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

Italy

* in accordance with Council Decision 2009/470/EC
National programme for the control of *Salmonella Enteritidis* and Typhimurium, in laying hens of *Gallus gallus* in Italy

Application for co-financing 2010
PART A

(a) This national control programme is presented to the Commission for approval according to article 5 of Regulation (EC) n.2160/2003. It has the objective of reducing the infection prevalence in layers of *Salmonella* Enteritidis and Typhimurium on the national territory. Since in Italy the prevalence of infection of Enteritidis and Typhimurium estimated during the baseline study was 8%, according to Regulation (EC) 1166/2006 this programme has the objective of reducing the prevalence of infection of *S. Enteritidis* and *S. Typhimurium* of 10% every year. The programme is based on a monitoring scheme according to Regulation (EC) 1166/2006, consisting in own-checks and official controls in holdings. Control measures are the killing or slaughtering of flocks positive for *S. Enteritidis* and *Typhimurium*, and the vaccination of animals used to restock a positive flock.

(b) Laying flocks shall be sampled at the initiative of the food business operator (operator) and by the Competent Authority.

Sampling at the initiative of the operator shall take place at least:

(a) in adult flocks at least every fifteen weeks. The first sampling shall take place at the age of 24 ± 2 weeks.

Furthermore the sampling shall take place:

(b) in day-old-chicks

(c) in rearing flocks two weeks before moving to the laying phase or laying unit.

(c) If the presence of *S. Enteritidis* or *Typhimurium* is confirmed, the animals must be submitted to sanitary restrictive measures, eliminated and destroyed according to Regulation 1774/2000, or in alternative, slaughtered applying measures to avoid the risk of diffusion of salmonellae.

If the positivity for *S. Enteritidis* or *Typhimurium* is found in laying animals during own-checks, until the official confirmation of the presence of *S. Enteritidis* or *Typhimurium*, eggs must be destroyed or heat treated.

If the positivity for *S. Enteritidis* or *Typhimurium* is found in laying animals producing eggs destined to be pasteurized, the flock of positive animals may be slaughtered at the end of the production cycle.

(d) 1.1

The infections from *Salmonella* represent, in Italy like in other industrialized Countries, one of the most frequent foodborne diseases in humans, and foods of avian origin, eggs and egg-products in particular, are ascribed amongst main infection causes. The most recent European legislation on food safety (White Book, Regulation (EC) 178/2002) identifies in the production chain control the more effective approach in order to guarantee the hygiene of foodstuffs, identifying in the primary production a key point for the surveillance and the control.

Regulation (EC) 2160/2003 requires a Community target for reducing *Salmonella* prevalence in laying hens to be laid down, and therefore comparable data on current prevalence in Member States (MS) needed to be available. To this end a special baseline study was carried out in order to estimate the prevalence of *Salmonella* spp. in laying hens. The objectives, the sampling frame, the diagnostic testing methods as well as the collection of data, evaluation and reporting and timelines of this baseline study are specified in Commission Decision 2004/665/EC.
In Italy the observed prevalence of S. Enteritidis and S. Typhimurium was 8.1%.
Regulation (EC) No 2160/2003 provides that for a transitional period of three years, the
Community target for laying hens of Gallus gallus is to cover Salmonella Enteritidis and
Salmonella Typhimurium.

1.2
The responsible central Authority of the control and the coordination of the sanitary control
program is the Ministry of Health. At peripheral level the Regions, through the Local
Veterinary Services, are responsible for the performance of the programme.
The National Reference Laboratory for Salmonella is appointed at Istituto Zooprofilattico
Sperimentale delle Venezie (D.M. 4 October 1999).
The isolations of S. Enteritidis and Typhimurium during own checks must be immediately
notified to the Local Health Unit. The isolations of S. Enteritidis and Typhimurium following
sampling performed by the Competent Authority will always have to be notified by fax
directly to the Regional Veterinary Service.
Moreover, in case of isolation of S. Enteritidis and S. Typhimurium the results of
epidemiological investigations and a synthetic report of the adopted sanitary measures will
have to be sent both to the Regional Veterinary Service and to the National Reference
Laboratory for Salmonella.

