



EUROPEAN COMMISSION
HEALTH & CONSUMERS DIRECTORATE-GENERAL

Unit 04 - Veterinary Control Programmes

SANCO/10298/2009

*Programmes for the eradication, control and monitoring of certain
animal diseases and zoonoses*

**Control programme of Salmonella in breeding, laying
and broiler flocks (*Gallus gallus*) and in flocks of
turkeys (*Meleagris gallopavo*)**

Approved* for 2010 by Commission Decision 2009/883/EC

United Kingdom

* in accordance with Council Decision 2009/470/EC

ANNEX II

Standard requirements for the submission of national programmes for the control of Salmonellosis (zoonotic Salmonella) as referred to in Article 1(b)

Part A

General requirements for the national salmonella control programmes

- (a) state the aim of the programme

To reduce or maintain the low prevalence of *Salmonellas* of public health significance in fattening and adult breeding turkey flocks on holdings in the UK, at least to the target levels set out in Regulation (EC) No 584/2008 which is a maximum percentage of fattening and adult breeding turkey flocks¹ remaining positive of *Salmonella* Enteritidis and *Salmonella* Typhimurium to 1% or less by 31 December 2012.

- (b) demonstrate the evidence that it complies with the minimum sampling requirements laid down in part B of Annex II to Regulation (EC) No 2160/2003 of the European Parliament and of the Council² indicating the relevant animal population and phases of production which sampling must cover

¹ Flock means all poultry of the same health status kept on the same premises or in the same enclosure and constituting a single epidemiological unit; in the case of housed poultry, this includes all birds sharing the same airspace.

² OJ L 325, 12.12.2003, p. 1.

1. General

1.1. A short summary referring to the occurrence of the salmonellosis [zoonotic salmonella] in the Member State with specific reference to the results obtained in the framework of monitoring in accordance with Article 4 of Directive 2003/99/EC of the European Parliament and of the Council¹, particularly highlighting the prevalence values of the salmonella serovars targeted in the salmonella control programmes.

Salmonella has been recognised as an important zoonotic pathogen for many years. *Salmonella* Enteritidis and *Salmonella* Typhimurium have accounted for the majority of cases of human salmonellosis since the 1980s and have consistently been the most commonly implicated pathogens in general outbreaks of food-borne disease.

The results of the UK *Salmonella* control programme are reported annually to the Commission and are published by the European Food Safety Authority (EFSA) in the Community Summary Report on Trends and Sources of Zoonoses, Zoonotic Agents, Antimicrobial resistance and Foodborne outbreaks in the European Union.

A European Union-wide baseline survey was carried out to determine the prevalence of *Salmonella* in commercial turkey holdings with at least 250 birds for breeding turkeys and with at least 500 birds for fattening turkeys. The reports for the survey which took place between October 2006 and September 2007 are available on the EFSA website at:

http://www.efsa.europa.eu/cs/BlobServer/Report/zoon_report_ej134_finturkeys_en.0.pdf and
http://www.efsa.europa.eu/EFSA/efsa_locale-1178620753812_1211902151685.htm

The reports submitted by the UK for the analysis are available on the Defra website at <http://www.defra.gov.uk/animalh/diseases/zoonoses/trends-sources.htm>

A sharp rise in the incidence of human salmonellosis in the UK was observed in the mid 1980s. This was largely due to an increase in *S. Enteritidis* phage type 4 (PT 4) infections, which reached a peak in the early 1990s. The incidence of salmonellosis reached a peak in the early 1990s with over 30,000 cases recorded and remained broadly stable until 1998 when a significant fall was recorded throughout most of the UK which continued for the next two years. Since then the general decline has continued, albeit less sharply.

¹ OJ L 325, 12.12.2003, p. 31.

In 2007 there were 112 reported incidents of *Salmonella* spp. in turkeys in the UK, detected as a result of voluntary monitoring carried out by the industry and private veterinarians. The most commonly reported serotypes were S. Derby (37 incidents) and S. Kottbus (24 incidents) which comprised 33.0% and 21.4% of total reports respectively. There were 12 incidents of S. Typhimurium but no S. Enteritidis reported from turkeys during the year. When S. Enteritidis or S. Typhimurium is isolated from a turkey flock, advice is given to the operators on control of *Salmonella*.

There is currently no statutory monitoring programme for *Salmonella* in turkey flocks in the UK and all samples are from voluntary monitoring. It is a statutory requirement for all laboratories which isolate *Salmonella* from a flock of turkeys or its environment to report positive findings and supply the isolate to the National Reference Laboratory (NRL) for *Salmonella* – the Veterinary Laboratories Agency in Great Britain or to Agri-Food and Biosciences Institute in Northern Ireland. The isolates are serotyped, phage-typed, where appropriate, and tested for sensitivity against a panel of 16 antimicrobials in the monitoring programme by the NRL, which provides information on trends. This information is recorded and analysed. The number of reports received depends on the level and sensitivity of monitoring which is undertaken by the producers. The reports provide useful information on the serovars which are most common in poultry, and indicate trends.

Since monitoring for *Salmonella* in turkeys is done on a voluntary basis, it is not possible therefore from these figures to establish the prevalence of *Salmonella* in flocks of turkeys, but the data does give valuable information on the serotypes which are most commonly found in turkeys, and the trends in these from year to year. A better measure of the prevalence was obtained from the survey carried out to set a baseline for *Salmonella* in turkeys according to the Commission Decision (EC) No 2006/662/EC

1.2. The structure and organization of the relevant competent authorities. Please refer to the information flow between bodies involved in the implementation of the programme.

The Competent Authority for this National Control Programme in respect of EC Regulation 2160/2003 for the control of *Salmonella* in flocks of fattening and rearing turkey flocks is:

Department for Environment, Food and Rural Affairs, Nobel House, 17 Smith Square, London, SW1P 3JR.

- In Northern Ireland the operation of the Control Programme is under Department of Agriculture and Rural Development (DARD).
- The programme in Wales operates with the collaboration of the Welsh Assembly.
- The programme in Scotland operates with the collaboration of the Scottish Government.

The Competent Authority in respect of Regulation (EC) No 882/2004 on official controls performed to ensure the verification of compliance with the main body of the feed and food law, is the:

• Food Standards Agency, Aviation House, 125 Kingsway, London, WC2B 6NH.

The Food Standards Agency (FSA) is an independent Government department set up by an Act of Parliament in 2000 to protect the public's health and consumer interests in relation to food. The Agency is led by a Board that has been appointed to act in the public interest and not to represent particular sectors. Board members have a wide range of relevant skills and experience. The Food Standards Agency is accountable to Parliament through Health Ministers, and to the devolved administrations in Scotland, Wales and Northern Ireland for its activities within their areas. Further information can be found at www.food.gov.uk

- Defra and the equivalent bodies in the devolved administrations are the central competent authorities for the animal health and welfare elements of Regulation (EC) No 882/2004.

1.3. Approved laboratories where samples collected within the programme are analysed.

Laboratories may also be authorised to test samples taken under the Animal By-Products Regulations 2005 which makes provision for the administration and enforcement of Regulation (EC) No 1774/2002 of the European Parliament and of the Council laying down health

rules concerning animal by-products not intended for human consumption (OJ No. L273, 10.10.2002, p1). It requires operators of rendering plants to test for *Salmonella* in samples of rendered animal protein that is intended for use in animal feedingsuffs. The feeding of processed animal protein to farmed animals is also regulated by the TSE Regulations 2002 (as amended) which makes provision for administration and enforcement of certain Community legislation in relation to TSEs. Under the terms of these Regulations only fishmeal tested under the Animal By-Products Regulations is permitted for feeding to poultry.

1.4. Methods used in the examination of the samples in the framework of the programme.

Samples taken by operators and samples taken as official controls are prepared and tested in accordance with the requirements of the Annex in Commission Regulation (EC) No 584/2008 using the method recommended by the Community Reference Laboratory for *Salmonella* in Bilthoven, Netherlands. The method is described in the current version of Annex D of ISO 6579 (2002): "Detection of *Salmonella* spp. in animal faeces and in samples of the primary production stage". A semi-solid medium (modified semi-solid Rappaport-Vassiladis medium, MSRV) is used as the single selective enrichment medium. At least one isolate will be serotyped according to the Kaufmann-White scheme. Isolates of *S. Enteritidis* and *S. Typhimurium* will also be phage typed. Sensitivity to a panel of 16 antimicrobials will be determined.

1.5. Official controls (including sampling schemes) at fecd, flock and/or herd level.

In accordance with Regulation (EC) No 584/2008 the Competent Authority will select each year at random:

1 All flocks on at least 10% of holdings with more than 500 fattening turkeys.

1 All flocks on least 10% of holdings with at least 250 adult breeding turkeys between 30 and 45 weeks of age, but including all holdings where *S. Enteritidis* or *S. Typhimurium* has been detected during the previous 12 months and all holdings with elite, great grandparents and grandparent breeding turkeys. This sampling may also take place at the hatchery

1 Each time the Competent Authority considers it necessary

The random selection will take into account the size of holding and geographical distribution. The Competent Authority or its agent will select one flock at random on the holding. In the case of fattening turkeys the flock should be within 3 weeks of going for slaughter. The selected flock will be sampled in accordance with the Annex in Regulation (EC) No 584/2008.

1.6. Measures taken by the competent authorities with regard to animals or products in which the presence of *Salmonella spp.* have been detected, in particular to protect public health, and any preventive measures taken, such as vaccination.

When a turkey flock is suspected of being infected with *Salmonella* Enteritidis or *Salmonella* Typhimurium the flock will be investigated. The flock is suspected of being infected when *S. Enteritidis* or *S. Typhimurium* is isolated from samples, carried out privately or as required by either the operator or the Competent Authority as detailed in the Annex to Regulation (EC) No 584/2008. Tissue/organs may be taken from birds as part of the investigation of clinical disease by the private veterinarian; these cases will be discussed and additional follow up investigation carried out as appropriate, along with advice on *Salmonella* control. Neck skins are sampled at abattoirs under Regulation (EC) No 1441/2007. The potential for cross contamination make the results from abattoir sampling difficult to interpret in relation to a particular flock. During 2009 consideration will be given to the value of reporting the results of *Salmonella* monitoring at the abattoir to the flock owners where this is possible. Isolates of *S. Enteritidis* and *S. Typhimurium* will be examined to determine if they are vaccine strains according to the manufacturer's specification. If vaccine strains are confirmed in samples the flock will not be classed as positive for the purposes of establishing the progress towards the target. Although vaccines against *Salmonella* are not currently used in meat turkeys in the UK, *Salmonella* Typhimurium vaccine is sometimes used in breeding flocks. Also, this practice may change in the future if suitable vaccines are developed.

When a breeding flock of turkeys is suspected of being infected with *Salmonella* Enteritidis or *Salmonella* Typhimurium the flock will be placed under official control by the Competent Authority. This applies to breeding flocks from day old through to end of production. If the flock is in the laying phase no further eggs may be sent for hatching and no birds or hatching eggs may leave the holding, except under licence issued by the Competent Authority. When infection with *Salmonella* Enteritidis or *Salmonella* Typhimurium has been confirmed, the owner is required to have the birds slaughtered in accordance with Community legislation on food hygiene. Infection with *S. Typhimurium* and *S. Enteritidis* detected in operator samples may be confirmed by samples taken by the Competent Authority as detailed in the Annex, paragraph 2 of Regulation (EC) No 584/2008. This requirement will be assessed on a case by case basis. *Salmonella* Enteritidis or *Salmonella* Typhimurium detected from official sampling will not be confirmed

The owner or person responsible for the flock will be required to clean and disinfect the building where the infected birds were kept, and provide evidence to the Competent Authority that the cleaning and disinfection has been satisfactory. Re-stocking may not take place

until the cleaning and disinfection has been carried out. Hatching eggs present in the hatchery from the time the flock was suspected to be infected are removed and destroyed.

The operator/owner in consultation with his/her veterinarian may consider vaccination of the flock against *Salmonella* with a product which has a marketing authorisation

1.7. National legislation relevant to the implementation of the programmes, including any national provisions concerning the activities set out in the programme.

Zoonoses Order 1989 and in Northern Ireland, the Zoonoses Order (Northern Ireland) 1991 – requires the person responsible in all laboratories to report the isolation of a *Salmonella* and to provide a sub-culture on request to the National Reference Laboratory for *Salmonella*

National legislation (The Control of *Salmonella* in Turkeys Poultry Order) will be introduced. This legislation will require operators to take samples from the turkey flocks as specified in Regulation (EC) No 584/2008, and to keep records of results, and details of flocks sampled, etc

1.8. Any financial assistance provided to food and feed businesses in the context of the programme.

Currently, when *Salmonella* Enteritidis or *Salmonella* Typhimurium is confirmed in a flock the owner is compensated. Compensation is based on the costs incurred in rearing the bird to a certain age, less any income which has been derived from the bird (e.g., hatching eggs). A scale of compensation is published on a quarterly basis.

2. Concerning food and feed businesses covered by the programme

2.1. The structure of the production of the given species and products thereof.

2.2. The structure of the production of feed

A number of Competent Authorities are involved in feed law policy and its enforcement. The Food Standards Agency deals with the composition and marketing of animal feeds (including undesirable substances, additives and labelling); Defra (Veterinary Medicines Directorate VMD) which deals with zotechnical and medicated feeds; and Defra Animal Health and veterinary group, or its equivalent in the devolved administrations, covers processed animal proteins and *Salmonella*. Many low moisture feeds, in particular those derived from cereals and oilseeds processing industries are widely used in the manufacture of compound feeds and blends. Soya bean and rapeseed meals are major sources of protein. The Animal By-Products Regulations 2005 requires operators of rendering plants to take samples of rendered animal protein (fishmeal) that is intended for use in animal feedingsuffs. The samples must then be tested at an approved laboratory for the presence of *Salmonella*. Only a small number of feed compounders operate on a national scale, manufacturing and distributing compound livestock feeds on a nation-wide basis. Other feed compounders operate on a regional basis. Some feed compounders may be farmer controlled or co-operatives. A number of companies manufacture feeds as part of an integrated process of poultry and egg production.

2.3. Relevant guidelines for good animal husbandry practices or other guidelines (mandatory or voluntary) on biosecurity measures defining at least:

- hygiene management at farms,
- measures to prevent incoming infections carried by animals, feed, drinking water, people working at farms, and
- hygiene in transporting animals to and from farms.
- Hygiene management at farms

- Measures to prevent incoming infections carried by animals, feed, drinking water, people working at farms, and
 - Hygiene in transporting animals to and from farms
- A number of voluntary guides have been produced in collaboration with representatives of the industry on the control of Salmonella in poultry production.

