REGULATORY IMPACT ASSESSMENT

1. Title of the proposed provision


2. Purpose and intended effect of measure

(i) The objective

2.1 The objective of the legislation is to implement the Directive and lay down measures for the control of classical swine fever (CSF) in the event of an outbreak in Great Britain. Most of the measures are already covered in existing legislation. The new Orders will consolidate these with the some further new provisions of the Directive. Similar legislation will be made in Northern Ireland.

The key provisions of the Directive, which are implemented by this legislation, are:

- Notification to the competent authority of the Member State if CSF is suspected.
- Imposition of movement controls on suspicion of disease.
- Where disease is confirmed, the imposition of a protection zone (minimum 3km) and a surveillance zone (minimum 10km) around the infected premises.
- Eradication of the disease by slaughter of infected and contact animals.
- Controls for feral pigs.

2.2 The proposed Orders prohibit the routine vaccination of pigs against CSF in accordance with the Directive. However, the Directive caters for the use of vaccines including marker vaccines under certain specified circumstances, e.g. when disease is spreading rapidly. There are two types of vaccine available for use in the European Union: conventional vaccines which have been used in the past during campaigns in Europe to eradicate this disease, and a new generation of vaccine (marker vaccines) which have now been licensed for use throughout the European Union. By using the latter vaccines it should be possible to differentiate between an animal which is infected, one which is vaccinated and one which is both infected and vaccinated. We would want to direct the type of vaccine used should such a control measure be needed and would do so by means of emergency legislation at the time.

(ii) The background

2.3 Classical swine fever is a highly contagious viral disease of pigs. It is notifiable. It persisted in this country until it was eradicated in 1966. Since then there have been a few cases of the disease in 1971 and 1986 and a far more serious outbreak in 2000 affecting 16 farms in East Anglia. In Europe, there was a major outbreak in the Netherlands in 1997-8 infecting 429 farms in total. There have been lesser outbreaks of CSF in other European countries since then. In 2002 a total of 49 cases were recorded in Bulgaria, France, Germany, Luxembourg, Romania, Slovakia and Spain.
2.4 Council Directive 80/217/EEC on the control of CSF has been replaced by Directive 2001/89/EC. The later Directive extends controls for CSF to include vaccination under certain conditions as well as slaughter. It also introduces controls for feral pigs.

At present, rules for the control of CSF are contained in:
The Swine Fever Order 1963 as amended
The Swine Fever (Movement Restrictions) Order 1956 as amended
The Swine Fever (Movement Restriction Area) Order 2000 as amended.

These Orders do not fully implement the new provisions of Directive 2001/89/EC.

(iii) Risk Assessment

2.5 Although current legislation was effective in controlling the outbreaks in 1986 and 2000, these were relatively small. Studies have shown that in large outbreaks of the disease, such as occurred in the Netherlands in 1997, vaccination may well have hastened eradication of the disease, reduced the disease control costs and the number of pigs slaughtered.

2.6 Following the CSF outbreak in England in 2000, measures have been taken to prevent a similar occurrence. Feeding catering waste to pigs, which was believed to be the cause, has been banned both by EU legislation and domestic regulations. However, the threat of disease entering the country is still present albeit low.

3. Options

i) Option 1: Do nothing. The current Classical Swine Fever Order 1963 would remain and would be subject to amendment in the face of an outbreak if further powers were required.


4. Benefits

Business sectors affected

4.1 The proposed legislation will have no effect on businesses unless CSF is suspected or diagnosed in this country. A suspect case would affect the business concerned and any others in a temporary control zone, if that is declared. Once disease has been confirmed, any of those involved in keeping pigs (and other livestock if they were kept on the same holding as pigs) would be affected if their holding was located in the protection or surveillance zone around an infected premises. Farms without CSF and ancillary industries can also be affected, for example, movement restrictions could mean abattoirs find it difficult to procure supplies and lose contracts. Meat sales may also be affected unless there is a clear message that the disease is not transmitted to humans and that meat from vaccinated animals is safe.
4.2 The latest available information (as at June 2002) shows that there are 3,037 pig breeding businesses and 4,359 pig fattening businesses in England over 8 ESU\(^1\). Statistical data from “Agriculture in the United Kingdom 2002” shows provisional total pig numbers in England at 4.63 million (5.44 million in 2000).

Scotland has 241 pig breeding businesses and 336 pig fattening businesses over 8 ESU (June 2002). The total number of pigs in Scotland is 526,276.