1.3
All the laboratory investigations in the framework of official controls are performed by
Istituti Zooprofilattici Sperimentali (10 in the country), accredited according to Regulation
(EC) 2160/2003 and to ISO 17025. Private laboratories performing own-checks analysis
must be accredited, according to Regulation (EC) 2160/2003 and to ISO 17025.

1.4
Detection method
The method recommended by the Community Reference Laboratory (CRL) for Salmonella
in Bilthoven, the Netherlands, for detection shall be used. This method is described in the
current version of draft Annex D of ISO 6579 (2002): ‘Detection of Salmonella spp. in
animal faeces and in samples of the primary production stage’.
In this method, a semi-solid medium (modified semi-solid Rappaport-Vassiladis medium,
MSRV) is used as the single selective enrichment medium.

Serotyping
At least one isolate from each positive sample shall be serotyped, following the Kaufmann-
White scheme.

Alternative methods
With regard to samples taken at the initiative of the operator, the methods of analysis
provided for in Article 11 of Regulation (EC) No 662/2004, may be used instead of the
methods for the preparation of samples, detection methods and serotyping provided for in
point 3 of this Annex, if validated in accordance with EN/ISO 16140/2003.

1.5
Sampling by the Competent Authority shall take place at least:
(a) in one flock per year per holding comprising at least 1000 birds. This sampling shall
take place not before than 9 weeks from slaughtering. If no flocks of this age are present
the routine official sampling has to be performed anyway in one flock per year per holding
comprising at least 1000 birds, sampling the flock of animals closer to the age of
slaughtering.
(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;
(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.
(f) in case of detection of Salmonella Enteritidis or Typhimurium in a sample taken by the food business operator or during routine sampling by the Competent Authority, an official confirmatory sampling must be performed; in this case 5 pair of boot swabs and two dust samples must be taken for each flock resulted positive (in this case analysis have to be performed by the National Reference Laboratory for Salmonella); Competent Authority have moreover to verify that the results for examination for salmonella are not affected by the use of antimicrobials

A sampling carried out by the Competent Authority may replace one sampling at the initiative of the operator.

Sampling of feed must takes place at least according to PNAA 2009-2011 and whenever the Veterinary Service considers it necessary.

1.6

If the presence of S. Enteritidis or Typhimurium is confirmed, the animals must be submitted to sanitary restrictive measures, eliminated and destroyed according to Regulation 1774/2000, or in alternative, slaughtered applying measures to avoid the risk of diffusion of salmonellae. If the flock is of foreign origin, the veterinary service who has executed the control must give immediate communication of the results of the microbiological tests to the Ministry of Health, and to the Regional Veterinary Service, transmitting all the data concerning the batch of animals and the intention to eliminate or slaughter the animals.

Following the identification of salmonella, the Veterinary Service, in collaboration with the holder of the company and the approved veterinarian, must proceed to an accurate epidemiological investigation.

If the positivity for S. Enteritidis or Typhimurium is found in laying animals during own-checks, until the official confirmation of the presence of S. Enteritidis or Typhimurium, eggs must be destroyed or heat treated.

Suitable sanitary measures must be adopted in the holding in order to avoid or to limit the spread of the infection or contamination.

If the positivity for S. Enteritidis or Typhimurium is found in laying animals producing eggs destined to be pasteurized, the flock of positive animals may be slaughtered at the end of the production cycle.

Nevertheless suitable sanitary measures must be adopted in the holding in order to avoid or to limit the spread of the infection or contamination.

After the slaughtering or destruction of a flock positive for S. Enteritidis or S. Typhimurium, the house where positive animals were farmed must be repopulated only with vaccinated animals.