Relevant ones are listed below, and some are also available on the website at:
<http://www.defra.gov.uk/animal/diseases/zoonosis/salmonella-cop.htm>

Code of Practice For The Prevention and Control of Salmonella –

In Commercial Egg Laying Flocks. Ref No PB 2205

2. Codes of Practice For The Control of Salmonella –

For The UK Fish Meal Industry Ref No PB 2203

3. Code of Practice For The Control of Salmonella –

In The Production of Final Feed For Livestock In Premises Producing Less Than 10,000 tonnes Per Annum. Ref No 2201

4. Code of Practice For The Control of Salmonella –

In the Production of Final Feed for Livestock In Premises Producing Over 10,000 Tonnes Per Annum. Ref No 2200

5. Code of Practice For the Prevention and Control of *Salmonella* –
In Chickens Reared For Meat on farm Ref No PB7323
http://www.defra.gov.uk/animalh/diseases/zoonoses/zoonoses_reports/salmonellainchick.pdf
6. Code of Practice For The Control of *Salmonella* –
During the Storage, Handling and Transport of Raw Materials Intended For Incorporation Into, or Direct Use As, Animal Feedingstuff. Ref No 2202
7. Code of Practice For The Control of *Salmonella* –
In Animal By-products Rendering Industry. Ref No 2199
8. Code of Practice For The Control of *Salmonella* –
For The Prevention of Rodent Infestation In Poultry Flocks. Ref No 13233
http://www.defra.gov.uk/animalh/diseases/zoonoses/zoonoses_reports/salrodent.pdf
9. Code of Practice For The Prevention and Control of *Salmonella* -
In Breeding Flocks and Hatcheries. Ref No PB 1564
10. Code of Practice For The Control of *Salmonella* –

In The Production Of Final Feed For Livestock. Ref No 2200 & 2201

11. Egg Quality Guide Ref No PB 4821

12. Code of Practice The Handling and storage of eggs from farm to retail sale Ref No. PB2818

2.4. Routine veterinary supervision of farms.

The owner is responsible for the health and welfare of the poultry on the holding, and for ensuring that a veterinarian is consulted on disease and welfare issues as appropriate. The Competent Authority carries out inspections on farms for animal welfare reasons, to take samples for residues, to administer and enforce legislation on marketing of eggs, and to check medicine records.

2.5. Registration of farms.

All turkey breeding flocks of more than 250 birds will be required to register (Control of *Salmonella* in Turkeys Order – to be implemented). The register is maintained at the local level by the Competent Authority or its agent (Animal Health in Great Britain, DARD in Northern Ireland). A GB Poultry Register and an equivalent register in Northern Ireland detail the locations and numbers of all poultry for the purposes of control of avian influenza and other diseases such as *Salmonella*. The information in the Register

2.6. Record-keeping at farms.

The owner is responsible for the health and welfare of the poultry on the holding, and for ensuring that a veterinarian is consulted on disease and welfare issues as appropriate. The Competent Authority carries out inspections on farms for animal welfare reasons, to take samples for residues, and to check medicine records. All turkey flock operators are required to keep records of medicine usage, including vaccines, which must be available for inspection. Records relating to movement of flocks onto and off the holding must be kept.

Records giving details of sampling for *Salmonella* and results will be kept either at the holding or be readily available.

2.7. Documents to accompany animals when dispatched.

Operators wishing to export more than 20 birds or hatching eggs to another EU Member State (or certain third countries) must comply with EU Directive 90/539/EC and ensure that the consignment is accompanied by a completed and signed Intra-trade Animal Health Certificate (ITAHC) for poultry breeding and production. This can be obtained from a local Animal Health Divisional Office and must be completed and signed by the Official Veterinarian as well as the operator to confirm compliance with the relevant articles of Directive. The flock of origin and the hatchery must be currently registered with the Poultry Health Scheme in compliance with EU Directive 90/539/EC. This is administered by the Animal Health Agency, which undertakes the approval process and administers the scheme for hatcheries and flocks. The ITAHC will also require the reference number of the operator's poultry health certificate. The ITAHC will be amended to include the results of the last test for *Salmonella* as required in Commission Regulation (EC) 2160/2003 Article 9.1 prior to any dispatching of the live animals, or hatching eggs, from the food business of origin. The date and the result of testing shall be included in the relevant health certificates provided for in Community legislation as required by Decision (EC) No 2007/594

2.8. Other relevant measures to ensure the traceability of animals.

The Control of *Salmonella* in Turkeys Order (to be implemented), and the equivalent legislation implemented in the devolved administrations in Wales, Scotland and Northern Ireland require the operators of hatcheries and the keepers of breeding flocks to keep records of poultry or hatching eggs entering or leaving the premises. The records must contain information on the number, date, and origin or destination. These records must be retained for one year and be available to the Competent Authority for inspection. The Diseases of Poultry Order 2003 (and equivalent legislation) extends this requirement to every person who is engaged in the transport or marketing of poultry. All official veterinary health certificates issued for the export of poultry and hatching eggs are recorded on either the Centaur system or the Trade Control and Expert System (TRACES). Both of these systems allow tracking of exports of live animals and hatching eggs accompanied by veterinary health certification. Centaur creates Export Health Certificates for third countries while TRACES generates ITAHCs issued for intra-Community movements. TRACES is an internet-based service which is owned and maintained by the Commission. It is possible for traders (economic operators) to apply for both Centaur EHCs and TRACES ITAHCs on-

line or using paper application forms. Operators wishing to export birds to EU Member States can register with TRACES via Defra's website or their local Animal Health Office.

Part B

1. Identification of the programme

Member State: UK

Disease : infection of animals with zoonotic *Salmonella spp*

Animal population covered by the programme: Turkeys

Year/s of implementation:2010-2012

Reference of this document: UK Salmonella in Turkey programme 2010

Contact (name, phone, fax, e-mail):

Charmaine Govindasamy

Delta, Area 4A, Nobel House, 17 Smith Square, London, SW1P 3JR

Tel -- 44 207 238 4436 FAX 44 207 238 4436

Email Charmaine.Govindasamy@defra.gsi.gov.uk

Date sent to the Commission:

2. Historical data on the epidemiological evolution of zoonotic salmonellosis specified in point 1⁴:

⁴ A concise description is given with data on the target population (species, number of flocks/herds and animals present and under the programme), the main measures (testing, testing and slaughter, testing and killing, qualification of flocks/herds and animals, vaccination) and the main results (incidence, prevalence, qualification of flocks/herds and animals). The information is given for distinct periods if the measures were substantially modified. The information is documented by relevant summary epidemiological tables, graphs or maps.

3. **Description of the submitted programme**⁵:

A concise description of the programme is given with the main objective(s) (monitoring, control, eradication, qualification of flocks/herds and/or regions, reducing prevalence and incidence), the main measures (testing, testing and slaughter, testing and killing, qualification of flocks/herds and animals, vaccination), the target animal population and the area(s) of implementation and the definition of a positive case.

4. Measures of the submitted programme

4.1. *Summary of measures under the programme*

Duration of the programme:

First year:2010

Last year:2012

Control

Control/Eradication

Testing

Testing

Slaughter of animals tested positive

Slaughter of animals tested positive

Killing of animals tested positive

Killing of animals tested positive

Vaccination

Extended slaughter or killing

Treatment of animal products

Disposal of products

Disposal of products

Monitoring or surveillance

Other measures (specify):

4.2. *Designation of the central authority in charge of supervising and coordinating the departments responsible for implementing the programme⁶:*

The Competent Authority for this National Control Programme in respect of EC Regulation 2160/2003 for the control of Salmonella in turkeys is:

⁶ Describe the authorities in charge of supervising and coordinating the departments responsible for implementing the programme and the different operators involved. Describe the responsibilities of all involved.

Department for Environment, Food and Rural Affairs, Nobel House, 17 Smith Square, London SW1P 3JR

- In Northern Ireland the operation of the Control Programme is under Department of Agriculture and Rural Development (DARD).
- The programme in Wales operates with the collaboration of the Welsh Assembly.
- The programme in Scotland operates with the collaboration of the Scottish Executive Environment and Rural Affairs Department.

The Competent Authority in respect of Regulation (EC) No 882/2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules is the Food Standards Agency, Aviation House, Holborn, London.

With reference to the slaughter of turkey flocks at the end of lay the Meat Hygiene Service is an Executive Agency of the Food Standards Agency and is responsible for the protection of public health and animal health and welfare in Great Britain, through proportionate enforcement of legislation in licensed meat premises. Enforcement in licensed premises in Northern Ireland is the responsibility of DARDNI.

In respect of EC Regulation No 1831/2005 on feed hygiene, the Competent Authorities are the Food Standards Agency and local authorities (Trading Standards Departments and some Environmental Health Services).

4.3. *Description and delimitation of the geographical and administrative areas in which the programme is to be implemented⁷:*

The plan will be implemented throughout the UK including England, Wales, Scotland, Northern Ireland.

⁷ Describe the name and denomination, the administrative boundaries, and the surface of the administrative and geographical areas in which the programme is to be applied. Illustrate with maps.

4.4. Measures implemented under the programme⁸

4.4.1. Measures and applicable legislation as regards the registration of holdings:

A GB Poultry Register and an equivalent register in Northern Ireland detail the locations and numbers of all poultry on premises where more than 50 birds are present for the purposes of control of avian influenza and other diseases such as *Salmonella*. (under The Avian Influenza (Preventive Measures) (England) Regulations 2006, The Avian Influenza (Preventive Measures) (Scotland) Regulations 2007 and The Avian Influenza (Preventive Measures) (Wales) Regulations 2006. This national legislation transposes Commission Decision 2006/474/EC and provide for the continued operation of the poultry register established under the Avian Influenza (Preventive Measures) Regulations 2005 and the Avian Influenza (Preventive Measures) (No2) Regulations 2005)

4.4.2. Measures and applicable legislation as regards the identification of animals⁹:

Not Applicable

4.4.3. Measures and applicable legislation as regards the notification of the disease:

The owner in charge of any laboratory must report the isolation of *Salmonella* from any bird or livestock kept to produce food for human consumption to Defra or its agency, detailing the date, type of sample, animal or bird type, and to supply the culture of the *Salmonella*

4.4.4. Measures and applicable legislation as regards the measures in case of a positive result¹⁰:

When a breeding flock of *Gallus gallus* is suspected of being infected with *Salmonella* Enteritidis or *Salmonella* Typhimurium the flock is placed under official control by the Competent Authority. This applies to breeding flocks from day old through to end of production. If the flock is in the

⁸ Where appropriate Community legislation is mentioned. Otherwise the national legislation is mentioned.
⁹ Not applicable for poultry.

¹⁰ A short description is provided of the measures as regards positive animals (slaughter, destination of carcasses, use or treatment of animal products, the destruction of all products which could transmit the disease or the treatment of such products to avoid any possible contamination, a procedure for the disinfection of infected holdings, a procedure for the restocking with healthy animals of holdings which have been depopulated by slaughter.

laying phase no further eggs may be sent for hatching and no birds or hatching eggs may leave the holding, except under licence issued by the Competent Authority. When infection with *Salmonella* Enteritidis or *Salmonella* Typhimurium has been confirmed, the owner is required to have the birds slaughtered in accordance with Community legislation on food hygiene. Infection with *S.* Typhimurium and *S.* Enteritidis will be confirmed by samples taken by the Competent Authority as detailed in with Annex 2.2.2.1 of Regulation (EC) 1831/2005.

The owner or person responsible for the flock is required to clean and disinfect the building where the infected birds were kept, and provide evidence to the Competent Authority that the cleaning and disinfection has been satisfactory. Re-stocking may not take place until the cleaning and disinfection has been carried out. Hatching eggs present in the hatchery from the time the flock was suspected to be infected are removed and destroyed in accordance with Regulation (EC) No 1774/2002.

If the owner does not take appropriate action to clean and disinfect infected houses legislation is available to enforce the operator to do so and to require that samples are taken to check the clearing and disinfection is satisfactory. The same legislation may also be used to control movements onto and off the premises. The legislation is the Zoonoses Order 1989 (equivalent in devolved administrations).

4.4.5. Measures and applicable legislation as regards the different qualifications of animals and herds:

All eligible turkey flocks, according to Regulation 2160/2003 are in the national control programme

4.4.6. Control procedures and in particular rules on the movement of animals liable to be affected or contaminated by a given disease and the regular inspection of the holdings or areas concerned¹¹:

All holdings which are producing eggs which are graded are visited at least once a year by Egg Marketing Inspectors from Animal Health Agency.

4.4.7. Measures and applicable legislation as regards the control (testing, vaccination, ...) of the disease:

¹¹ A short description of the control procedures and in particular rules on the movement of animals liable to be affected or contaminated by a given disease and the regular inspection of the holdings or areas is provided.

Measures as outlined in 4.4.4. above.

4.4.8. Measures and applicable legislation as regards the compensation for owners of slaughtered and killed animals:

In breeding turkey flocks, the provisions of the Animal Health Act 1981 will apply where relevant.

4.4.9. Information and assessment on bio-security measures management and infrastructure in place in the flocks/holdings involved.:

Hygiene measures on turkey farms are assessed by the Animal Health agency. .

5. General description of the costs and benefits¹²:

Not applicable

6. Data on the epidemiological evolution during the last five years¹³

6.1. Evolution of zoonotic salmonellosis

¹² A description is provided of all costs for the authorities and society and the benefits for farmers and society in general.
¹³ The data on the evolution of zoonotic salmonellosis are provided according to the tables where appropriate.

6.2. Stratified data on surveillance and laboratory tests

6.2.1. Stratified data on surveillance and laboratory tests (one table per year and per disease/species)

Year:

Animal species ^(a):

Category ^(b):

Description of the used serological tests:

Description of the used microbiological or virological tests:

Description of the other used tests:

Region ^(c)	Serological tests		Microbiological or virological tests		Other tests	
	Number of samples tested ^(d)	Number of positive samples ^(e)	Number of samples tested ^(d)	Number of positive samples ^(e)	Number of samples tested ^(d)	Number of positive samples ^(e)
Total						

- (a) Animal species, if necessary.
 (b) Category/further specifications such as breeders, laying hens, broilers, breeding turkeys, broiler turkeys, breeding pigs, slaughter pigs, etc. when appropriate.
 (c) Region as defined in the approved control and eradication programme of the Member State.
 (d) Number of samples tested.
 (e) Number of positive samples.

7.1.2 Targets on testing of flocks¹⁵

Year:

Situation on date:

Animal species:

Infection^(a):

Region (a1)	Type of flock ^(a)	Total number of flocks ^(a)	Total number of animals	Total number of flocks under the programme	Total number of animals under the programme	Expected number of flocks to be checked ^(a)	Number of flocks ^(a) expected to be positive ^(a)			Number of flocks expected to be depopulated ^(a)		Total number of animals expected to be slaughtered or destroyed ^(a)	Expected quantity of eggs to be destroyed (number or kg) ^(a)	Expected quantity of eggs charred to egg products (number or kg) ^(a)	
							(a1)	(a2)	(a3)	(a4)	(a5)				
UK	Breeding turkeys	Approx 850	718763	Approx 654	Approx 700000	Approx 654	0*	Approx 1*	Approx 1*	0	1	0	0	Unk 0	Unk 0
											Appr 700	n			
UK	Slaughter turkeys	Approx 7000	723622	Approx 5432	Approx 7000000	Approx 5432	4*	4*	50*	0	0	0	N/A	N/A	
Total															

*The above figures are based on population estimates and the number of incidents of Salmonella detected in turkeys in 2008 through voluntary industry monitoring. In the 2008 monitoring, the number of positive incidents does not necessarily equate to number of positive flocks. An incident is defined as the first isolation and all subsequent isolations of the same serotype or serotype and phage/ definitive

¹⁵ Specify types of flocks if appropriate (breeders, layers, broilers).

type combination of a particular *Salmonella* from an animal, group of animals or their environment on a single premises within a 30 day period.