The figures from the June 2002 census show Wales to have around 7,900 breeding and 36,500 fattening pigs included in 921 holdings (of all sizes). 410 holdings are over 8 ESU.

**Benefits to business**

**Options 1 and 2** – no benefits. Member States are compelled by EU law to implement Directives, which gives little room for flexibility. Failure to implement would also be contrary to the Government’s specific commitment to prepare fully for disease outbreaks. These options are not therefore considered further.

**Option 3** allows for additional control measures as required by the Directive to be put in place to provide optimum control should an outbreak occur.

The benefits of being able to control the disease quickly depend on the scale of the outbreak and are difficult to quantify. The likely benefits are described below.

**i) Benefits to the public sector**

Reduced public spending on compensation for animals slaughtered. Where slaughter is required by the Secretary of State/Scottish Ministers, owners must be compensated as provided for by section 31 of the Animal Health Act 1981. For example, the compensation costs for 74,793 pigs slaughtered in East Anglia in 2000 amounted to £4,392,101.

**ii) Benefits to consumers**

Consumers are likely to be concerned about the effect of animal diseases on meat and meat products and their personal health, even if such concerns are unfounded. A clearly defined disease control strategy supported by the necessary legislation will offer reassurance. Rapid control of an outbreak will also minimise any disruption of the supply of pig meat and products to local markets.

**iii) Benefits to business**

A controlled outbreak will minimise losses to the farming and related industries. The cost of a controlled outbreak of CSF on 16 farms has been estimated where quantifiable at over £2m for pig keepers. If the disease began to escalate and reached worst case proportions (for example, affecting 429 farms and continuing over a period of time), the cost (again where quantifiable) would be over £42m including costs of long term movement restrictions for non-infected pig farmers.

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\(^1\)European Size Units, which is a measure of the economic size of holdings in terms of the value they add to variable inputs and thus differs from physical measures, such as area, which take no account of the intensity of production. Note that a business may appear in more than 1 category.
within the protection and surveillance zones. Judicious use of vaccination by emergency legislation may prevent escalation (See the Annex).

Benefits will also include:

- reduction in the time that restrictions are imposed on export of pigs and pig products. An export ban on live animals would affect those traders and farmers involved in exporting pigs and their germplasm, as well as transporters (road haulage and shipping). The UK export trade in live pigs is worth some £4m a year. The export trade in pig meat, should an export ban be extended, is worth some £100m a year (figures include bacon). An export ban leads to lower prices for all producers, not just those in restricted areas. The Meat and Livestock Commission estimate that for every 10,000 tonnes decrease in annual imports, the producer price would decline by 0.5p/kg dead weight.

- reduced losses incurred by related industries affected by animal disease, eg markets, shows, hauliers, slaughterhouses etc;

- less stress and financial hardship on pig farm and related industry personnel.

iv) Environmental benefits

A controlled outbreak limits the number of pigs to be slaughtered and disposed of and reduces the number of farms that need to be cleansed and disinfected and hence reduce the environmental effects of disposing of the waste water, disinfectants etc.

v) Social benefits

A controlled outbreak limits the stress and psychological trauma on pig farmers and others in the pig industry. This includes those whose farms are infected and those who are worried that infection may reach their farm or that their businesses will be affected.

vi) Risks/assumptions associated with benefits identified

As already explained, the benefits depend on the size and nature of the disease outbreak. We have looked at two scenarios to help quantify benefits and costs to industry and made a number of assumptions. These are detailed in the Annex.

5. Costs

i) compliance costs to business

Compliance costs are considered for Option 3.

a. Policy costs

There would be no direct costs to business unless there was a suspected or confirmed case of CSF. Controls over suspect CSF cases are of limited duration and would have relatively little impact. It should be noted that compensation is
payable for those animals which are compulsorily slaughtered for CSF disease control purposes; compensation would also be paid for vaccinated animals if they were compulsorily slaughtered. However, compensation is not payable for consequential losses or indirect losses to businesses incurred during an outbreak.