1.7
NATIONAL LEGISLATION

- D.M. 4 October 1999: national reference laboratories in the veterinary sector
- DPR n. 587 of 3 March 1993: regulation applying the Directive 90/539/EC on animal health conditions governing intra-Community trade in and imports from third countries of poultry and hatching eggs
- Circolare n.1 of the Ministry of Health of 12 January 1995: national control programme laying down requirements for the recognition of the plants allowed to export poultry and hatching eggs intra-Community. Practical criteria.
- Ordinanza of the Ministry of Health of 26 August 2005 and subsequent modification and integration laying down veterinary measures on infective and diffusive diseases in poultry

LEGISLATION ABOUT FEED

Feed hygiene
Regulation (EC) 183/2005 laying down requirements for feed hygiene

Control programmes
National programme 2009-2011 concerning monitoring and sanitary control of animal feed
(Nota of the Ministry of Health 0024861-P-18/12/2008)

2.3
The Veterinary services with a frequency established at regional level must verify in poultry farms the application of the biosecurity measures defined by the Ordinanza of the Ministry of Health of 25 August 2005 and subsequent modification and integration
A far as specifically the breeding turkeys the measures identified by Circolare n.1 of the Ministry of Health of 12 January 1995 must be applied.
PART B

1. IDENTIFICATION OF THE PROGRAMME

Member State: Italy

Disease: infection from Salmonella Enteritidis and Typhimurium,

Animal population covered by the programme: The sampling frame shall cover all flocks of adult laying hens of Gallus gallus (laying flocks) referred to in Article 1 of Regulation (EC) No 2160/2003.

Years of implementation: 2008-2010

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Date sent to the Commission: 30 April 2009

2. HISTORICAL DATA ON THE EPIDEMIOLOGICAL EVOLUTION OF THE DISEASE

Consistency of the national production of laying hens of Gallus gallus (year 2009)

In the national territory 3249 laying hens holdings are present, 959 of these holdings have more than 1000 birds.

Infection prevalence in layers flocks of Gallus gallus in Italy

The following table reports the results of the baseline study on the prevalence of Salmonella spp. In laying hens, carried out from October 2004 to September 2005 according to Commission Decision 2004/865/EC.

<table>
<thead>
<tr>
<th>State Member</th>
<th>N. aves avvel. campionato</th>
<th>Salmonella spp. N. avv. positivi</th>
<th>prevalenza (%) 95% IC</th>
<th>S. Enteritidis e S. Typhimurium N. avv. positivi</th>
<th>prevalenza (%) 95% IC</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITALIA</td>
<td>255</td>
<td>88</td>
<td>80,2</td>
<td>75,6-84,8</td>
<td>24</td>
</tr>
<tr>
<td>TOTALE EU</td>
<td>4561</td>
<td>1378</td>
<td>30,7</td>
<td>29,6-31,8</td>
<td>927</td>
</tr>
</tbody>
</table>

Provisional data from the application of the National Control Programme in 2008 report a prevalence of S. Enteritidis and S. Typhimurium of 6.4%.
3. DESCRIPTION OF THE SUBMITTED PROGRAMME

This national control programme is presented to the Commission for approval according to article 5 of Regulation (EC) n. 2160/2003. It has the objective of reducing the infection prevalence in layers of *Salmonella* Enteritidis and Typhimurium on the national territory. Since in Italy the prevalence of infection of Enteritidis and Typhimurium estimated during the baseline study was 8%, according to Regulation (EC) 1168/2006 this programme has the objective of reducing the prevalence of infection of *S. Enteritidis* and *S. Typhimurium* of 10% every year. The programme is based on a monitoring scheme according to Regulation (EC) 1160/2006, consisting in own-checks and official controls in holdings. Control measures are the killing or slaughtering of flocks positive for *S. Enteritidis* and *Typhimurium*, and the vaccination of animals used to restock a positive flock.

4. MEASURES OF THE SUBMITTED PROGRAMME

4.1 SUMMARY OF THE MEASURES UNDER THE PROGRAMME

Duration Of The Programme: 3 Years (2008-2010)

- Control
  - Testing
  - Slaughter of positive animals
  - Killing of positive animals
  - Vaccination
  - Treatment
  - Disposal of products

Vaccination of layer flocks for the control of zoonotic salmonellae is not mandatory according to Commission Regulation (EC) 1177/2006, but allowed, with the exception of the use of live vaccines indistinguishable from wild strains. The vaccination is mandatory according to the national control programme for the animals used to restock a positive flock; in any case the use of live vaccines is forbidden in laying hens during production.

The use of antimicrobials for the control of *Salmonella* spp. in layer flocks is forbidden but may be allowed by way of derogation and following authorization by Competent Authority and under the supervision of the National Reference Laboratory for Salmonella, in exceptional circumstances according to Commission Regulation 1177/2006.

