estimated that the UK imported around 6,000 tonnes of ware potatoes in 2012 (June to October).

2. If the Scottish Government takes no action against Romania, Portugal and Spain there is potential for infected potatoes to be imported given the UK supply issues this season. Multiple incursion events would cause serious reputational damage to the Scottish seed potato industry. Both would have serious economic consequences.

Option 2: Legislate to require all Polish potatoes to be accompanied by a valid test certificate and require destruction of any which do not have a certificate and notification of ware potatoes from Romania, Portugal and Spain

1. While we already have statutory notification we recognise the risk and have assumed that a new requirement for a valid test certificate for all Polish imports will enhance the existing quarantine measures as no consignment should leave Poland without one. Most uncertified consignments in 2012 are attributed to new suppliers due to exceptional UK demand resulting from a shortage in domestic supply.

2. Overall, there will be lower risk of introduction than under option 1, and a very small risk of limited spread as the EU quarantine measures would be adequate to eradicate any small number of introductions. We assume that the risk weight will be reduced by 85% from the do-nothing option, if mandatory certification is introduced.

3. If Polish exporters cannot meet the export certification requirements, Scottish importers will seek alternative sources which may be limited and/or more expensive. However, we assume that the existing Polish exporters sourcing from disease-free areas will increase their export volume in the longer run. As such cost of certification of additional potato from disease-free areas is unlikely to be significant to affect UK price in the longer run.

4. RPID and SASA will not need significant additional resources to manage the notification database resulting from new certification requirements. A database is already in operation for seed potatoes. Overall RPID monitoring resources are unlikely to increase significantly as the enforcement will largely rely on the existing EU quarantine legislation coupled with Polish controls and the threat of action is expected to be sufficient to discourage imports of uncertified consignments.

Option 3: Ban imports of Polish, Romanian, Spanish and Portuguese potatoes

1. We have assumed that a ban on Polish, Romanian, Spanish and Portuguese potatoes is likely to result in Scottish importers having to find alternative sources which may be limited and/or more expensive and more risky. There would also be a strong risk

of legal challenge if a ban was introduced without valid technical justification.

2. This option is likely to increase the risk of infected imports arriving. A ban is likely is to result in reduced effectiveness of UK controls due to loss of the current hybrid arrangement under which, in addition to EU control measures against ring rot, Polish law requires exporters to seek certification. We assumed that a ban will increase the risk weight by 25% (from option 1 level). However, although the reported incidents of PRR in ware potato in these countries are lower than Poland and Romania, they are deemed to have weaker regulatory governance. Furthermore, the loss of the existing protection from the Polish certification regime is likely increase the risk

3. Additional sampling (10% of import) may be necessary to ascertain the status of the increased new supply from countries neighbouring Poland and Romania, as part of the existing quarantine surveillance activities. However, the overall RPID monitoring costs are unlikely to increase significantly as inspections will still be relying on the existing legislation and threat of action against non-compliance.

- **Sectors and groups affected**

Potato stakeholders involved in the supply of potatoes to outlets including supermarkets, processing sectors etc who have contracts to supply ware potatoes.

- **Benefits**

There are a number of common benefits associated with each option. These can be broadly separated into the following categories:

1. Maintain the phytosanitary status of potatoes in Scotland which is crucial to Scotland's international reputation as a high-quality seed potato producer and ultimately helps to maintain the high volume of exports from Scotland.

2. Prevents the spread of the disease which will affect the yield for potato producers in Scotland.

Research undertaken for the UK Government[1] estimated that the economic benefits from excluding potato ring rot from the UK was £2.56 million. In order to estimate what proportion of these benefits may be attributed to Scotland, we can estimate this based on the value of potato production in Scotland relative to the UK. However, this is likely to be an underestimate as Scotland exports the majority of seed potatoes from the UK.

Over the past 5 years the value of potato production in Scotland has varied between 24% and 32% of the total value of potato production for the UK[2]. Therefore to estimate the proportion of the economic benefits for the UK to attribute to Scotland, we have taken the mid-point within this range which is 28%. On this basis, the economic benefit to Scotland would be £716,800.