Details of estimated costs for typical businesses in a controlled outbreak and in a worst case scenario are set out in the Annex. It should be noted that current legislation and administrative instructions already impose costs on businesses in the event of a disease outbreak and these would continue under the proposed legislation. The proposed legislation does introduce some new costs, particularly should an emergency vaccination programme be introduced (although the majority of these costs would be borne by government). Examples of costs to industry would be assistance with labour and equipment to help with vaccination on the farm.

b. Implementation costs

There are no significant new implementation costs. The website will be updated to include details of the new legislation. Changes will also be publicised to key industry representatives, Defra staff and staff in devolved administrations.

ii) other costs

a. costs to consumers

There would be no costs to consumers.

b. costs to the public sector

An outbreak of CSF would incur costs for the public sector. The amount would depend on the nature of the outbreak and have not been quantified. Such costs include the following:

- Compensation paid under the Animal Health Act where animals are slaughtered by direction of the Secretary of State. The Government would dispose of the animals slaughtered.
- The State Veterinary Service would carry out extensive surveillance and monitoring of the infected holdings and protection and surveillance zones over the time that restrictions were in place and undertake epidemiological tracings. Laboratory costs for testing diagnostic and surveillance samples.
- The Government would also incur administrative costs for such matters as implementing Declaratory Orders, running disease control centres and setting up a communications programme.
- Staff overtime costs, travel and subsistence costs (including hotels for staff on detached duty). Possible additional pay costs for extra veterinary, technical and administrative staff.
- Cost of equipment to carry out cleansing and disinfection of farms, where Government Departments are responsible for payment.
- Emergency vaccination programme, if implemented. These costs might be offset by a reduction in disposal costs.
c. expected environmental and social costs

There would be costs in disposing of carcases and other contaminated materials and treating waste water. There may be increased pressure on social services and costs in setting up helplines for farmers, depending on the severity of the outbreak.

iii) issues of equity and fairness including distributional issues

The fundamental principle underlying the Directive is the need to control and eradicate CSF. The Directive applies equally to all Member States. The legislation in England, Scotland and Wales would apply to all keepers of pigs or related industries affected by the disease or within a protection or surveillance zone. The proposed measures would be more stringent in infected areas than in uninfected areas; however, in general the same rules would apply to all infected areas and to all uninfected areas.

6. Consultation with small business: the ‘Small Firms Impact Test’

In the event of a CSF outbreak, small businesses, predominantly pig farmers, are likely to incur costs. During consultation, we spoke to industry representatives to identify likely implications and costs.

7. Competition assessment

The competition filter looks at the impact a proposed regulation has on various sectors of an industry. It tries to ensure that no firm or type of firm gains or loses disproportionately as a result of introducing new regulations. Taking Great Britain as a whole, no individual pig farm controls more than 10% of the industry nor do the top 10 firms control 50% of the industry. The proposals will not have a negative competitive impact unless the disease is confirmed. The new legislation will apply equally to all new and existing businesses within a protection or surveillance zone and are similar to existing requirements for other serious diseases of livestock.

The Competition Filter test

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
<th>Yes or No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1: In the market(s) affected by the new regulation, does any firm have more than 10% market share?</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Q2: In the market(s) affected by the new regulation, does any firm have more than 20% market share?</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Q3 In the market(s) affected by the new regulation, do the three largest firms together have at least 50% market share?</td>
<td></td>
<td>No</td>
</tr>
</tbody>
</table>
Q4: Would the costs of the regulation affect some firms substantially more than others?  Yes*

Q5: Is the regulation likely to affect the market structure, changing the number or size of firms?  No

Q6: Would the regulation lead to higher set-up costs for new or potential firms that existing firms do not have to meet?  No

Q7: Would the regulation lead to higher ongoing costs for new or potential firms that existing firms do not have to meet?  No

Q8: Is the sector characterised by rapid technological change?  No

Q9: Would the regulation restrict the ability of firms to choose the price, quality, range or location of their products?  Yes*

Each "yes" answer indicates a possible competition concern.

* Notes: Q4 - firms would be affected differently depending on whether they were an infected holding, in the infected area or outside the area altogether. Q9 - it is possible that there would be a short-term impact on the ability of affected firms to choose the price, quality, range or location of their products while infected area restrictions were in force - for example, animals could not be moved for sale out of an infected area, although an exemption may be granted under certain conditions. The Directive also stipulates minimum time limits before an infected premises can be restocked with animals. However, these restrictions are necessary to comply with EU law and to halt the spread of disease.

8. Enforcement and Sanctions

Enforcement in Great Britain will be by the Local Authorities in conjunction with the State Veterinary Service. This is in line with enforcement duties for other notifiable diseases.

9. Monitoring and Review

The legislation will be reviewed as part of contingency exercises.