4.2 DESIGNATION OF THE CENTRAL AUTHORITY IN CHARGE OF SUPERVISING AND COORDINATING THE DEPARTMENTS RESPONSIBLE FOR IMPLEMENTING THE PROGRAMME

The responsible central Authority of the control and the coordination of the sanitary control program is the Ministry of Health. At peripheral level the Regions, through the Local Veterinary Services, are responsible for the performance of the programme. The National Reference Laboratory for Salmonella is appointed at Istituto Zooprofilattico Sperimentale delle Venezie (D.M. 4 October 1999). All the laboratory investigations in the framework of official controls are performed by Istituti Zooprofilattici Sperimentali (10 in the country), accredited according to Regulation
(EC) 2160/2003 and to ISO 17025. Private laboratories performing own-checks analysis must be accredited, according to Regulation (EC) 2160/2003 and to ISO 17025.

OWN-CHECK PROGRAMME
The holder of the company has to submit to the Competent Authority an own-check programme.

In the own-check programme the following information must be reported at least:

- data on how the farm is registered, the name of the veterinary responsible for the own-check programme
- description of the farm
- biosecurity measures implemented
- information on feed including microbiological guarantees requested to the producer and own-check microbiological analysis
- sampling plan for the control of *Salmonella* spp.
- name of the accredited laboratory analyzing the samples for *Salmonella*
- measures implemented in case of positive results

The own-check programme must be submitted to the Competent Authority who may require modification or integration to be made before the approval; the approval must be reported in a document kept both by the holder of the company and by the Competent Authority.

RESULTS AND REPORTING

A laying flock shall be considered positive for the purpose of verifying the achievement of the Community target, where the presence of *Salmonella Enteritidis* and *Salmonella Typhimurium* (other than vaccine strains) was detected in one or more samples in the laying flock. Positive laying flocks shall be counted only once, irrespective of the number of sampling and testing operations and only be reported in the first year of detection.

4.3 DESCRIPTION AND DEMARCATION OF THE GEOGRAPHICAL AND ADMINISTRATIVE AREAS IN WHICH THE PROGRAMME IS TO BE IMPLEMENTED

The programme concerns all the national territory.

4.4 MEASUREs IMPLEMENTED UNDER THE PROGRAMME

TERMS OF LEGISLATION

COMMUNITY LEGISLATION

- Council Decision 90/638/EC of 27 November 1990 laying down Community criteria for the eradication and monitoring of certain animal diseases
Council Decision 2004/450/EC of 29 April 2004 laying down standard requirements for the content of application for Community financing for programmes for the eradication and monitoring of animal diseases


National Legislation

- D.M. 4 October 1999: national reference laboratories in the veterinary sector
- DPR n. 587 of 3 March 1993: regulation applying the Directive 90/539/EC on animal health conditions governing intra-Community trade in and imports from third countries of poultry and hatching eggs
- Circolare n.1 of the Ministry of Health of 12 January 1995: national control programme laying down requirements for the recognition of the plants allowed to export poultry and hatching eggs intra-Community. Practical criteria.
- Ordinanza of the Ministry of Health of 26 August 2005 and subsequent modification and integration laying down veterinary measures on infective and diffusive diseases in poultry

Legislation about Feed

Feed hygiene
Regulation (EC) 183/2005 laying down requirements for feed hygiene

Control programmes
National programme 2009-2011 concerning monitoring and sanitary control of animal feed (Nota of the Ministry of Health 0024961-P-18/12/2008)
4.4.1 MEASURES AND APPLICABLE LEGISLATION AS REGARDS THE REGISTRATION OF HOLDINGS

The registration of poultry holdings in National Data Base (except less 250 heads) is compulsory in Italy according to article 1 of Ordinanaza of the Ministry of Health of 25 August 2006.
The Local Veterinary Service is responsible for the maintenance of the registration of poultry holdings and for the registration in the National Data Base of any modification (closings, openings, changes of corporate name) of breeding holdings and hatcheries in the area of competence. The keeper or owner of animals is responsible for the communication to NDB of data concerning consistence of the holding.