- (a) For zoonotic salmonellosis indicate the serotypes covered by the control programmes: (a1) for *Salmonella* Enteritidis, (a2) for *Salmonella* Typhimurium, (a3) for other serotypes-specific as appropriate, (a4) for *Salmonella* Enteritidis or *Salmonella* Typhimurium.
- (a1) Region as defined in the approved control and eradication programme of the Member State.
- (b) For example, breeding flocks (rearing, adult flocks), production flocks, laying hen flocks, breeding turkeys, broiler turkeys, breeding pigs, slaughter pigs, etc. Flocks or herds or as appropriate.
- (c) Total number of flocks existing in the region including eligible flocks and non-eligible flocks for the programme.
- (d) Check means to perform a flock level test under the programme for the presence of salmonella. In this column a flock must not be counted twice even if it has been checked more than once.
- (e) If a flock has been checked, in accordance with footnote (d), more than once, a positive sample must be taken into account only once.

7.2. Targets on vaccination (one table for each year of implementation)

7.2.1. Targets on vaccination ¹⁶

Animal species: ^(a)

Region ^(b)	Total number of herds ^(c) in vaccination programme	Total number of animals in vaccination programme	Targets on vaccination programme				
			Number of herds ^(c) in vaccination programme	Number of herds ^(c) expected to be vaccinated	Number of animals expected to be vaccinated	Number of doses of vaccine expected to be administered	
Total							

- (a) Species if necessary;
- (b) Region as defined in the approved control and eradication programme of the Member State.
- (c) Herds or flocks or holdings as appropriate.

¹⁶ Data to provide only if appropriate.

8. Detailed analysis of the cost of the programme (one table per year of implementation)

<i>Costs related to</i>	<i>Specification</i>	<i>Number of units</i>	<i>Unitary cost in EUR</i>	<i>Total amount in EUR</i>	<i>Community funding requested (yes/no)</i>
<i>1. Testing</i>					
<i>1.1. Cost of the analysis</i>	<u>Test: Number of bacteriological tests (cultivation) planned to be carried out in the framework of official sampling</u>				
	<u>Test: Number of serotyping of relevant isolates tests planned to be carried out</u>				
<i>1.2. Cost of sampling</i>					
<i>1.3. Other costs</i>					

2. Vaccination or treatment of animal products					
2.1. Purchase of vaccine/treatment of animal products	Number of purchase of vaccine doses planned if a vaccination policy is part of the programme as set out explicitly under point 4 of Annex II				
2.2. Distribution costs					
2.3. Administrative costs					
2.4. Control costs					
3. Slaughter and destruction					
3.1. Compensation of animals		1 flock таприкхитовы 7000 breeding birds	EURO 191,287	EURO 191,287	YES
3.2. Transport costs					

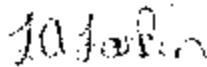
<u>3.3. Destruction costs</u>		
<u>3.4. Loss in case of slaughtering</u>		
<u>3.5. Costs from treatment of animal products (milk, eggs, hatching eggs, etc)</u>		
<u>4. Cleaning and disinfection</u>		
<u>5. Salaries (staff contracted for the programme only)</u>		
<u>6. Consumables and specific equipment</u>		

Annex - Declaration

I hereby confirm that implementation of the National Control Programme for *Salmonella* in turkey flocks in 2010 in the UK will be according to the provisions of the following veterinary legislation:

- Regulation (EC) No. 2160/2003
- Regulation (EC) No. 584/2008
- Regulation (EC) No. 213/2009

1. Sampling will be carried out under the requirements of the UK National Control Programme for *Salmonella* in turkeys by the Competent Authority and by the operator according to the requirements of Annex III of EC Regulation 2160/2003 and paragraph 1 and paragraph 2 of the Annex to Regulation (EC) No. 584/2008
2. Reporting of results will be carried out according to the provisions of paragraph 4 of the Annex to Regulation (EC) No. 584/2008.



Lesley Larkin
Defra
9th September 2009.

ANNEX II

Standard requirements for the submission of national programmes for the control of Salmonellosis (zoonotic Salmonella) as referred to in Article 1(b)

Part A

General requirements for the national salmonella control programmes

- (a) state the aim of the programme

To reduce/maintain the prevalence of breeding flocks infected with *S. Enteritidis*, *S. Typhimurium*, *S. Hadar*, *S. Infantis* and *S. Virchow* to 1% or less flocks infected by the end of 2009.

- (b) demonstrate the evidence that it complies with the minimum sampling requirements laid down in part B of Annex II to Regulation (EC) No 2160/2003 of the European Parliament and of the Council¹ indicating the relevant animal population and phases of production which sampling must cover

Breeding flocks of *Gallus gallus*: applied for co-financing of Salmonella control programme 2010

rearing flocks — day-old chicks

... four-week-old birds

... two weeks before moving to laying phase or laying unit

— adult breeding flocks ... every second week during the laying period

¹ OJ L 325, 12.12.2003, p. 1.

Laying hens:

- rearing flocks --- day-old chicks
pullets two weeks before moving to laying phase or laying unit
- laying flocks --- every 15 weeks during the laying phase

Broilers --- birds leaving for slaughter

Turkeys --- birds leaving for slaughter

Herd(s) of pigs:

- breeding pigs --- animals leaving for slaughter or carcasses at the slaughterhouse
- slaughter pigs --- animals leaving for slaughter or carcasses at the slaughterhouse

- (c) demonstrate the evidence that it complies with the specific requirements laid down in Parts C, D and E of Annex II to Regulation (EC) No 2160/2003; and
- (d) specify the following points:

1. General

- 1.1. A short summary referring to the occurrence of the salmonellosis [zoonotic salmonella] in the Member State with specific reference to the results obtained in the framework of monitoring in accordance with Article 4 of Directive 2003/99/EC of the European Parliament and of the Council², particularly highlighting the prevalence values of the salmonella serovars targeted in the salmonella control programmes.

Salmonellas have been recognised as important pathogens and *Salmonella* Enteritidis and *Salmonella* Typhimurium have accounted for the majority of cases of human salmonellosis for many years and have consistently been the most commonly implicated pathogens in general outbreaks of foodborne disease.

A programme for the control of *Salmonella* Enteritidis and *Salmonella* Typhimurium in breeding flocks of *Gallus gallus* has been in operation in the UK since 1989, and in its present form since 1993. As a result of the control programme the number of *Salmonella* Enteritidis and *Salmonella* Typhimurium infected breeding flocks of *Gallus gallus* in the UK is currently very low. Of the other three *Salmonella* serovars, *Salmonella* Hadar, *Salmonella* Infantis and *Salmonella* Virchow, the occurrence is likewise at low levels.

Information was submitted to the Commission relating to the occurrence of *Salmonella* isolates in breeding flocks in the UK in 2004 (SANCCO/143/2005 http://europa.eu.int/comm/food/food/biosafety/Salmonella/impl_reg_en.htm). Analysis of the information submitted indicated that the level of *Salmonella* Hadar, *Salmonella* Infantis and *Salmonella* Virchow was 0.00%, 0.15%, 0.30% respectively. The overall occurrence of all *Salmonella* serovars was estimated at 6.3%. The occurrence of the five *Salmonella* serovars in the control programme was calculated as 0.4%.

A sharp rise in the incidence of human salmonellosis in the UK was observed in the mid 1980s. This was largely due to an increase in *S.* Enteritidis phage type 4 (PT 4) infection. The incidence of this phage type reached a peak in the early 1990s and remained broadly stable until 1998 when a significant fall was recorded throughout most of the UK which continued for the next two years. Since then, the decline has continued, albeit less sharply. The reduction in the number of cases of salmonellosis reported in humans continued in 2005 and in the UK as a whole there were 12,831 cases. *S.* Enteritidis and *S.* Typhimurium remained the two most common serotypes isolated from humans, accounting for just under 70% of all laboratory confirmed reports. In 2006 there was a slight increase to 14,060 confirmed laboratory cases in humans and in 2007 again a slight reduction to 13,213 laboratory confirmed reports. Overall, there is little regional variation in salmonellosis in humans in the UK.

² OJ L 325, 12.12.2003, p. 31.

All laboratories which isolate *Salmonella* from a breeding flock or its environment are required to report the finding and supply the isolate to the National Reference Laboratory (NRL). This information is recorded and analysed. The number of reports made depends on the level and sensitivity of monitoring which is undertaken by the producers. The reports provide useful information on the serovars which are most common in the birds, and indicate trends. Over the last five years the number of incidents concerning the invasive types of *Salmonella* in breeding hens has been low from this method of monitoring.

The levels of *Salmonella* in breeding flocks in the UK remains at very low levels with only one confirmed report of *S. Typhimurium* in 2007 a parent Broiler Breeder (Meat Production Line) flock. There were no reports of *S. Enteritidis*, *S. Infantis*, *S. Virchow* or *S. Hadar*. In the UK in 2006 there were no *S. Enteritidis*, *S. Hadar*, *S. Infantis*, or *S. Virchow* isolated from the breeding sector. Provisional results for 2008 were 8 flocks detected as infected with *S. Typhimurium* during the year.

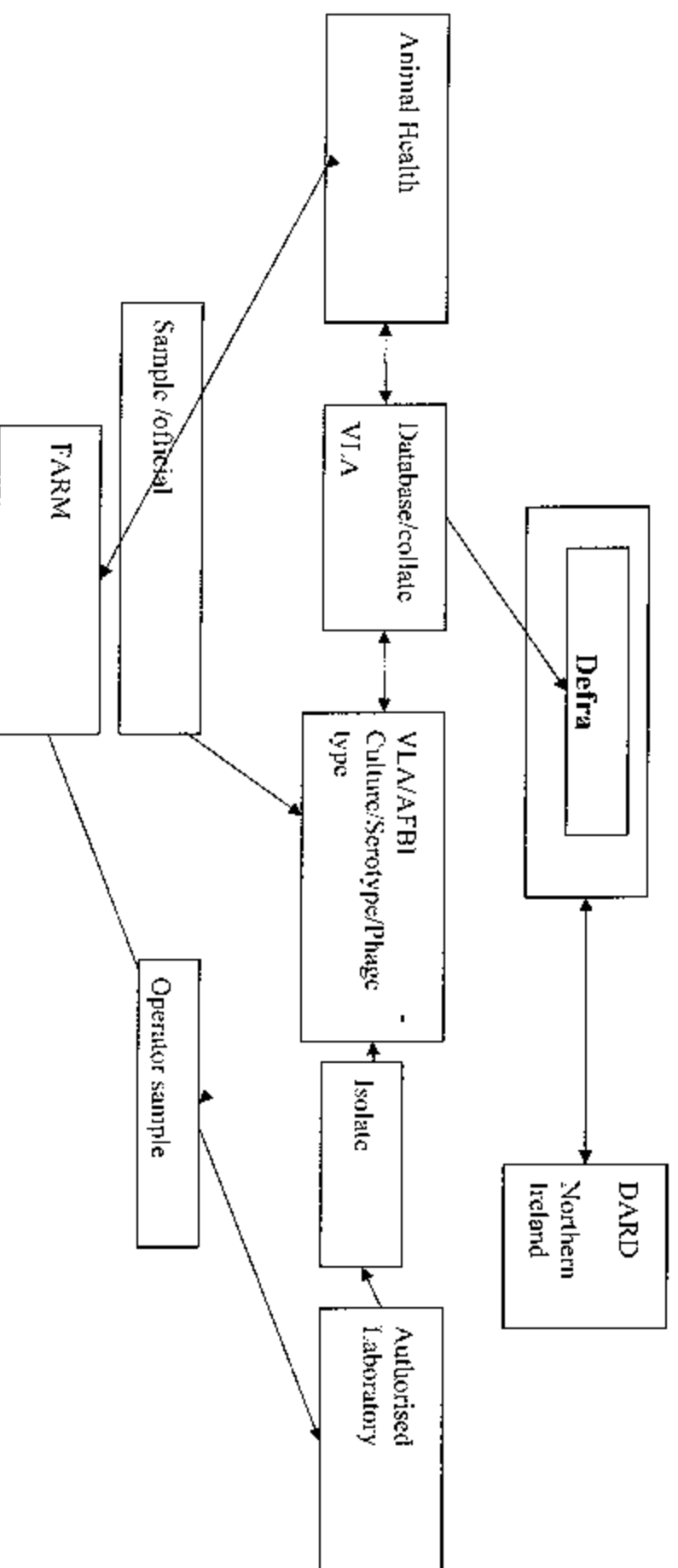
Any breeding flock found to be infected with *S. Typhimurium* or *S. Enteritidis* according to the NCP is compulsorily slaughtered with compensation. When *Salmonella* Enteritidis or *Salmonella* Typhimurium is suspected in a breeding flock the holding is placed under official control. An investigation is carried out on all the flocks on the site. If the flock is compulsorily slaughtered the holding remains under official control until cleaning and disinfection has been carried out and shown to be satisfactory by microbiological culture of samples taken from the empty house.

A breeding flock is recorded as positive for purposes of reporting of the results of *Salmonella* monitoring under the requirements of Dir (EC) No 99/2003 when *Salmonella* is detected in one or more samples taken from that flock by the operator or by official sampling by the Competent Authority. In some cases, in the event of isolation of *Salmonella* Enteritidis or *Salmonella* Typhimurium, the positive operator result may be confirmed prior to designation as a positive flock and implementation of the actions required under Regulation (EC) No 2160/2003 by confirmatory sampling carried out by the Competent Authority (but the need for official confirmatory sampling is assessed on a case by case basis and does not necessarily occur in all cases). No confirmatory sampling is carried out if *Salmonella* Enteritidis or *Salmonella* Typhimurium is detected in an official sample taken by the Competent Authority. An infected flock is counted once only regardless of how often *Salmonella* have been, detected in this flock during the production period.

- 1.2. The structure and organization of the relevant competent authorities. Please refer to the information flow between bodies involved in the implementation of the programme.