10. Consultation

i) Within Government

Agriculture Departments in England, Scotland, Wales and Northern Ireland have worked closely in drawing up the legislation.

ii) Public consultation
Consultation took place on the draft Directive. In addition, industry representatives were invited to comment on the draft Order and RIA at a meeting held to discuss implementation of the Directive. The MLC provided information for the RIA.

11. Summary and Recommendations

Great Britain is obliged to implement this EU Directive and option 3 is the only option open to us. Existing legislation does not cover all the requirements of the Directive.

12. Declaration

I have read the regulatory impact assessment and I am satisfied that the benefits justify the costs.

Signed

Date

Minister's name

Title

Department

Contact point

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Classical Swine Fever outbreak scenarios and related costs

Introduction

1. The costs of an outbreak of Classical Swine Fever (CSF) would depend on the nature and scale of the outbreak. The range could extend from an isolated case in imported animals to an outbreak that persisted. To demonstrate the sort of cost that might be involved beyond zero impact, we have provided estimates for two scenarios, a relatively controlled outbreak in East Anglia and a much larger outbreak in Humberside, an area of high pig density. Directive 2001/89 allows for control of the disease by vaccination – the costs of vaccinating to prevent the disease spreading further have therefore been included for the larger outbreak.

2. The scenarios look at a range of costs that keepers can face as a result of the control arrangements imposed by the proposed legislation. It does not consider costs faced by the supply industries or other parts of the food chain such as abattoirs, food processors or distributors. It also does not cover the compensation arrangements for animals slaughtered under statutory disease control provisions.

3. The costs which would occur as a result of animal disease controls will depend on the circumstances of a particular site. Over the period of movement restrictions (minimum of six to eight weeks if only one farm infected) the producer must continue to look after the welfare of the pigs. Young pigs will continue to grow. The farmer may well end up looking after larger pigs which the farm was never intended to house due to the movement restrictions. In the actual situation the producer must make a decision on the rate of feeding and this will depend on a number of factors including the current size and condition of the pigs, the expectations which the producer has concerning the length of the restriction period and the genetic makeup of his stock. The figures produced in this annex should therefore be viewed as illustrative.

Controlled outbreak scenario

4. We have assumed that:

- 16 farms are infected in East Anglia; pigs on the infected premises are slaughtered and compensation paid. Dangerous contacts on 13 farms (including pig premises within 1 km) are also slaughtered.
- 3 infected areas are declared which include a total of 98 further pig farms;
- each farm has an average of 2,500 pigs;
- restrictions are in place for a total of 16 weeks but farmers can resume earning income on pigs going to slaughter after 30 days. We have assumed 60% would be destined for slaughter.
- initially pigs destined for slaughter under movement restrictions will gain weight and value. After the first two weeks, the costs of maintaining a pig are greater than the increase in value. The pig gradually decreases in value. The total loss of each animal over 30 days is estimated at £12.20 per head;
- breeding stock can not be moved. Sows must be fed but are not producing piglets for sale. Restrictions would also apply to semen and other germplasm;
- on infected premises trading resumes 80 days after disease has been confirmed. This period allows time for checking sentinel pigs;
- vaccination of pigs would not be necessary unless there was evidence that the disease was out of control.

<table>
<thead>
<tr>
<th>Scenario 1: Controlled outbreak: (East Anglia): estimated costs for pig keepers</th>
<th>Implementation Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Infected premises</td>
<td>£</td>
</tr>
<tr>
<td>Cleansing and disinfection on 16 holdings plus 13 contact holdings @ £3,000 per holding</td>
<td>- 87,000</td>
</tr>
<tr>
<td>Keeping records for CSF (1 hour @ £6.72 per hour)</td>
<td>- 195</td>
</tr>
<tr>
<td>Movement of animals to isolation on 29 holdings (one off movement taking 1 hour @ £6.72 per hour)</td>
<td>- 195</td>
</tr>
<tr>
<td>Waiting time (80 days) – net loss of income(^2)</td>
<td>- 160,805</td>
</tr>
<tr>
<td>2. Protection and surveillance zones Non-infected farms under restrictions</td>
<td>£</td>
</tr>
<tr>
<td>98 non-infected farms with average 2,500 pigs per holding</td>
<td></td>
</tr>
<tr>
<td>Loss of value of pigs destined for slaughter (60% of total) under restrictions estimated at £12.20 per pig(^3).</td>
<td>- 1,793,400</td>
</tr>
<tr>
<td>Loss of income from movement restrictions on breeding pigs.</td>
<td>negligible(^4)</td>
</tr>
<tr>
<td>Loss of income from movement restrictions on germplasm.</td>
<td>negligible(^5)</td>
</tr>
</tbody>
</table>