4.4.3 MEASURES AND APPLICABLE LEGISLATION AS REGARDS THE NOTIFICATION OF THE DISEASE

The isolations of S. Enteritidis and Typhimurium during own checks must be immediately notified to the Local Health Unit. The isolations of S. Enteritidis and Typhimurium following sampling performed by the Competent Authority will always have to be notified by fax directly to the Regional Veterinary Service.
Moreover in case of isolation of S. Enteritidis and S. Typhimurium the results of epidemiological investigations and a synthetic report of the adopted sanitary measures will have to be sent both to the Regional Veterinary Service and to the National Reference Laboratory for Salmonella.

4.4.4 MEASURE IN CASE OF A POSITIVE RESULT

In the case of isolation, following an official sampling in a flock of layers, of salmonellae other than S. Enteritidis and S. Typhimurium, the competent Veterinary Service carries out an epidemiological investigation.

Instead, in the case of isolation of S. Enteritidis or Typhimurium, the following measures must be implemented:

1) If the presence of S. Enteritidis or Typhimurium is found in flocks during own checks, the holder of the company or the approved veterinarian must immediately communicate the result to the Veterinary Service. After the notification, the Veterinary Service puts in place the necessary controls for the confirmation of the result.

2) If the presence of S. Enteritidis or Typhimurium is confirmed, the animals must be submitted to sanitary restrictive measures, eliminated and destroyed according to Regulation 1774/2000, or in alternative, slaughtered applying measures to avoid the risk of diffusion of salmonellae. If the flock is of foreign origin, the veterinary service who has executed the control must give immediate communication of the results of the microbiological tests to the Ministry of Health, and to the Regional Veterinary Service, transmitting all the data concerning the batch of animals and the intention to eliminate or slaughter the animals.

Following the identification of salmonella, the Veterinary Service, in collaboration with the holder of the company and the approved veterinarian, must proceed to an accurate epidemiological investigation.
If the positivity for S. Enteritidis or Typhimurium is found in laying animals during own-checks, until the official confirmation of the presence of S. Enteritidis or Typhimurium, eggs must be destroyed or heat treated. Suitable sanitary measures must be adopted in the holding in order to avoid or to limit the spread of the infection or contamination.

If the positivity for S. Enteritidis or Typhimurium is found in laying animals producing eggs destined to be pasteurized, the flock of positive animals may be slaughtered at the end of the production cycle. Nevertheless suitable sanitary measures must be adopted in the holding in order to avoid or to limit the spread of the infection or contamination.

After the slaughtering or destruction of a flock positive for S. Enteritidis or S. Typhimurium, the house where positive animals were farmed must be repopulated only with vaccinated animals.

ENVIRONMENTAL DISINFECTIONS

The sheds in which the animals resulted positive for S. Enteritidis and S. Typhimurium were housed will have to be submitted to an accurate disinfection and pest control, carried out under the official control. The decontamination will have to be confirmed by an environmental microbiological control carried out at list 10 days before the restocking of new flocks.

4.4.5 QUALIFICATIONS OF HOLDINGS

An holding is defined as accredited when an official control according to the programme described in this document has been performed with negative results. Moreover, the sampling in the framework of own-checks must be performed as previously described.

The accreditation is maintained until further controls give the suspicion of the presence of salmonella in the farm and only if the official veterinarian assesses the presence of the minimal structural requirements.

The accreditation is suspended in the case that a positivity to Salmonella spp. is identified and until the official confirmation.

If the presence of S. Enteritidis or Typhimurium is confirmed the accreditation will be cancelled and the positive group will be eliminated or slaughtered under sanitary restrictions.

The holding will be re-accredited after a negative official control performed on all the flocks of the same holding.

4.4.7 MEASURES AND APPLICABLE LEGISLATION AS REGARDS THE CONTROL OF THE DISEASE

Frequency and status of sampling
Laying flocks shall be sampled at the initiative of the food business operator (operator) and by the Competent Authority.
Sampling at the initiative of the operator shall take place at least:
(a) in adult flocks at least every fifteen weeks. The first sampling shall take place at the age of 24 ± 2 weeks.
Furthermore the sampling shall take place:
(b) in day-old-chicks
(c) in rearing flocks two weeks before moving to the laying phase or laying unit.