Department for Environment Food and Rural Affairs (Defra). Defra is the competent authority for Regulation EC 2160/2003 in England, Wales and Scotland (Great Britain). The Department of Agriculture, Development and Rural Affairs (DARD) Northern Ireland is the competent authority for Regulation EC 2160/2003 in Northern Ireland. DARD provides information on the *Salmonella* in breeding flocks to Defra who collates it. In Scotland the Scottish Government, and the Welsh Assembly Government in Wales

administer the control plans, and supply information to Defra for collation. Official samples are taken by staff from Animal Health which is a Defra Agency. Follow up samples in infected holdings may be taken either by Animal Health or the Veterinary Laboratories Agency (VLA). The laboratories authorised to test samples in the control programme are required to report all isolations of *Salmonella* from samples taken (both statutory and voluntary samples) from poultry or their environment to VLA and to supply the isolate for serotyping and antimicrobial resistance.



1.3. Approved laboratories where samples collected within the programme are analysed.

Veterinary Laboratories Agency- an agency of Defra, with a network of regional laboratories in Great Britain including the NRL, for *Salmonella*

For samples in Northern Ireland the National Reference Laboratory is The Agri-Food & Biosciences Institute (AFBI). AFBI Headquarters, Newforge Lane, Belfast BT9 5PX. AFBI is a DARD Non-Departmental Public Body (NDPB).

In addition samples taken by the operator may be analysed at laboratories authorised by the Competent Authority and overseen by the NRI.s

1.4. Methods used in the examination of the samples in the framework of the programme.

Annex D of ISO 6579 (2002): 'Detection of *Salmonella* spp. in animal faeces and in samples of the primary production stage'

1.5. Official controls (including sampling schemes) at feed, flock and/or herd level.

Three samples will be taken under the control of the Competent Authority for Regulation 2160/2003 from each breeding flock during production of eggs for hatching as specified in 2.1.2.2 of Annex to Commission Regulation (EC) No 1003/2005. Routine official sampling is carried out on three occasions during the production cycle:

- (a) within four weeks following moving to laying phase or laying unit;
- (b) towards the end of the laying phase, not earlier than eight weeks before the end of the production cycle;
- (c) during the production, at any time sufficiently distant from the samples referred to in points (a) and (b).

The records of samples taken by the operator will be made available for inspection to the Competent Authority and provide details of date of sample, type of sample, laboratory carrying out the examination, and the result.

The sampling under the Animal By-Products legislation is monitored by the Competent Authority with inspections carried out using a risk-based approach.

Regulation (EC) No 2073/2005 of 15 November 2005 on microbiological criteria for foodstuffs requires poultry abattoirs to undertake microbiological testing for *Salmonella* on 5 samples a week (each sample is 3 neck skins). Establishments producing minced meat, meat preparations and mechanically separated meat must also undertake weekly testing for *Salmonella*. The Food Standards Agency (FSA) are the Competent Authority which monitors these controls.

1.6. Measures taken by the competent authorities with regard to animals or products in which the presence of *Salmonella spp.* have been detected, in particular to protect public health, and any preventive measures taken, such as vaccination.

When a breeding flock of *Gallus gallus* is suspected of being infected with *Salmonella* Enteritidis or *Salmonella* Typhimurium the flock is placed under official control by the Competent Authority. This applies to breeding flocks from day old through to end of production. If the flock is in the laying phase no further eggs may be sent for hatching and no birds or hatching eggs may leave the holding, except under licence issued by the Competent Authority. When infection with *Salmonella* Enteritidis or *Salmonella* Typhimurium has been confirmed, the owner is required to have the birds slaughtered in accordance with Community legislation on food hygiene. Infection with *S. Typhimurium* and *S. Enteritidis* will be confirmed by samples taken by the Competent Authority as detailed in with Annex 2.2.2.1 of Regulation (EC) 1831/2003.

The owner or person responsible for the flock is required to clean and disinfect the building where the infected birds were kept, and provide evidence to the Competent Authority that the cleaning and disinfection has been satisfactory. Re-stocking may not take place until the cleaning and disinfection has been carried out. Hatching eggs present in the hatchery from the time the flock was suspected to be infected are removed and destroyed in accordance with Regulation (EC) No 1774/2002.

When a breeding flock is infected with *S. Hadar*, *S. Infantis*, or *S. Virchow*, the operator/owner of the flock will be required to draw up a plan in consultation with his/her veterinarian and the Competent Authority for the monitoring and control of the infection. The plan should include an epidemiological investigation, a review of biosecurity measures, any additional monitoring procedures, and measures to be taken to reduce or eliminate the infection. As appropriate the flock may be placed under official control.

The operator/owner in consultation with his/her veterinarian may consider vaccination of the flock against *Salmonella* with a product which has a marketing authorisation

1.7. National legislation relevant to the implementation of the programmes, including any national provisions concerning the activities set out in the programme.

Zoonoses Order 1989 and in Northern Ireland, the Zoonoses Order (Northern Ireland) 1991... requires the person responsible in all laboratories to report the isolation of a *Salmonella* and to provide a sub-culture on request to the National Reference Laboratory for *Salmonella*

The Control of Salmonella in Poultry Order 2008... requires operators to take samples from the laying flocks as specified in Regulation (EC) No 1831/2003 as amended by Regulation (EC) No. 213/2009, and to keep records of results, and details of flocks sampled.

1.8. Any financial assistance provided to food and feed businesses in the context of the programme.

Currently, when *Salmonella* Enteritidis or *Salmonella* Typhimurium is confirmed in a flock the owner is compensated following compulsory slaughter of the flock. Compensation is based on the costs incurred in rearing the bird to a certain age, less any income which has been derived from the bird (e.g., hatching eggs). A scale of compensation is published on a quarterly basis according to the age of the bird, and whether it is a breeding flock on the meat production side or a breeding flock on the egg production side.

2. Concerning food and feed businesses covered by the programme

2.1. The structure of the production of the given species and products thereof.

In the UK there are approximately 1600 breeding chicken holdings with 250 or more birds present on the holding.

2.2. The structure of the production of feed.

Poultry feed is supplied to farms by a small number of manufacturers. The major manufacturers of poultry feed operate to assurance schemes, apply HACCP principles and monitor for *Salmonella*.

2.3. Relevant guidelines for good animal husbandry practices or other guidelines (mandatory or voluntary) on biosecurity measures defining at least:

- hygiene management at farms,
 - measures to prevent incoming infections carried by animals, feed, drinking water, people working at farms, and
 - hygiene in transporting animals to and from farms.
- hygiene management at farms,
- measures to prevent incoming infections carried by animals, feed, drinking water, people working at farms, and
 - hygiene in transporting animals to and from farms.

A number of voluntary guides have been produced in collaboration with representatives of the industry on the control of *Salmonella* in poultry production.

Relevant ones are listed below, and some are also available on the website at: <http://www.defra.gov.uk/animalh/diseases/zoonoses/salmonella-eop.htm>

1. Code of Practice For The Prevention and Control of *Salmonella* –
In Commercial Egg Laying Flocks.
Ref No PB 2205
2. Codes of Practice For The Control of *Salmonella* --
For The UK Fish Meal Industry
Ref No PB 2203
3. Code of Practice For The Control of *Salmonella* . . .
In The Production of Final Feed For Livestock In Premises Producing Less
Than 10,000 tonnes Per Annum.
Ref No 2201
4. Code of Practice For The Control of *Salmonella* . . .
In the Production of Final Feed for Livestock In Premises Producing Over
10,000 Tonnes Per Annum.
Ref No 2200
5. Code of Practice For the Prevention and Control of *Salmonella*
In Chickens Reared For Meat
Ref No 7323
6. Code of Practice For The Control of *Salmonella* --
During the Storage, Handling and Transport of Raw Materials Intended For
Incorporation Into, or Direct Use As, Animal Feedingsuff.
Ref No 2202
7. Code of Practice For The Control of *Salmonella* . . .
In Animal By-products Rendering Industry.
Ref No 2199
8. Code of Practice
For The Prevention of Rodent Infestation In Poultry Flocks --
The Control of *Salmonella*.
Ref No 2630

9. Code of Practice For The Prevention and Control of *Salmonella* -

In Breeding Flocks and Hatcheries.

Ref.No PB 1564

10. Egg Quality Guide

Ref.No PB 0000

11. Code of Practice The Handling and storage of eggs from farm to retail sale

RefNo. PB 2818

2.4. Routine veterinary supervision of farms.

The owner is responsible for the health and welfare of the poultry on the holding, and for ensuring that a veterinarian is consulted on disease and welfare issues as appropriate. The Competent Authority carries out inspections on farms for animal welfare reasons, to take samples for residues, to administer and enforce national legislation and to check medicine records

2.5. Registration of farms.

All poultry breeding flocks of more than 250 birds are registered (Control of Salmonella in Poultry Order 2008). The register is maintained at the local level by the Competent Authority or its agent (Animal Health Agency in Great Britain, DARD in Northern Ireland).

A Great Britain Poultry Register and an equivalent register in Northern Ireland detail the locations and numbers of all poultry for the purposes of control of avian diseases such as Avian Influenza and *Salmonella*.

2.6. Record-keeping at farms.

All breeding flock operators are required to keep records of medicine usage, including vaccines, which must be available for inspection
Records relating to movement of flocks onto and off the holding must be kept.

Records giving details of sampling for *Salmonella* and results will be kept either at the holding or be readily available.

2.7. Documents to accompany animals when dispatched.

Operators wishing to export more than 20 birds or hatching eggs to another EU member state (or certain third countries) must comply with EU Directive 90/539/EEC and ensure that the consignment is accompanied by a completed and signed Intra-trade Animal Health Certificate (ITAH/C) for poultry breeding and production. This can be obtained from a local Animal Health Divisional Office and must be completed and signed by the Official Veterinarian as well as the operator to confirm compliance with the relevant articles of Directive.

The ITAH/C will also require the reference number of the operator's poultry health certificate.

The ITAH/C will be amended to include the results of the last test for *Salmonella* as required in Commission Regulation (EC) 2160/2003 Article 9.1 prior to any dispatching of the live animals, or hatching eggs, from the food business of origin. The date and the result of testing shall be included in the relevant health certificates provided for in Community legislation.

2.8. Other relevant measures to ensure the traceability of animals.

The Control of Salmonella in Poultry Order (England) 2008, and the equivalent legislation in the devolved administrations in Wales, Scotland and Northern Ireland requires the operators of hatcheries and the keepers of breeding flocks to keep records of poultry or hatching eggs entering or leaving the premises. The records must contain information on the number, date, and origin or destination.

These records must be retained for one year and be available to the Competent Authority for inspection. The Diseases of Poultry Order 2003 (and equivalent legislation) extends this requirement to every person who is engaged in the transport or marketing of poultry.

All official veterinary health certificates issued for the export of poultry and hatching eggs are recorded on either the Centaur system or the Trade Control and Export System (TRACTES). Both of these systems allow tracking of exports of live animals and hatching eggs accompanied by veterinary health certification. Centaur creates Export Health Certificates for exports to third countries while TRACTES generates ITAH/Cs issued for intra-Community movements. TRACTES is an internet-based service which is owned and maintained by the Commission. It is possible for traders (economic operators) to apply for both Centaur EHCs and TRACTES ITAH/Cs on-line or using paper application forms. Operators wishing to export birds to EU member states can register with TRACTES via Defra's website or their local Animal Health Office.

Part B

1. Identification of the programme

Member State: UK

Disease : infection of animals with zoonotic *Salmonella* spp

Animal population covered by the programme: Breeding chickens (*Gallus gallus*)

Year/s of implementation: 2010

Reference of this document: UK Salmonella in Breeders programme 2010

Contact (name, phone, fax, e-mail):

Lesley Larkin,

Defra, Area 4A, Nobel House, 17 Smith Square, London SW1P 3JR

Tel - + 44 207 238 5723 fax : 44 207 238 1109

Email Lesley.larkin@defra.gsi.gov.uk

Date sent to the Commission:

2. Historical data on the epidemiological evolution of zoonotic salmonellosis specified in point 1³:

³ A concise description is given with data on the target population (species, number of flocks/herds and animals present and under the programme), the main measures (testing, testing and slaughter, testing and killing, qualification of flocks/herds and animals, vaccination) and the main results (incidence, prevalence, qualification of flocks/herds and animals). The information is given for distinct periods if the measures were substantially modified. The information is documented by relevant summary epidemiological tables, graphs or maps.

There are approximately 1600 breeding chicken flocks in the UK. Approximate numbers are as follows:

Animal Species	Category	Approximate number of flocks (2007)
Breeding flocks (<i>Gallus gallus</i>)	Elite breeding flocks for egg production	4
	Grandparent breeding flocks for egg production	79
	Parent breeding flocks for egg production	101
	Elite breeding flocks for meat production	60
	Grandparent breeding flocks for meat production	120
	Parent breeding flocks for meat production	1055
	Breeding flocks unspecified	200

All breeding flocks of 250 birds or more, and all hatcheries with an incubator capacity of 1000 eggs or more will be required to register with the Competent Authority.

Operators are required to implement the sampling programme in Annex II B of EC Regulation 2160/2003. Samples for the detection of *Salmonella* are taken from *Cattles gallus* day-old chicks to be used for breeding, when the birds are approximately 4 weeks of age, and approximately 2 weeks before the birds come into lay. For 2007 and 2008, during the production phase of laying eggs for hatching the flocks were sampled every two weeks by the operator on the holding to verify the achievement of the target in adult breeding flocks. Sampling to verify the achievement of the target was as detailed in the Annex to Commission Regulation (EC) No 1003/2005. From April 2009, samples are

taken according to the requirements of the UK National Control Programme by the Competent Authority and by the operator as detailed in with Annex 2.2.2.1 of Regulation (EC) 1003/2005, as amended by Regulation (EC) No. 213/2009. The frequency of sample collection is as laid out in Regulation (EC) No. 213/2009 paragraph 2.1.1 and paragraph 2.1.2.3(b) (derogation as the Community target has been reached for at least two consecutive calendar years in the UK).

Samples will be submitted to a laboratory authorised by the Competent Authority and which applies quality assurance systems that conform to the requirements of the current EN/ISO standard

The owner shall keep a record of date when each flock is sampled for *Salmonella*, the identity of the flock sampled, the age of the flock sampled, the laboratory which undertook the analysis, and the result of the tests and make these records available to the Competent Authority. Samples taken as above shall be sent immediately (or may be stored for up to 48 hours in a refrigerator 3-5° C) to a laboratory authorised by Defra or DARD for the detection of *Salmonella* in Breeding flocks

3. Description of the submitted programme⁴:

The main emphasis of the programme is to monitor effectively, to assess the prevalence of infection against the reduction target, and to give advice to owners with infected flocks on how to reduce or eliminate *Salmonella* of public health significance on the premises. To require owners to clean and disinfect and to control other pests such as rodents which may carry *Salmonella* and re-infect subsequent flocks. Also to advise on the need to prevent contamination of feed on the farm.

⁴ A concise description of the programme is given with the main objective(s) (monitoring, control, eradication, qualification of flocks/herds and/or regions, reducing prevalence and incidence), the main measures (using, testing and slaughter, testing and killing, qualification of flocks/herds and animals, vaccination), the target animal population and the area(s) of implementation and the definition of a positive case.