\(^2\) based on average occupier’s net income for 2000/01
\(^3\) ESD paper on costs to farmers of animal disease controls
\(^4\) Estimate of 0.114% moves between Nov.2002 and April 2003 for breeding purposes.
\(^5\) 39 export health certificate applications received for 2003. 1201 semen straws exported. No ova or embryos.
Worst case scenario

5. We have assumed that:

- 429 farms are infected or have been in contact with infected animals in Humberside;
- the infected area covers 60km. A further 371 pig farms fall within this area;
- each farm has an average of 3,300 pigs;
- the protection and surveillance zones would remain in force for 12 months;
- farmers in the infected area can resume earning income from pigs destined for slaughter after 30 days. Where, because of further outbreaks of CSF, a protection and surveillance zone is maintained beyond 30 days, the Directive allows movements of pigs off a holding to slaughter subject to certain conditions. We have assumed 60% of pigs are destined for slaughter. The total loss of each animal over the initial 30 day period is estimated at £12.20 per head;
- breeding stock cannot be moved. Sows must be fed but are not producing piglets for sale. Restrictions would also apply to semen and other germplasm;
- pigs in a vaccination zone are vaccinated to prevent the disease spreading. Emergency vaccination programme paid for by Defra. Vaccinate to live policy. Pigs on the infected or contact premises are slaughtered and compensation paid;
- there would be losses from the processing requirements for pig meat from vaccinated animals. As there is a limited market in the UK for heat-treated pig meat, outlets would be severely curtailed;
- on infected premises trading (within the parameters of the infected area) resumes 80 days after disease has been confirmed. This period allows time for checking sentinel pigs.
### Scenario 2: Worst case: (Humberside): estimated costs for pig keepers

<table>
<thead>
<tr>
<th>Description</th>
<th>Implementation costs (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Infected premises</strong></td>
<td></td>
</tr>
<tr>
<td>Cleansing and disinfection on 429 holdings @ £5,000 per holding</td>
<td>- 2,145,000</td>
</tr>
<tr>
<td>Keeping records for CSF (2 hours @ £6.72 per hour)</td>
<td>- 5,766</td>
</tr>
<tr>
<td>Movement of animals to isolation on 429 holdings (one off movement taking 2 hours @ £6.72 per hour)</td>
<td>- 5,766</td>
</tr>
<tr>
<td>Waiting time (80 days) - net loss of income&lt;sup&gt;6&lt;/sup&gt;</td>
<td>-2,378,805</td>
</tr>
<tr>
<td><strong>Protection and surveillance zones</strong></td>
<td></td>
</tr>
<tr>
<td>371 non-infected farms under restrictions – average 3,300 pigs per holding</td>
<td></td>
</tr>
<tr>
<td>Loss of value of 60% pigs destined for slaughter estimated at £12.20 per pig&lt;sup&gt;7&lt;/sup&gt;</td>
<td>- 8,961,876</td>
</tr>
<tr>
<td>Loss of value of pigs destined for slaughter due to heat treatment of meat (estimated at £35.70 per pig) and loss of export markets (£3.50 per pig)</td>
<td>- 28,795,536</td>
</tr>
<tr>
<td>Loss of income from movement restrictions on breeding pigs</td>
<td>- negligible&lt;sup&gt;8&lt;/sup&gt;</td>
</tr>
<tr>
<td>Loss of income from movement restrictions on germplasm.</td>
<td>- negligible&lt;sup&gt;9&lt;/sup&gt;</td>
</tr>
<tr>
<td>Farm costs of rounding up and restraining 1,225,000 pigs to enable vaccination to take place - estimated at 1 minute per pig @ £6.72 per hour</td>
<td>- 137,200</td>
</tr>
</tbody>
</table>

Exotic Diseases Team – July 2003

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<sup>6</sup> based on average occupier’s net income for 2000/01

<sup>7</sup> ESD paper on costs to farmers of animal disease controls

<sup>8</sup> Estimate of 0.114% moves between Nov.2002 and April 2003 for breeding purposes.

<sup>9</sup> 39 export health certificate applications received for 2003. 1201 semen straws exported. No ova or embryos.