Sampling by the Competent Authority shall take place at least:
(a) in one flock per year per holding comprising at least 1000 birds. This sampling shall take place not before than 9 weeks from slaughtering. If no flocks of this age are present the routine official sampling has to be performed anyway in one flock per year per holding comprising at least 1000 birds, sampling the flock of animals closer to the age of slaughtering.
(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;
(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.
(f) in case of detection of Salmonella Enteritidis or Typhimurium in a sample taken by the food business operator or during routine sampling by the Competent Authority, an official confirmatory sampling must be performed; in this case 5 pair of boot swabs and two dust sampling of the toad."
In the case of sampling referred to in point 2.1(b), (c) and (d), the Competent Authority shall satisfy itself by conduction further tests as appropriate that the results of examinations for salmonella in birds are not affected by the use of antimicrobials in the flocks.

Where the presence of Salmonella Enteritidis and Salmonella Typhimurium is not detected but antimicrobials or bacterial growth inhibitory effect are it shall be accounted for as an infected laying flock for the purpose of the Community target.

EXAMINATION OF THE SAMPLES

Transport and preparation of the samples
Samples shall be sent by express mail or courier to the laboratories referred to in Article 11 of Regulation (EC) 2160/2003, on the day of collection. At the laboratory, samples shall be kept refrigerated until examination, which shall be carried out within 48 hours following receipt.

Boot swab samples
(a) The two pairs of boot swabs (‘or socks’) shall be carefully unpacked to avoid dislodging adherent faecal material, pooled and placed in 225 ml Buffered Peptone Water (BPW) which has been pre-warmed to room temperature;
(b) The sample shall be swirled to fully saturate it and culture shall be continued by using the detection method.
(c) In case of confirmatory sampling each sample must be tested individually

Other faecal material and dust samples
(a) The faeces samples shall be pooled and thoroughly mixed and a 25 gram sub-sample shall be collected for culture.
(b) The 25 gram sub-sample shall be added to 225 ml of BPW which has been pre-warmed to room temperature.
(c) Culture of the sample shall be continued by using the detection method in 3.2.

If ISO standards on the preparation of faeces for the detection of salmonella are agreed on, they shall be applied and replace the above provisions on sampling preparation.

Each dust sample must be analyzed individually according to the following protocol.

(a) at the laboratory place each dust sample into an equal weight of Buffered Peptone Water which has been pre-warmed to room temperature and mix gently
(b) allow the sample to soften for 10-15 minutes then mix gently
(c) immediately after mixing remove 50 g of the mixture and add to 200 ml of Buffered Peptone Water which has been pre-warmed to room temperature
(d) continue culture of the sample by using the detection method in 3.2.

Detection method
The method recommended by the Community Reference Laboratory (CRL) for Salmonella in Blithoven, the Netherlands, for detection shall be used. This method is described in the current version of draft Annex D of ISO 6579 (2002): ‘Detection of Salmonella spp. in animal faeces and in samples of the primary production stage’.

In this method, a semi-solid medium (modified semi-solid Rappaport-Vassiliadis medium, MSRV) is used as the single selective enrichment medium.

Seroobying
At least one isolate from each positive sample shall be serotyped, following the Kaufmann-White scheme.

Alternative methods
With regard to samples taken at the initiative of the operator, the methods of analysis provided for in Article 11 of Regulation (EC) No 882/2004, may be used instead of the methods for the preparation of samples, detection methods and serotyping provided for in point 3 of this Annex, if validated in accordance with EN/ISO 16140/2003.

Storage of strains
At least the strains isolated from samples collected by the competent authority, shall be stored for future phagetyping or anti-microbial susceptibility testing, using the normal methods for culture collection, which must ensure integrity of the strains for a minimum of two years.

4.4.8 MEASURES AND APPLICABLE LEGISLATION AS REGARDS THE COMPENSATION OF OWNERS OF SLAUGHTERED AND KILLED ANIMALS

In the case of animals culled and destroyed by the official veterinary service, in application of the plan, the owner is granted a reimbursement calculated according to the national rules (Legge 218/88)
If the utilization of meats of slaughtered animals is authorized, from the indemnity calculated according to the previous paragraph the amount derived from the utilization of meats is deducted.
Furthermore, it’s possible in the same way the reimbursement of the fixed or mobile equipment (if they are not properly suited for disinfection) or of contaminated feedingstuffs or agricultural products, if the destruction is required by the official veterinary service.