4. **Measures of the submitted programme**

4.1. *Summary of measures under the programme*

Duration of the programme:

First year: 2007

Last year: 2009

Control

Control/Eradication

Testing

Testing

Slaughter of animals tested positive

Slaughter of animals tested positive

Killing of animals tested positive

Killing of animals tested positive

Vaccination

Extended slaughter or killing

Treatment of animal products

Disposal of products

Disposal of products

Monitoring or surveillance

Other measures (specify):

4.2. *Designation of the central authority in charge of supervising and coordinating the departments responsible for implementing the programme⁴:*

The Competent Authority for this National Control Programme in respect of EC Regulation 2160/2003 for the control of *Salmonella* in breeding flocks of *Gallus gallus* is:

Department for Environment, Food and Rural Affairs, Nobel House, 17 Smith Square, London SW1P 3JR

⁴ Describe the authorities in charge of supervising and coordinating the departments responsible for implementing the programme and the different operators involved. Describe the responsibilities of all involved.

- In Northern Ireland the operation of the Control Programme is under Department of Agriculture and Rural Development (DARD).
- The programme in Wales operates with the collaboration of the Welsh Assembly.
- The programme in Scotland operates with the collaboration of the Scottish Executive Environment and Rural Affairs Department.

The Competent Authority in respect of Regulation (EC) No 882/2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules is the Food Standards Agency, Aviation House, Holborn, London.

With reference to the slaughter of breeding flocks at the end of lay the Meat Hygiene Service is an Executive Agency of the Food Standards Agency and is responsible for the protection of public health and animal health and welfare in Great Britain, through proportionate enforcement of legislation in licensed meat premises. Enforcement in licensed premises in Northern Ireland is the responsibility of DARDNI.

In respect of EC Regulation No 1831/2003 on feed hygiene, the Competent Authorities are the Food Standards Agency and local authorities (Trading Standards Departments and some Environmental Health Services).

Defra is the Competent Authority in respect of the rules on the Marketing of Eggs (Council Regulation (EEC) No 1907/90 of 26 June 1990 on certain marketing standards for eggs, Commission Regulation (EC) No 2295/2003 of 23 December 2003 introducing detailed rules for implementing Council Regulation (EEC) No 1907/90 on certain marketing standards for eggs, and from 01 July 2007 Council Regulation (EC) No 1028/2006 of 19 June 2006 on marketing standards for eggs) administered and enforced by the Egg Marketing Inspectorate (EMI) in England and Wales. The equivalent body in Scotland is Eggs and Poultry Unit (EPU) of Scottish Executive Environment and Rural Affairs Department and in Northern Ireland the function is the responsibility of Quality Assurance Branch, (DARD)

4.3. *Description and delimitation of the geographical and administrative areas in which the programme is to be implemented:*

The plan is implemented throughout the UK including England, Wales, Scotland, Northern Ireland.

⁶ Describe the name and denomination, the administrative boundaries, and the surface of the administrative and geographical areas in which the programme is to be applied. Illustrate with maps.

4.4. Measures implemented under the programme⁷

4.4.1. Measures and applicable legislation as regards the registration of holdings:

The Control of Salmonella in Poultry (Order 2008 (previously, the Poultry Breeding Flocks and Hatcheries Order 2007) required owners of more than 250 breeding birds to register the name of the holding with the Local Animal Health Divisional Office of the State Veterinary Service, which is an Agency of Defra. In Northern Ireland the Poultry Breeding Flocks and Hatcheries Scheme Order (Northern Ireland) 2007 is similar to the above Order with the same requirements to register with DARD.

4.4.2. Measures and applicable legislation as regards the identification of animals⁸:

Not Applicable

4.4.3. Measures and applicable legislation as regards the notification of the disease:

The owner in charge of any laboratory must report the isolation of *Salmonella* from any bird or livestock kept to produce food for human consumption to Defra or its agency, detailing the date, type of sample, animal or bird type, and to supply the culture of the *Salmonella* (according to the requirements of the Zoonoses Order 1989 and equivalent legislation in the Devolved Administrations)

4.4.4. Measures and applicable legislation as regards the measures in case of a positive result⁹:

If the owner does not take appropriate action to clean and disinfect infected houses, legislation is available to enforce the operator to do so and to require that samples are taken to check the cleaning and disinfection is satisfactory. The same legislation may also be used to control movements onto and off the premises. The legislation is the Zoonoses Order 1989 (equivalent in devolved administrations).

⁷ Where appropriate Community Legislation is mentioned. Otherwise the national legislation is mentioned.

⁸ Not applicable for poultry.

⁹ A short description is provided of the measures as regards positive animals (slaughter, destination of carcasses, use or treatment of animal products, the destruction of all products which could transmit the disease or the treatment of such products to avoid any possible contamination, a procedure for the disinfection of infected holdings, a procedure for the restocking with healthy animals of holdings which have been depopulated by slaughter.

4.4.5. Measures and applicable legislation as regards the different qualifications of animals and herds:

All eligible breeding flocks, according to Regulation (EC) No. 2160/2003 are in the National Control Programme

4.4.6. Control procedures and in particular rules on the movement of animals liable to be affected or contaminated by a given disease and the regular inspection of the holdings or areas concerned¹⁰;

When a breeding flock of *Citrus gallus* is suspected of being infected with *Salmonella* Enteritidis or *Salmonella* Typhimurium the flock is placed under official control by the Competent Authority. This applies to breeding flocks from day old through to end of production. If the flock is in the laying phase no further eggs may be sent for hatching and no birds or hatching eggs may leave the holding, except under licence issued by the Competent Authority.

4.4.7. Measures and applicable legislation as regards the control (testing, vaccination, ...) of the disease:

Measures as outlined in 4.4.4. above.

4.4.8. Measures and applicable legislation as regards the compensation for owners of slaughtered and killed animals:

Currently, when *Salmonella* Enteritidis or *Salmonella* Typhimurium is confirmed in a flock the owner is compensated. Compensation is based on the costs incurred in rearing the bird to a certain age, less any income which has been derived from the bird (e.g., hatching eggs). A scale of compensation is published on a monthly basis according to the age of the bird, and whether it is a breeding flock on the meat production side or a breeding flock on the egg production side. The Animal Health Act, 1981 and the Diseases Of poultry order 1993 designate *Salmonella* as a disease of poultry and provides powers for the slaughter of flocks which are confirmed to be infected. In Northern Ireland the Disease of Animals (Northern Ireland) Order 1981 designates *Salmonella* as a disease of poultry and provides similar powers as above.

¹⁰

A short description of the control procedures and in particular rules on the movement of animals liable to be affected or contaminated by a given disease and the regular inspection of the holdings or areas is provided.

4.4.9. Information and assessment on bio-security measures management and infrastructure in place in the flocks/holdings involved:

Hygiene measures on the breeding farms are also assessed during visits for the collection of official samples and during general visits to premises by officials for other purposes. Advisory visits are carried out by *Salmonella* experts from the VLA to farms where *Salmonella* has been detected or where advice and assistance is needed in control/prevention of disease

5. General description of the costs and benefits¹¹;

No available information

6. Data on the epidemiological evolution during the last five years¹²

6.1. Evolution of zoonotic salmonellosis

A programme for the control of the two most important *Salmonella* of public health significance, *Salmonella* Enteritidis and *Salmonella* Typhimurium in breeding flocks of *Gallus gallus* has been in operation in the UK since 1989, and in its present form since 1993. As a result of the control programme the number of *Salmonella* Enteritidis and *Salmonella* Typhimurium infected breeding flocks of *Gallus gallus* in the UK is currently very low. Of the other three *Salmonella* serovars, *Salmonella* Hadar, *Salmonella* Infantis and *Salmonella* Virchow, the occurrence is likewise at low levels

¹¹

A description is provided of all costs for the authorities and society and the benefits for farmers and society in general.

¹²

The data on the evolution of zoonotic salmonellosis are provided according to the tables where appropriate.

6.1.2. Data on evolution of zoonotic salmonellosis

Year: 2010

Situation on date: 20th April 2009

Animal species: Breeding hens (*Gallus gallus*) Disease/infection^(a): Zoonotic Salmonella

Region (a1)	Type of flock ^(e)	Total number of flocks ^(c)	Total number of animals	Total number of flocks under the programme	Total number of animals under the programme	Number of flocks of flocks checked ^(b)	Number of positive ^(a) flocks ^(b)				Total numbers of animals slaughtered or destroyed ^(a)		Quantity of eggs destroyed (number or kg) ^(b)		Quantity of eggs channelled to egg products (number or kg) ^(a)	
							(a1)	(a2)	(a3)	(a4)	(a4)	(a3)	(a4)	(a3)	(a4)	(a3)
UK	Breeding hens (<i>Gallus gallus</i>)	1600	8000000	1600	8000000	~1600	0	~8	~20	0	~600000	unkn	unkn	unkn	unkn	unkn
Total		1600	8000000	1600	8000000	~1600	0	~8	~20	0	~600000	unkn	unkn	unkn	unkn	unkn

Above are provisional figures for the 2008 reporting year

- (a) For zoonotic Salmonellosis indicate the serotypes covered by the control programmes: (a1) for *Salmonella* Enteritidis, (a2) for *Salmonella* Typhimurium, (a3) for other serotypes-specific as appropriate, (a4) for *Salmonella* Enteritidis or *Salmonella* Typhimurium.
- (a1) Region as defined in the approved control and eradication programme of the Member State.
- (b) For example, breeding flocks (rearing, adult flocks), production flocks, laying hen flocks, broiler turkeys, breeding turkeys, slaughter pigs, etc. Flocks or herds or as appropriate.
- (c) Total number of flocks existing in the region including eligible flocks and non-eligible flocks for the programme.
- (d) Check means to perform a flock level test under the programme for the presence of salmonella. In this column a flock must not be counted twice even if it has been checked more than once.
- (e) If a flock has been checked, in accordance with footnote (d), more than once, a positive sample must be taken into account only once.

6.2. Stratified data on surveillance and laboratory tests NOT APPLICABLE

6.2.1. Stratified data on surveillance and laboratory tests (one table per year and per disease/species)

Year: 2010

Animal species^(a): Citullus gallus

Category^(b): breeding hens

Description of the used serological tests: not used

Description of the used microbiological or virological tests: Microbiological culture ISO 6579 (2002)

Description of the other used tests:

Region ^(c)	Serological tests		Microbiological or virological tests		Other tests	
	Number of samples tested ^(d)	Number of positive samples ^(e)	Number of samples tested ^(d)	Number of positive samples ^(e)	Number of samples tested ^(d)	Number of positive samples ^(e)
LJK						
1 total						

- (a) Animal species if necessary.
 (b) Category/further specifications such as breeders, laying hens, broilers, breeding turkeys, broiler turkeys, breeding pigs, slaughter pigs, etc. when appropriate.
 (c) Region as defined in the approved control and eradication programme of the Member State.
 (d) Number of samples tested.
 (e) Number of positive samples.

6.3. Data on infection (one table per year and per species)

Year: 2010

Animal species^(a): Breeding hens (Gallus gallus)

Region ^(b)	Number of herds infected ^(c)	Number of animals infected
U.K.	8	260,000
Total	8	260,000

Provisional results for the 2008 reporting year

- (a) Animal species if necessary.
- (b) Region as defined in the control and eradication programme of the Member State.
- (c) Herds or flocks or holdings as appropriate.

7. Targets

7.1. Targets related to testing (one table for each year of implementation) NOT APPLICABLE

7.1.1. Targets on diagnostic tests

Animal species: ^(a);

Region ^(b)	Type of the test ^(c)	Target population ^(d)	Type of sample ^(e)	Objective ^(f)	Number of planned tests

(a) Species if necessary.

(b) Region as defined in the approved control and eradication programme of the Member State.

(c) Description of the test.

(d) Specification of the targeted species and the categories of targeted animals if necessary.

(e) Description of the sample (for instance faeces).

(f) Description of the objective (for instance surveillance, monitoring, control of vaccination).

7.1.2. Targets on testing of flocks¹⁴

Year:

Situation on date:

Animal species:

Infection¹⁵:

Region (a1)	Type of flock ¹⁶	Total number of flocks ¹⁷	Total number of animals	Total number of flocks under the programme	Total number of animals under the programme	Expected number of flocks to be checked ¹⁸	Number of flocks ¹⁹ expected to be positive ¹⁹			Number of flocks expected to be depopulated ²⁰		Total number of animals expected to be slaughtered or destroyed ²¹	Expected quantity of eggs to be destroyed (number or kg) ²²	Expected quantity of eggs channelled to egg products (number or kg) ²³
							(a1)	(a2)	(a3)	(a1)	(a2)			
UK	Breeding chickens	~1600	~800000	~1600	800000	~1600	0	~3	~20	~3	0	~20.0 own	unkn own	unkn own
Total														

- (a) For zoonotic salmonellosis indicate the serotypes covered by the control programmes: (a1) for *Salmonella* Enteritidis, (a2) for *Salmonella* Typhimurium, (a3) for other serotypes-specific as appropriate, (a4) for *Salmonella* Enteritidis or *Salmonella* Typhimurium.
- (a1) Region as defined in the approved control and eradication programme of the Member State.
- (b) For example, breeding flocks (rearing, adult flocks), production flocks, laying hen flocks, breeding turkeys, broiler turkeys, breeding pigs, slaughter pigs, etc. Flocks or herds or as appropriate.
- (c) Total number of flocks existing in the region including eligible flocks and non-eligible flocks for the programme.
- (d) Check means to perform a flock level test under the programme for the presence of salmonella. In this column a flock must not be counted twice even if it has been checked more than once.

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Specify types of flocks if appropriate (broilers, layers, broilers).

- (e) If a flock has been checked, in accordance with footnote (d), more than once, a positive sample must be taken into account only once.