In addition to this economic benefit, Fera estimated that Option 2 would have a net annual

[1] [1] Cook David C., Waage, Jeffery K., Mumford, John D., Fraser Rob W.(2006), T8.11: The benefits of potato ring rot exclusion from the United Kingdom, Foresight (Report on) Infectious Diseases: preparing for the future, Office and Science and Innovation

[2] Source: Scottish Farm Income Estimates 2011, Scottish Government and Agriculture in the United Kingdom 2011, DEFRA. Between 2007 and 2011 the farmgate value of potato production varied from £165.6m to £224.2m for Scotland, and from £638m to £794m for the whole of the UK.

benefit of approximately £5,000 a year for certification for the UK. Again apportioning this benefit on the basis of Scotland's share of the value of potato production in the UK, there would be an additional annual benefit of £1,400 for Option 2.

- **Costs**

Option 1

The main costs would be borne by any Scottish firm which looked to source potatoes from the countries listed. There would be a slight delay (possibly up to 5 days) while the pre-import notification process took place (whereby a sample of the potatoes to be imported would be tested).

Fera estimate that the social cost from this option for the UK was £35,000 over 10 years. Therefore apportioning this cost on the basis of Scotland's share of the value of potato production in the UK, there would a cost of £9,800 over the 10 years.

Option 2

Fera estimate that as Option 2 would reduce the risk associated with imports being infected with ring rot, the resulting cost would be £9,000 over 10 years. Again apportioning this cost on the basis of Scotland's share of the value of potato production in the UK, there would be a cost of £2,520 over 10 years for Option 2.

Option 3

Fera estimate the social cost of this ban to be approximately £44,000 over the 10 year period. Apportioning this cost on the basis of Scotland's share of the value of potato production in the UK, the cost to Scotland would be £12,320 over the 10 years.

In addition to the costs identified above, there will be common costs for all the options for the Scottish Government for undertaking the assessments of potatoes before potatoes from these countries are imported to Scotland. It is estimated that each test costs around £160 to run. Although the total cost to the Scottish Government will rise depending on the scale of imports from these countries, the overall cost is unlikely to be significant.

Furthermore, Scottish firms will choose to import potatoes from other countries to meet any shortfall in domestic supply based on both the price and quality of the potato. While there are long-term benefits from preventing infected potatoes into Scotland (in terms of spreading the disease) there may be short-term costs to firms in terms of the delay in securing imports and they may need to pay slightly higher prices for potatoes from other countries.

Scottish Firms Impact Test

No face to face interviews were conducted with stakeholders. But all responded to the written communication with Scottish Government voicing their unequivocal support for the action proposed.

- **Competition Assessment**

The proposal will affect all firms irrespective of their size equally. It will not limit suppliers' ability to compete with each other but may mean that they have to give consideration to the

source of their supplies.

- **Test run of business forms**

  No new forms for businesses in Scotland.

Legal Aid Impact Test

None conducted.

Enforcement, sanctions and monitoring

RPID will be notified 48 hours in advance of arrival of the potatoes and this will facilitate risk assessment based action. RPID will monitor implementation. Non-compliance will result in issue of a statutory notice under the Plant Health (Order) (Scotland) 2005 requiring relevant information. Ultimate sanction could be prosecution and business subject to level 5 fine.

Implementation and delivery plan

By SSI (subject to negative resolution procedure – The Plant Health (Scotland) (Amendment) Order 2013) as soon as possible – expected by 9 February 2013.

Post-implementation review

There will an annual review of the notification requirement.

Summary and recommendation

While all the options are estimated to have a positive net benefit and there is little difference between the size of the net benefits for each option, the balance of evidence suggests Option 2 is preferable. Option 2 – Extend existing notification for Poland to Romania. Spain and Portugal. Require Polish potatoes to be accompanied by a certificate issued by Polish authorities.

- **Summary costs and benefits table**

Table 1: Annual Costs and Benefits for Each Option (taken over a 10 year period, discounted at 3.5% and based on 2012 prices)

	Benefits (£)	Cost (£)	Net Benefit (£)
Option 1: Do nothing	716,800	980	715,820
Option 2: Legislate	718,200	252	717,948
Option 3: Ban	717,360	1,232	716,128

Declaration and publication

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

Signed:

Date: January 2013

Richard Lochhead, Cabinet Secretary for Rural Affairs and the Environment

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