4.4.9 INFORMATION AND ASSESSMENT ON BIO-SECURITY MEASURES

The Veterinary services with a frequency established at regional level must verify in poultry farms the application of the biosecurity measures defined by the Ordinanza of the Ministry of Health of 26 August 2005 and subsequent modification and integration A far as specifically the breeding turkeys the measures identified by Circolare n.1 of the Ministry of Health of 12 January 1995 must be applied.

5. GENERAL DESCRIPTION OF THE COSTS AND BENEFITS

The infections from Salmonella represent, in Italy like in other industrialized Countries, one of the most frequent foodborne diseases in humans, and foods of avian origin, eggs and egg-products in particular, are ascribed amongst main infection causes. The most recent European legislation on food safety (White Book, Regulation (EC) 178/2002) identifies in the production chain control the more effective approach in order to guarantee the hygiene of foodstuffs, identifying in the primary production a key point for the surveillance and the control.
Regulation (EC) 2160/2003 requires a Community target for reducing Salmonella prevalence in laying hens to be laid down, and therefore comparable data on current prevalence in Member States (MS) needed to be available. To this end a special baseline study was carried out in order to estimate the prevalence of *Salmonella* spp. in laying hens. The objectives, the sampling frame, the diagnostic testing methods as well as the
collection of data, evaluation and reporting and timelines of this baseline study are
specified in Commission Decision 2004/665/EC.
In Italy the observed prevalence of S. Enteritidis and S. Typhimurium was 8.1%.
Regulation (EC) No 2160/2003 provides that for a transitional period of three years, the
Community target for laying hens of Gallus gallus is to cover Salmonella Enteritidis and
Salmonella Typhimurium.
The Community target referred to in Article 4(1) of Regulation (EC) No 2160/2003 for the
reduction of Salmonella Enteritidis and Salmonella Typhimurium in adult laying hens of
Gallus gallus (Community target) shall be an annual minimum percentage of reduction of
positive flocks of adult laying hens equal to at least 10 % if the prevalence in the preceding
year was less than 10 %.
The objective of this programme is to reduce the prevalence from 8% to 7.2% in the first
year, from 7.2% to 6.5% in the second year, and from 6.5% to less than 6% in the third
year.
6.1.2 Data on evolution of the disease

Year: 2008  
Situation on date: 31.03.09 (PROVISIONAL DATA)

Animal species: laying hens of *Gallus gallus*  
Infection: *S. Enteritidis, Typhimurium*

<table>
<thead>
<tr>
<th>Region</th>
<th>Type of flock</th>
<th>Total n° of flocks</th>
<th>Total n° of animals under the programme</th>
<th>Number of positive flocks</th>
<th>Number of depopulated flocks</th>
<th>Total number of animals slaughtered or destroyed</th>
<th>Quantity of eggs destroyed</th>
<th>Quantity of eggs channeled to egg products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>Layers</td>
<td>1.582</td>
<td>45.840</td>
<td>1.113</td>
<td>43.742</td>
<td>142</td>
<td>740</td>
<td>39.604</td>
</tr>
</tbody>
</table>

Total | 1.582 | 45.840 | 1.113 | 43.742 | 142 | 7 | 614.162 | 39.604 | 380.898 | 7.590 | 2.328.620 | 2.452.811 |
### Targets

#### Targets related to testing

7.1.1 Targets on diagnostic tests

**Animal species:** Laying hens of Gallus gallus

<table>
<thead>
<tr>
<th>Region</th>
<th>Type of test</th>
<th>Target population</th>
<th>Type of sample</th>
<th>Objective</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITALY</td>
<td>TYPING</td>
<td>Laying hens (Gallus gallus)</td>
<td>Salmonella spp. strains</td>
<td>control</td>
<td>300</td>
</tr>
<tr>
<td></td>
<td>BACTERIOLOGICAL</td>
<td>Fecal material (foot swabs or naturally pooled faeces) and dust</td>
<td></td>
<td>control</td>
<td>4400</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4700</td>
</tr>
</tbody>
</table>