8. Detailed analysis of the cost of the programme (one table per year of implementation)

<u>Costs related to</u>	<u>Specification</u>	<u>Number of units</u>	<u>Unitary cost in EUR</u>	<u>Total amount in EUR</u>	<u>Community funding requested (yes/no)</u>
<u>1. Testing</u>					
<u>1.1. Cost of the analysis</u>	<u>Test: Number of bacteriological tests (cultivation) planned to be carried out in the framework of official sampling</u>				
	<u>Test: Number of serotyping of relevant isolates tests planned to be carried out</u>				
<u>1.2. Cost of sampling</u>					
<u>1.3. Other costs</u>					

2. Vaccination or treatment of animal products				
2.1. Purchase of vaccine/treatment of animal products	Number of purchase of vaccine doses planned if a vaccination policy is part of the programme as set out explicitly under point 4 of Annex II			
2.2. Distribution costs				
2.3. Administering costs				
2.4. Control costs				
3. Slaughter and destruction				
3.1. Compensation of animals				
3.2. Transport costs				

3 flocks
approximately
15000 breeding
birds

EURO 34028 per
flock

EURO 103083

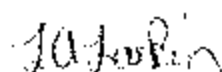
YES

<u>3.3. Destruction costs</u>									
<u>3.4. Loss in case of slaughtering</u>									
<u>3.5. Costs from treatment of animal products (milk, eggs, hatching eggs, etc.)</u>									
<u>4. Cleaning and disinfection</u>									
<u>5. Salaries (staff contracted for the programme only)</u>									
<u>6. Consumables and specific equipment</u>									

Annex - Declaration

I hereby confirm that implementation of the National Control Programme for *Salmonella* in breeding flocks of *Gallus gallus* in 2010 in the UK will be according to the provisions of the following veterinary legislation:

- **Regulation (EC) No. 2160/2003**
 - **Regulation (EC) No. 1003/2005 as amended by Regulation (EC) No. 213/2009**
1. Sampling is carried out under the requirements of the UK National Control Programme for *Salmonella* in breeding chickens (*Gallus gallus*) by the Competent Authority and by the operator according to the requirements of Annex II B of EC Regulation 2160/2003:
 - For 2007 and 2008, sampling to verify the achievement of the target was as detailed in the Annex to Commission Regulation (EC) No 1003/2005.
 - From April 2009, samples are taken as detailed in paragraph 2 of the Annex of Regulation (EC) No. 213/2009. The frequency of sample collection is as laid out in Regulation (EC) No. 213/2009 paragraph 2.1.1 and paragraph 2.1.2.3(b) (derogation as the Community target has been reached for at least two consecutive calendar years in the UK).
 2. Reporting of results is carried out according to the provisions of paragraph 4 of Regulation (EC) No. 213/2009 as laid out in the UK application document (Decision 2008/425/EC).



Lesley Larkin

Defra

9th September 2009.

ANNEX II

Standard requirements for the submission of national programmes for the control of Salmonellosis (zoonotic Salmonella) as referred to in Article 1(b)

Part A

General requirements for the national salmonella control programmes

(a) state the aim of the programme

To reduce the prevalence of layer flocks infected with *S. Enteritidis* or *S. Typhimurium* by 10% year on year from a baseline of 8% prevalence

(b) demonstrate the evidence that it complies with the minimum sampling requirements laid down in part B of Annex II to Regulation (EC) No 2160/2003 of the European Parliament and of the Council¹ indicating the relevant animal population and phases of production which sampling must cover

Breeding flocks of *Gallus gallus*:

- rearing flocks — day-old chicks
 - four-week-old birds
 - two weeks before moving to laying phase or laying unit
- adult breeding flocks — every second week during the laying period

¹ OJ L 325, 12.12.2003, p. 1.

Laying hens: applying for co-financing of the Salmonella control programme 2010

- rearing flocks ... day-old chicks
 - pullets two weeks before moving to laying phase or laying unit
- laying flocks — every 15 weeks during the laying phase

Broilers birds leaving for slaughter

Turkeys — birds leaving for slaughter

Herds of pigs:

- breeding pigs ----- animals leaving for slaughter or carcasses at the slaughterhouse
- slaughter pigs animals leaving for slaughter or carcasses at the slaughterhouse

- (c) demonstrate the evidence that it complies with the specific requirements laid down in Parts C, D and E of Annex II to Regulation (EC) No 2160/2003; and
- (d) specify the following points:

I. General

- 1.1. A short summary referring to the occurrence of the salmonellosis [zoonotic salmonella] in the Member State with specific reference to the results obtained in the framework of monitoring in accordance with Article 4 of Directive 2003/99/EC of the European Parliament and of the Council², particularly highlighting the prevalence values of the salmonella serovars targeted in the salmonella control programmes.

Salmonellas have been recognised as important pathogens and *Salmonella* Enteritidis and *Salmonella* Typhimurium have accounted for the majority of cases of human salmonellosis for many years and have consistently been the most commonly implicated pathogens in general outbreaks of foodborne disease.

A programme for the control of the two most important *Salmonellas* of public health significance, *Salmonella* Enteritidis and *Salmonella* Typhimurium in breeding flocks of *Cathus gallus* has been in operation in the UK since 1989, and in its present form since 1993. As a result of the control programme, the number of *Salmonella* Enteritidis and *Salmonella* Typhimurium infected breeding flocks of *Cathus gallus* in the UK is currently very low. Of the other three *Salmonella* serovars, *Salmonella* Hadar, *Salmonella* Infantis and *Salmonella* Virchow, the occurrence is likewise at low levels.

Information was submitted to the Commission relating to the occurrence of *Salmonella* isolates in breeding flocks in the UK in 2004 (SANCO/143/2005 http://europa.eu.int/comm/food/food/safety/salmonella/impl_rpt_en.htm)

The success of the control programme in breeding flocks means that the day old layer chicks placed on farms should be free of *S. Enteritidis* and *S. Typhimurium*.

A sharp rise in the incidence of human salmonellosis in the UK was observed in the mid 1980s. This was largely due to an increase in *S. Enteritidis* phage type 4 (PT 4) infection. The incidence of this phage type reached a peak in the early 1990s and remained broadly stable until 1998 when a significant fall was recorded throughout most of the UK which continued for the next two years. Since then, the decline has continued, albeit less sharply. The reduction in the number of cases of salmonellosis reported in humans continued in 2005 and in the UK as a whole there were 12,831 cases. *S. Enteritidis* and *S. Typhimurium* remained the two most common serotypes isolated from humans, accounting for just under 70% of all laboratory confirmed reports. In 2006 there was a slight increase to 14,060 confirmed laboratory cases in humans and in 2007 again a slight reduction to 13,213 laboratory confirmed reports.

² OJ L 325, 12.12.2003, p. 31.

The Advisory Committee on Microbiological Safety of Food (an expert independent group which advises the Food Standards Agency) considered *Salmonella* in eggs and reported on its findings in May 2001³ and considered that the widespread vaccination of egg laying flocks against *S. Enteritidis* combined with improved flock hygiene measures had had a significant effect on the prevalence of *Salmonella* contamination of eggs and on salmonellosis in humans. In the UK a voluntary industry operated scheme (British Egg Industry Council) Lion Quality requires its members to vaccinate their layer flocks and to operate to specified hygiene standards. About 85% of egg production belongs to the Lion Quality scheme. In addition many producers who are not members of the scheme also vaccinate their flocks on a voluntary basis.

S. Enteritidis and *S. Typhimurium* may enter the food chain from sources other than eggs. Although *S. Enteritidis* is mainly associated with birds, *S. Typhimurium* is found in other species of livestock.

Overall, there is little regional variation in salmonellosis in humans in the UK as illustrated below with a more detailed summary of the situation according to region or country.

All laboratories which isolate *Salmonella* from a laying flock or its environment are required to report the finding and supply the isolate to the National Reference Laboratory (NRL). This information is recorded and analysed. The number of reports made depends on the level and sensitivity of monitoring which is undertaken by the producers. The reports provide useful information on the serovars which are most common in the birds, and indicate trends. Over the last three years the number of incidents concerning the invasive types of *Salmonella* in laying hens has been low from this method of monitoring.

In 2005 in layers there were 42 incidents with 17 *S. Enteritidis*, and 3 incidents of *S. Typhimurium* recorded in Great Britain during routine monitoring carried out by the industry and private veterinarians. Advice was given to the operators on control of *Salmonella* and the codes of good practice to help control the introduction of *Salmonella* and its spread.

The current system of voluntary monitoring and the requirement of laboratories to report positive findings does not give information on the number of holdings or flocks sampled. It is not possible therefore from these figures to establish the prevalence of *Salmonella* in layer flocks, but the information does give valuable information on the serotypes which are most commonly found in layers, and the trends in these from year to year. In addition all *Salmonella* isolates are phage typed and tested for sensitivity against a panel of 16 antimicrobials in the monitoring

³Second report on *Salmonella* in eggs (2001) (ISBN 0-11-322466-4)

programme which provides information on trends. A better measure of the prevalence was obtained from the survey carried out to set a baseline for *Salmonella* in layer flock holdings according to Decision (EC) No 2004/665. The study was conducted according to the protocol in Decision 2004/665.

The raw data were forwarded to the Commission for analysis by the European Food Safety Authority (EFSA). An analysis of the UK data was carried out by the National Reference Laboratory (NRL). Small differences in the results of the two analysis may be expected due to inclusion or exclusion of certain data, and the methods of data analysis. In the analysis by the NRL of the 454 holdings that were sampled in the survey, 55 tested positive for *Salmonella* on one or more samples giving an estimated holding level prevalence of *Salmonella* on UK layer farms of 11.9% (CI95% 9.5 - 14.3%). Within these 55 positive holdings, 18 different serovars were identified. More than one serovar was isolated on seven of the holdings. No holding was found to have both *S. Enteritidis* and *S. Typhimurium* together. *S. Virchow* and *S. Infantis* were each found on a single holding, while *S. Hadar* was not found on any holdings. *S. Enteritidis* was isolated from 28 of the 454 holdings giving a weighted prevalence of 5.8% (CI95% 4.2 - 7.4%). *S. Typhimurium* was isolated from 8 holdings and the estimated prevalence of this serovar was 1.8% (CI95% 0.8-2.9%).

All isolates of *S. Enteritidis*, *S. Typhimurium*, *S. Virchow* and *S. Thompson* were phage typed. The two typable isolates of *S. Thompson* were phage type 2 while the single typable *S. Virchow* isolate was PT157. The most common *S. Enteritidis* phage type was PT4, which was isolated from over half of the positive holdings. PT35 and PT16 were also found frequently and were present in more than one quarter of the infected holdings. *S. Typhimurium* definitive phage type DT104 was identified on four of the eight infected holdings.

A statutory monitoring programme for *Salmonella* in laying hens in the UK producing eggs for human consumption was introduced in February 2008 in accordance with Regulation (EC) No 1168/2006. For the months January 2008 to March 2008 reports of 22 *S. Enteritidis* in laying flocks (no *S. Typhimurium* reported).

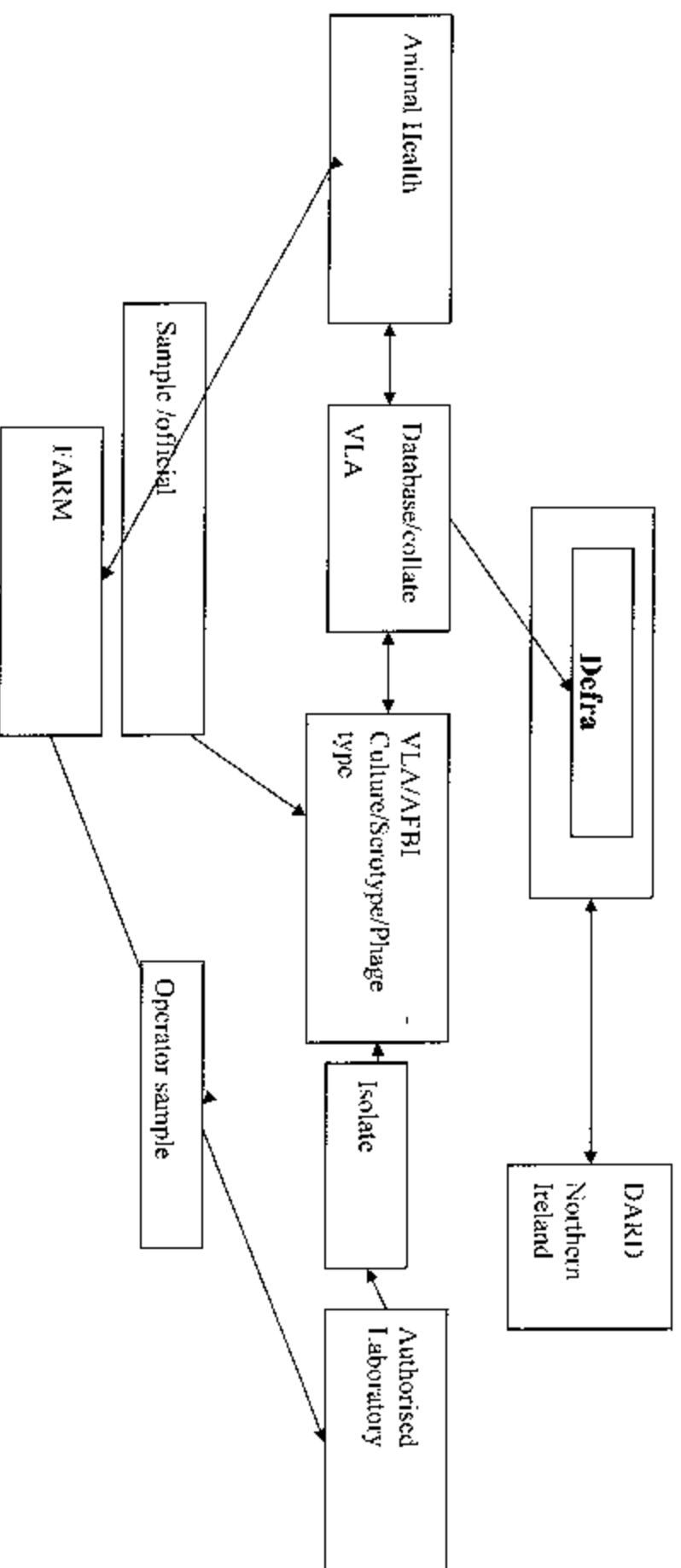
In 2007 there were 29 reports of *S. Enteritidis* and 3 reports of *S. Typhimurium* in layers from voluntary monitoring by the industry. During 2008 there were approximately 50 incidents of *S. Enteritidis* and *S. Typhimurium* detected in laying hen flocks in the UK.

Reporting of results is carried out according to the provisions of paragraphs 4 of Regulation (EC) No. 1168/2006, subject to limitations in recording of positive flocks for serotypes other than *Salmonella* Enteritidis and *Salmonella* Typhimurium where production extends over 2 calendar years. A laying flock is recorded as positive for purposes of reporting of the results of *Salmonella* monitoring under the requirements of Dir (EC) No 99/2003 when *Salmonella* is detected in one or more National Control Programme samples taken from that flock by the operator or by official sampling by the Competent Authority. However, for the purposes of implementing the requirements of Regulation (EC) No. 2160/2003 and Regulation (EC) No. 1237/2007 (ie the heat treatment of eggs from flocks positive for SE and ST) in the event of isolation of

Salmonella Enteritidis or *Salmonella* Typhimurium, a positive operator result may be confirmed prior to the actions required by the legislation by confirmatory sampling carried out by the Competent Authority. No confirmatory sampling is carried out if *Salmonella* Enteritidis or *Salmonella* Typhimurium is detected in an official sample taken by the Competent Authority.

1.2. The structure and organization of the relevant competent authorities. Please refer to the information flow between bodies involved in the implementation of the programme.

Department for Environment Food and Rural Affairs (Defra). Defra is the competent authority for Regulation EC 2160/2003 in England, Wales and Scotland (Great Britain). Department of Agriculture, Development and Rural Affairs (DARD) Northern Ireland. DARD is the competent authority for Regulation EC 2160/2003 in Northern Ireland. DARD provides information on the *Salmonella* in laying flocks to Defra who collates it. In Scotland the Scottish Government, and the Welsh Assembly Government in Wales administer the control plans, and supply information to Defra for collation. Official samples are taken by staff from Animal Health which is a Defra Agency. Follow up samples in infected holdings may be taken either by Animal Health or the Veterinary Laboratories Agency (VLA). The laboratories authorised to test samples in the control programme are required to report all isolations of *Salmonella* from samples taken (both statutory and voluntary samples) from poultry or their environment to VLA and to supply the isolate for serotyping and antimicrobial resistance.



1.3. Approved laboratories where samples collected within the programme are analysed.

Veterinary Laboratories Agency- an agency of Defra, with a network of regional laboratories in Great Britain including the NRL, for salmonella

For samples in Northern Ireland the National Reference Laboratory is The Agri-Food & Biosciences Institute (AFBI), AFBI Headquarters, Newforge Lane, Belfast BT9 5PX. AFBI is a DARD Non-Departmental Public Body (NDPB).

In addition samples taken by the operator may be analysed at laboratories authorised by the Competent Authority and overseen by the NRIs

1.4. Methods used in the examination of the samples in the framework of the programme.

Annex D of ISO 6579 (2002): 'Detection of *Salmonella* spp. in animal faeces and in samples of the primary production stage'

1.5. Official controls (including sampling schemes) at feed, flock and/or herd level.

Official controls consist of those required in Regulation (EC) No 1168/2006

(a) in one flock per year per holding comprising at least 1 000 birds;

(b) at the age of 24 ± 2 weeks in laying flocks housed in buildings where *Salmonella* was detected in the preceding flock;

(c) in any case of suspicion of *Salmonella* Enteritidis or *Salmonella* Typhimurium infection, as a result of the epidemiological investigation of food-borne outbreaks in accordance with Article 8 of Directive 2003/99/EC of the European Parliament and of the Council (1),

(d) in all other laying flocks on the holding in case *Salmonella* Enteritidis or *Salmonella* Typhimurium are detected in one laying flock on the holding;

(e) in cases where the competent authority considers it appropriate.

1.6. Measures taken by the competent authorities with regard to animals or products in which the presence of *Salmonella* spp. have been detected, in particular to protect public health, and any preventive measures taken, such as vaccination.

When *Salmonella* Enteritidis or *S.* Typhimurium are detected in a flock, the eggs from the flock are considered as Class B and must be heat treated before they are placed on the market for human consumption.

1.7. National legislation relevant to the implementation of the programmes, including any national provisions concerning the activities set out in the programme.

Zoonoses Order 1989 and in Northern Ireland, the Zoonoses Order (Northern Ireland) 1991 – requires the person responsible in all laboratories to report the isolation of a *Salmonella* and to provide a sub-culture on request to the National Reference Laboratory for *Salmonella*

The Control of Salmonella in Poultry Order 2008 requires operators to take samples from the laying flocks as specified in Regulation (EC) No 1168/2006, and to keep records of results, and details of flocks sampled.

1.8. Any financial assistance provided to food and feed businesses in the context of the programme.

None

2. Concerning food and feed businesses covered by the programme

2.1. The structure of the production of the given species and products thereof.

In the UK there are approximately 30,000,000 laying hens on 20,000 holdings. There are a large number of holding with less than 1000 birds but the total production from these birds is small and the 2.000 (provisional) holdings with more than 1000 birds accounts for more than 97% of total laying hens.

2.2. The structure of the production of feed.

Poultry feed is supplied to farms by a small number of manufacturers. The major manufacturers of poultry feed operate to assurance schemes, apply HACCP principles and monitor for *Salmonella*.

2.3. Relevant guidelines for good animal husbandry practices or other guidelines (mandatory or voluntary) on biosecurity measures defining at least:

- hygiene management at farms,
- measures to prevent incoming infections carried by animals, feed, drinking water, people working at farms, and
- hygiene in transporting animals to and from farms.
- hygiene management at farms,
- measures to prevent incoming infections carried by animals, feed, drinking water, people working at farms, and
- hygiene in transporting animals to and from farms.

A number of voluntary guides have been produced in collaboration with representatives of the industry on the control of *Salmonella* in poultry production.

Relevant ones are listed below, and some are also available on the website at:
<http://www.defra.gov.uk/animal/diseases/zoonoses/salmonella-cop.htm>

1. Code of Practice For The Prevention and Control of *Salmonella* –
In Commercial Egg Laying Flocks.
Ref No PB 2205
2. Codes of Practice For The Control of *Salmonella* –
For The UK Fish Meal Industry
Ref No PB 2203
3. Code of Practice For The Control of *Salmonella* –
In The Production of Final Feed For Livestock In Premises Producing Less
Than 10,000 tonnes Per Annum.
Ref No 2201
4. Code of Practice For The Control of *Salmonella* –
In the Production of Final Feed for Livestock In Premises Producing Over
10,000 Tonnes Per Annum.
Ref No 2200
5. Code of Practice For the Prevention and Control of *Salmonella*
In Chickens Reared For Meat
Ref No 7323
6. Code of Practice For The Control of *Salmonella*
During the Storage, Handling and Transport of Raw Materials Intended For
Incorporation Into, or Direct Use As, Animal Feedingsuff.
Ref No 2202
7. Code of Practice For The Control of *Salmonella* –
In Animal By-products Rendering Industry.
Ref No 2199
8. Code of Practice
For The Prevention of Rodent Infestation In Poultry Flocks –
The Control of *Salmonella*.
Ref No 2630
9. Code of Practice For The Prevention and Control of *Salmonella* –
In Breeding Flocks and Hatcheries.
Ref No PB 1564

10. Egg Quality Guide

Ref No PB 0000

11. Code of Practice The Handling and storage of eggs from farm to retail sale

Ref No. PB 2818

2.4. Routine veterinary supervision of farms.

The owner is responsible for the health and welfare of the poultry on the holding, and for ensuring that a veterinarian is consulted on disease and welfare issues as appropriate. The Competent Authority carries out inspections on farms for animal welfare reasons, to take samples for residues, to administer and enforce the legislation on marketing of eggs, and to check medicine records

2.5. Registration of farms.

All poultry breeding flocks of more than 250 birds are registered (Control of Salmonella in Poultry Order 2007). The register is maintained at the local level by the Competent Authority or its agent (State Veterinary Service in Great Britain, DARD in Northern Ireland).

All layer flocks of 350 or more birds are registered under the Registration of Establishments (Laying Hens) (England) Regulations 2003 and equivalent legislation. These Regulations implement for England Commission Directive 2002/4/EC on the registration of establishments keeping laying hens, covered by Council Directive 1999/74/EC.

A Great Britain Poultry Register and an equivalent register in Northern Ireland detail the locations and numbers of all poultry for the purposes of control of avian diseases such as Avian Influenza and *Salmonella* (requirement under The Avian Influenza (Preventive Measures) (England) Regulations 2006 and equivalent legislation in the Devolved Administrations).

2.6. Record-keeping at farms.

All laying flock operators are required to keep records of medicine usage, including vaccines, which must be available for inspection.

Records relating to movement of flocks onto and off the holding must be kept.

Records giving details of sampling for *Salmonella* and results will be kept either at the holding or be readily available.

2.7. Documents to accompany animals when dispatched.

Operators wishing to export more than 20 birds or hatching eggs to another EU member state (or certain third countries) must comply with EU Directive 90/539/EC and ensure that the consignment is accompanied by a completed and signed Intra-trade Animal Health Certificate (ITVABC) for poultry breeding and production. This can be obtained from a local Animal Health Divisional Office and must be completed and signed by the Official Veterinarian as well as the operator to confirm compliance with the relevant articles of Directive.

The ITVABC will also require the reference number of the operator's poultry health certificate.

The ITVABC will be amended to include the results of the last test for *Salmonella* as required in Commission Regulation (EC) 2160/2003 Article 9.1 prior to any dispatching of the live animals, or hatching eggs, from the food business of origin. The date and the result of testing shall be included in the relevant health certificates provided for in Community legislation.

2.8. Other relevant measures to ensure the traceability of animals.

The Control of *Salmonella* in Poultry Order (England) 2008, and the equivalent legislation when implemented in the devolved administrations in Wales, Scotland and Northern Ireland requires the operators of hatcheries and the keepers of breeding flocks to keep records of poultry or hatching eggs entering or leaving the premises. The records must contain information on the number, date, and origin or destination. These records must be retained for one year and be available to the Competent Authority for inspection. The Diseases of Poultry Order 2003 (and equivalent legislation) extends this requirement to every person who is engaged in the transport or marketing of poultry.

All official veterinary health certificates issued for the export of poultry and hatching eggs are recorded on either the Centaur system or the Trade Control and Export System (TRACTS). Both of these systems allow tracking of exports of live animals and hatching eggs accompanied by veterinary health certification. Centaur creates Export Health Certificates for exports to third countries while TRACTS generates ITVABCs issued for intra-Community movements. TRACTS is an internet-based service which is owned and maintained by the Commission. It is possible for traders (economic operators) to apply for both Centaur IHCs and TRACTS ITVABCs on-line or using paper application forms. Operators wishing to export birds to EU member states can register with TRACTS via Defra's website or their local Animal Health Office.

Part B

1. Identification of the programme

Member State: UK

Disease : infection of animals with zoonotic *Salmonella* spp

Animal population covered by the programme: Laying hens (*Gallus gallus*)

Year/s of implementation: 2010

Reference of this document: **UK Salmonella in Layers programme 2010**

Contact (name, phone, fax, e-mail):

Lesley Larkin,

Delta, Area 4A, Nobel House, 17 Smith Square, London SW1P 3JR

Tel - + 44 207 238 5723 fax - 44 207 238 1109

Email Lesley.larkin@defra.gsi.gov.uk

Date sent to the Commission:

2. Historical data on the epidemiological evolution of zoonotic salmonellosis specified in point 1⁴:

⁴ A concise description is given with data on the target population (species, number of flocks/herds and animals present and under the programme), the main measures (testing, testing and slaughter, testing and killing, qualification of flocks/herds and animals, vaccination) and the main results (incidence, prevalence, qualification of flocks/herds and animals). The information is given for distinct periods if the measures were substantially modified. The information is documented by relevant summary epidemiological tables, graphs or maps.

There are approximately 30,000,000 laying hens in the UK. The majority of the hens are in holdings with more than 1,000 birds. The geographical distribution is shown in the table below

Number of hens	England and Wales	Scotland	Northern Ireland
Unclassified	74		
1- 50	101		
51 - 150	154		
151 - 250	82		
251 - 350	69		
<350	415	100	15
350-1,000	204 not including those with 350 or less	25	20
1,000 to 10,000	724 not including those with 1,000 or less	45	90
>10,000	586 not including those	50	66

with 10,000 or less

The main measures taken in the programme are in compliance with Regulation (EC) 1168/2006, and consist of operator samples taken when day old layer chicks arrive on the farm, approximately 2 weeks before the birds are moved to laying accommodation, and then every 15 weeks during the production stage. The samples are sent for examination for *Salmonella* to either laboratories authorised by the Competent Authority, the Veterinary Laboratories Agency or the Agri-food and Biosciences Institute. *Salmonella* isolates are serotyped, phage typed, and tested for antimicrobial sensitivity. All isolations of *Salmonella* are reported to the Competent Authority. If *S. Enteritidis* or *S. Typhimurium* are isolated, from January 2009 all eggs from the infected flock will be considered as Class B. Other flocks on the holding will be subjected to an official test by the Competent Authority if one flock on the holding is infected with *S. Enteritidis* or *S. Typhimurium*. On holdings where a flock has been infected with *S. Enteritidis* or *S. Typhimurium*, an official sample will be taken of the replacement flock placed in the house when the birds are 22 to 26 weeks of age. On each holding when *S. Enteritidis* or *S. Typhimurium* is isolated the owner of the flock will be given detailed advice on the control of *Salmonella* on the premises and an attempt made to assess the likely sources of infection. If the operator does not voluntarily agree to cleaning and disinfection before a new flock is placed legislation is available to require the cleaning and disinfection of the house and appropriate disposal of the litter (The Zoonoses Order 1989, or equivalent legislation). The public health authorities monitor the isolation of *Salmonella* in humans. When there is a suspected foodborne outbreak of *Salmonella* the public health authorities (Health Protection Agency) carry out epidemiological investigations to attempt to identify the source. When the source is traced back to a specific farm, Animal Health will undertake sampling of the flock. Samples will be examined for *Salmonella* and detailed analysis performed to compare the human strain with any *Salmonella* strain found in the flock. When the isolates are indistinguishable the eggs from the infected flock will be considered as Class B.

The results of the EU survey of laying flocks in the UK in 2005-2006 indicated that the prevalence of *S. Enteritidis* or *S. Typhimurium* in laying flock holdings was approximately 8.0%

The mandatory monitoring of laying flocks commenced in February 2008 and to date (January 2008 to December 2008) there have been approximately 49 laying flocks infected with *S. Enteritidis*, and 4 with *S. Typhimurium* (provisional results as data still to be analysed before submission in the annual trends and sources report).

Many laying flocks in the UK are vaccinated against *Salmonella* on a voluntary basis.

3. **Description of the submitted programme⁵:**

The main emphasis of the programme is to monitor effectively, to assess the prevalence of infection against the reduction target, and to give advice to owners with infected flocks on how to reduce or eliminate *Salmonella* Enteritidis or *S.* Typhimurium on the premises. To require owners to clean and disinfect and to control other pests such as rodents which may carry *Salmonella* and re-infect subsequent flocks. Also to advise on the need to prevent contamination of feed on the farm. In 2009 eggs from infected flocks (*S.* Enteritidis or *S.* Typhimurium) are considered as Class B as a method to protect public health against the transmission of *Salmonella* infection through the consumption of fresh table eggs contaminated with *Salmonella*.

A flock is considered positive if a sample taken by the competent authority is positive for *S.* Enteritidis or *S.* Typhimurium

⁵ A concise description of the programme is given with the main objective(s) (monitoring, control, eradication, qualification of flocks/herds and/or regions, reducing prevalence and incidence), the main measures (testing, testing and slaughter, testing and killing, qualification of flocks/herds and animals, vaccination), the target animal population and the area(s) of implementation and the definition of a positive case.

4. Measures of the submitted programme

4.1. *Summary of measures under the programme*

Duration of the programme:

First year: 2008

Last year: 2010

Control

Control/Eradication

X Testing

Testing

Slaughter of animals tested positive

Slaughter of animals tested positive

Killing of animals tested positive

Killing of animals tested positive

Vaccination

Extended slaughter or killing

Treatment of animal products

Disposal of products

Disposal of products

X Monitoring or surveillance

Other measures (specify):

4.2. *Designation of the central authority in charge of supervising and coordinating the departments responsible for implementing the programme⁶:*

The Competent Authority for this National Control Programme in respect of EC Regulation 2160/2003 for the control of *Salmonella* in layer flocks of *Gallus gallus* is:

Department for Environment, Food and Rural Affairs, Nobel House, 17 Smith Square, London SW1P 3JR

⁶ Describe the authorities in charge of supervising and coordinating the departments responsible for implementing the programme and the different operators involved. Describe the responsibilities of all involved.

- In Northern Ireland the operation of the Control Programme is under Department of Agriculture and Rural Development (DARD).
 - The programme in Wales operates with the collaboration of the Welsh Assembly.
 - The programme in Scotland operates with the collaboration of the Scottish Executive Environment and Rural Affairs Department.
- The Competent Authority in respect of Regulation (EC) No 882/2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules is the Food Standards Agency, Aviation House, Holborn, London.

With reference to the slaughter of laying flocks at the end of lay the Meat Hygiene Service is an Executive Agency of the Food Standards Agency and is responsible for the protection of public health and animal health and welfare in Great Britain, through proportionate enforcement of legislation in licensed meat premises. Enforcement in licensed premises in Northern Ireland is the responsibility of DARDNI.

In respect of EC Regulation No 1831/2003 on feed hygiene, the Competent Authorities are the Food Standards Agency and local authorities (Trading Standards Departments and some Environmental Health Services).

Defra is the Competent Authority in respect of the rules on the Marketing of Eggs (Council Regulation (EEC) No 1907/90 of 26 June 1990 on certain marketing standards for eggs, Commission Regulation (EC) No 2295/2003 of 23 December 2003 introducing detailed rules for implementing Council Regulation (EEC) No 1907/90 on certain marketing standards for eggs, and from 01 July 2007 Council Regulation (EC) No 1028/2006 of 19 June 2006 on marketing standards for eggs) administered and enforced by the Egg Marketing Inspectorate (EMI) in England and Wales. The equivalent body in Scotland is Eggs and Poultry Unit (EPU) of Scottish Executive Environment and Rural Affairs Department and in Northern Ireland the function is the responsibility of Quality Assurance Branch, (DARD).

4.3. *Description and delimitation of the geographical and administrative areas in which the programme is to be implemented:*

The plan will be implemented throughout the UK including England, Wales, Scotland, Northern Ireland.

Describe the name and denomination, the administrative boundaries, and the surface of the administrative and geographical areas in which the programme is to be applied. Illustrate with maps.

4.4. Measures implemented under the programme⁸

4.4.1. Measures and applicable legislation as regards the registration of holdings:

All layer flocks of 350 or more birds are registered under the Registration of Establishments (Laying Hens) (England) Regulations 2003 and equivalent legislation.

4.4.2. Measures and applicable legislation as regards the identification of animals⁹:

Not Applicable

4.4.3. Measures and applicable legislation as regards the notification of the disease:

The owner in charge of any laboratory must report the isolation of *Salmonella* from any bird or livestock kept to produce food for human consumption to Defra or its agency, detailing the date, type of sample, animal or bird type, and to supply the culture of the *Salmonella*.

4.4.4. Measures and applicable legislation as regards the measures in case of a positive result¹⁰:

If the owner does not take appropriate action to clean and disinfect infected houses legislation is available to enforce the operator to do so and to require that samples are taken to check the cleaning and disinfection is satisfactory. The same legislation may also be used to control movements onto and off the premises. The legislation is the Zoonoses Order 1989 (equivalent in devolved administrations). The same legislation will be used to require eggs from flocks which are the cause of a foodborne outbreak to be treated as Class B. Amendment of the current legislation on eggs (the Egg and Chicks Regulation 2009) includes amendments require eggs from flocks infected with *S. Enteritidis* or *S. Typhimurium* to be considered as Class B and to enforce the requirement for heat treatment of these eggs.

⁸ Where appropriate Community legislation is mentioned. Otherwise the national legislation is mentioned.

⁹ Not applicable for poultry.

¹⁰ A short description is provided of the measures as regards positive animals (slaughter, destination of carcasses, use or treatment of animal products, the destruction of all products which could transmit the disease or the treatment of such products to avoid any possible contamination, a procedure for the disinfection of infected holdings, a procedure for the restocking with healthy animals of holdings which have been depopulated by slaughter.

4.4.5. Measures and applicable legislation as regards the different qualifications of animals and herds:

All eligible laying flocks, according to Regulation (EC) No. 2160/2003 are in the National Control Programme

4.4.6. Control procedures and in particular rules on the movement of animals liable to be affected or contaminated by a given disease and the regular inspection of the holdings or areas concerned¹⁾:

All holdings which are producing eggs which are graded are visited at least once a year by Egg Marketing Inspectors from Animal Health Agency.

4.4.7. Measures and applicable legislation as regards the control (testing, vaccination, ...) of the disease:

Measures as outlined in 4.4.4. above.

4.4.8. Measures and applicable legislation as regards the compensation for owners of slaughtered and killed animals:

There are no plans to compensate owners for slaughtered or killed laying flocks.

4.4.9. Information and assessment on bio-security measures management and infrastructure in place in the flocks/holdings involved:

Hygiene measures on the laying farms are also assessed by the Egg Marketing Inspectors from Animal Health as in 4.4.6 as above.

¹⁾ A short description of the control procedures and in particular rules on the movement of animals liable to be affected or contaminated by a given disease and the regular inspection of the holdings or areas is provided.

5. General description of the costs and benefits¹²:

- 5 Estimated costs to producers over the first 3 years of the NCP are **£28.6 million**. The benefits of the NCP are estimated to fall in a range between **£32.8 million** and **£61.4 million**. (This range assumes that the proportion of human cases of *Salmonella* linked to eggs is between 20% and 30% of all cases).

¹² A description is provided of all costs for the authorities and society and the benefits for farmers and society in general.

6. Data on the epidemiological evolution during the last five years¹³

6.1. Evolution of zoonotic salmonellosis

Although there has been voluntary monitoring and reporting of any *Salmonella* isolates to the competent authority for many years, there has not been a mandatory monitoring programme until February 2008. Section 1 in Part A gives the results of this monitoring, and of the EU survey to establish a baseline for *Salmonella* in 2005/2006.

¹³ The data on the evolution of zoonotic salmonellosis are provided according to the tables where appropriate.

- (e) If a Flock has been checked, in accordance with footnote (d), more than once, a positive sample must be taken into account only once.

6.2. Stratified data on surveillance and laboratory tests

6.2.1. Stratified data on surveillance and laboratory tests (one table per year and per disease/species)

Year: 2010 Animal species^(a): Gallus gallus Category^(b): Laying hens

Description of the used serological tests: NOT USED

Description of the used microbiological or virological tests: Microbiological culture ISO 6579 (2002)

Description of the other used tests:

Region ^(c)	Serological tests		Microbiological or virological tests		Other tests	
	Number of samples tested ^(d)	Number of positive samples ^(e)	Number of samples tested ^(d)	Number of positive samples ^(e)	Number of samples tested ^(d)	Number of positive samples ^(e)
UK			~4000	~200		
Total						

Provisional results from 2008

- (a) Animal species if necessary.
- (b) Category: further specifications such as breeders, laying hens, broilers, breeding turkeys, broiler turkeys, breeding pigs, slaughter pigs, etc, when appropriate.
- (c) Region as defined in the approved control and eradication programme of the Member State.
- (d) Number of samples tested.
- (e) Number of positive samples.

6.3. Data on infection (one table per year and per species)

Year: 2010

Animal species^(a): Laying hens (Gallus gallus)

Region ^(b)	Number of herds infected ^(c)	Number of animals infected
UK	160	32,60000
Total		

- (a) Animal species if necessary.
- (b) Region as defined in the control and eradication programme of the Member State.
- (c) Herds or flocks or holdings as appropriate.

6.4. Data on vaccination programmes¹⁴ NOT APPLICABLE

Year: _____ Animal species: ^(a) _____

Description of the used vaccination

Region ^(b)	Total number of herds ^(c)	Total number of animals	Information on vaccination programme		
			Number of herds ^(c) in vaccination programme	Number of herds ^(c) vaccinated	Number of animals vaccinated
Total					

(a) Animal species if necessary.

(b) Region as defined in the approved control and eradication programme of the Member State.

(c) Herds or flocks or holdings as appropriate.

¹⁴ Data to provide only if vaccination has been carried out.

7. Targets

7.1. Targets related to testing (one table for each year of implementation)

7.1.1. Targets on diagnostic tests

Animal species: (a),

Region ^(a)	Type of the test ^(c)	Target population ^(b)	Type of sample ^(e)	Objective ^(d)	Number of planned tests
UK	Microbiological	2000 holdings with more than 1000 laying hens	Best sample	Monitoring surveillance	2000
	Microbiological	2000 holdings with more than 1000 laying hens	Best swabs	Monitoring surveillance	2000
	Microbiological	Other flocks on infected holdings: fowls 4 flocks per holding and 3% infected - 600	Best swabs	Monitoring surveillance	600
	Microbiological	Other flocks on infected holdings: fowls 4 flocks per holding and 8% infected - 640	Best	Monitoring surveillance	640
	Microbiological	Check on flock not previously infected: fowls estimate 160	Best	Monitoring surveillance	160
	Microbiological	Check on flock on previously infected: fowls estimate 160	Best swab	Monitoring surveillance	160
	Microbiological			Monitoring surveillance	5600

- (a) Species if necessary.
 (b) Region as defined in the approved control and eradication programme of the Member State.
 (c) Description of the test.
 (d) Specification of the targeted species and the categories of targeted animals if necessary.
 (e) Description of the sample (for instance faeces).
 (f) Description of the objective (for instance surveillance, monitoring, control of vaccination).

7.1.2. Targets on testing of flocks¹⁵

Year:

Situation on date:

Animal species: infection^(a)

Region (a1)	Type of flock ^(b)	Total number of flocks ^(c)	Total number of animals	Total number of flocks under the programme	Total number of animals under the programme	Expected number of flocks to be checked ^(d)	Number of flocks ^(e) expected to be positive ^(a)			Total number of animals expected to be slaughtered or destroyed ^(e)		Expected quantity of eggs to be destroyed (number or kg) ^(a)		Expected quantity of eggs channelled to egg products (number or kg) ^(a)	
							(a1)	(a2)	(a3)	(a4)	(a3)	(a4)	(a3)	(a4)	(a3)
UK	Laying flock of hens	8000 assumes 4 flocks per holding	30,000,000 600	8000	29,000,000	2800*	~160	~5	unknown "	unkn own*	unkn own	0	200,0 4000 0	unkn own	0
Total		8000	30,000,000 "	8000	29,000,000	2800*	~160	~5	unknown "	unkn own	0	0	unkn own	unkn own	0

* Expected approximately 2000 flocks checked by annual official control sample (1 flock per premise) and 640 flocks tested on positive holdings and 160 flocks tested as follow-on to repopulation of house where positive flock has been depopulated

¹⁵ Specify types of flocks if appropriate (breeders, layers, broilers).

** Voluntary depopulation by operator if positive flock – therefore cannot estimate number of flocks likely to be slaughtered

- (a) For zoonotic salmonellosis indicate the serotypes covered by the control programmes: (a1) for *Salmonella* Enteritidis, (a2) for *Salmonella* Typhimurium, (a3) for other serotypes-specific as appropriate, (a4) for *Salmonella* Enteritidis or *Salmonella* Typhimurium, Region as defined in the approved control and eradication programme of the Member State.
- (a1) For example, breeding flocks (rearing, adult flocks), production flocks, laying hen flocks, breeding turkeys, broiler turkeys, breeding pigs, slaughter pigs, etc. Flocks or herds or as appropriate.
- (c) Total number of flocks existing in the region including eligible flocks and non-eligible flocks for the programme.
- (d) Check means to perform a flock level test under the programme for the presence of salmonella. In this column a flock must not be counted twice even if it has been checked more than once.
- (e) If a flock has been checked, in accordance with footnote (d), more than once, a positive sample must be taken into account only once.

7.2. Targets on vaccination (one table for each year of implementation) NOT APPLICABLE

7.2.1. Targets on vaccination ¹⁶

Animal species: ^(a)

Region ^(b)	Total number of herds ^(c) in vaccination programme	Total number of animals in vaccination programme	Targets on vaccination programme			
			Number of herds ^(c) in vaccination programme	Number of herds ^(c) expected to be vaccinated	Number of animals expected to be vaccinated	Number of doses of vaccine expected to be administered
Total						

(a) Species if necessary.

(b) Region as defined in the approved control and eradication programme of the Member State.

(c) Herds or flocks or holdings as appropriate.

¹⁶ Data to provide only if appropriate.

8. Detailed analysis of the cost of the programme (one table per year of implementation)

<u>Costs related to</u>	<u>Specification</u>	<u>Number of units</u>	<u>Unitary cost in EUR</u>	<u>Total amount in EUR</u>	<u>Component funding requested (Yes/No)</u>
1. Testing					
<u>1.1. Cost of the analysis</u>	<u>Test: Number of bacteriological tests (cultivation) planned to be carried out in the framework of official sampling</u>	3600	EUR 15,45	EUR 55620,00	YES
	<u>Test: Number of serotyping of relevant isolates tests planned to be carried out</u>				
<u>1.2. Cost of sampling</u>					
<u>1.3. OTHER COSTS</u>					

<u>2. Vaccination or treatment of animal products</u>		<u>2.1. Purchase of vaccine/treatment of animal products</u>																													

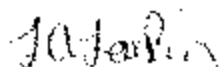
<i>3.1. Destruction costs</i>					
<i>3.4. Loss in case of slaughter</i>					
<i>3.5. Costs from treatment of animal products (milk, eggs, hatching eggs etc)</i>					
<i>4. Cleaning and disinfection</i>					
<i>5. Salaries (staff contracted for the programme only)</i>					
<i>6. Consumables and specific equipment</i>					

Annex - Declaration

I hereby confirm that implementation of the National Control Programme for *Salmonella* in laying flocks of *Gallus gallus* in 2010 in the UK will be according to the provisions of the following veterinary legislation:

- Regulation (EC) No. 2160/2003
- Regulation (EC) No. 1168/2006
- Regulation (EC) No. 1237/2007

1. Sampling is carried out under the requirements of the UK National Control Programme for *Salmonella* in laying chickens (*Gallus gallus*) by the Competent Authority and by the operator according to the requirements of Annex IIB of EC Regulation 2160/2003 and paragraph 2 of the Annex to Regulation (EC) No. 1168/2006
2. Reporting of results is carried out according to the provisions of paragraph 4 of the Annex to Regulation (EC) No. 1168/2006, subject to limitations in recording of positive flocks for serotypes other than *Salmonella* Enteritidis and *Salmonella* Typhimurium where production extends over 2 calendar years. A laying flock is recorded as positive for purposes of reporting of the results of *Salmonella* monitoring under the requirements of Dir (EC) No 99/2003 when *Salmonella* is detected in one or more National Control Programme samples taken from that flock by the operator or by official sampling by the Competent Authority



Lesley Larkin
Defra
9th September 2009.