#### Targets on testing offlocks

**Year:** 2010

**Situation on date:** 31/12/2010

**Infection:** S. Enteritidis and S. Typhimurium

<table>
<thead>
<tr>
<th>Region</th>
<th>Type of flock</th>
<th>Total number of flocks</th>
<th>Total number of animals</th>
<th>Total number of animals under the programme</th>
<th>Expected number of flocks to be chartered</th>
<th>Number of flocks expected to be positive</th>
<th>Number of hens expected to be depopulated</th>
<th>Total number of animals expected to be destroyed</th>
<th>Expected number of hens to be destroyed (number of flocks)</th>
<th>Expected no. chartered to空白</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITALY</td>
<td>Layers</td>
<td>1500</td>
<td>45000000</td>
<td>1200</td>
<td>44000000</td>
<td>1000</td>
<td>46</td>
<td>20</td>
<td>1725000</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>1500</td>
<td>46000000</td>
<td>1200</td>
<td>44000000</td>
<td>1000</td>
<td>46</td>
<td>20</td>
<td>1725000</td>
<td>0</td>
</tr>
</tbody>
</table>
Animal species

<table>
<thead>
<tr>
<th>Region</th>
<th>Total number of herds in vaccination programme</th>
<th>Total number of animals in vaccination programme</th>
<th>Number of herds expected to be vaccinated</th>
<th>Number of animals expected to be vaccinated</th>
<th>Number of doses of vaccine expected to be administered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>50</td>
<td>1,725,000</td>
<td>60</td>
<td>60</td>
<td>1,725,000</td>
</tr>
</tbody>
</table>
### Detailed analysis of the costs of the programme

<table>
<thead>
<tr>
<th>Costs related to</th>
<th>Specification</th>
<th>Number of units</th>
<th>Unitary cost in EUR</th>
<th>Total amount in EUR</th>
<th>Community funding requested (yes/no)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Testing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Cost of the analysis</td>
<td>Test number of bacteriological tests planned to be carried out in the framework of the official sampling</td>
<td>4000</td>
<td>20</td>
<td>68000</td>
<td>yes</td>
</tr>
<tr>
<td>1.2 Cost of sampling</td>
<td>Test number of serotyping of relevant isolates tests planned to be carried out</td>
<td>300</td>
<td>30</td>
<td>9000</td>
<td>yes</td>
</tr>
<tr>
<td>1.3 Other costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Vaccination or treatment of animal products</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 Purchase or vaccine/treatment</td>
<td>Number of vaccine doses to be purchased</td>
<td>300000</td>
<td>0.5</td>
<td>175000</td>
<td>yes</td>
</tr>
<tr>
<td>2.2 Distribution costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.3 Administration costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.4 Control costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Slaughter and destruction</td>
<td>number of animals destroyed (considering 10% of the infected flocks, where it is not possible to slaughter)</td>
<td>17250</td>
<td>7.5</td>
<td>129375</td>
<td>yes</td>
</tr>
<tr>
<td>3.1 Compensation of animals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2 Transport costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3 Destruction costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.4 Costs in case of slaughtering</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.5 Costs in case of treatment of animal products (milk, eggs, hatching eggs, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Cleaning and disinfection</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Staffs/staff contracted for the programme only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Consumables and specific equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Other costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ANNEX: GENERAL INFORMATION

- **Official controls at other stages of the food-chain (including sampling schemes)**


- **Structure of the production of feed**

Secondo gli ultimi dati ufficiali dell’ISTAT (anno 2005), in Italia la produzione di mangimi ammonta a 13 milioni e 805 mila tonnellate prodotte da circa 600 stabilimenti distribuiti su tutto il territorio nazionale e destinati alle varie specie animali (avicolli, bovini, suini, conigli, ovini, equini, pisci, animali familiari, ecc.).

L’Assalzo - Associazione Nazionale tra i Produttori di Alimenti Zootecnici - è l’Associazione nazionale dell’industria mangimistica italiana alla quale aderiscono oltre 120 aziende, che rappresentano circa il 75% della produzione mangimistica industriale realizzata in Italia. L’Assalzo pubblica annualmente un annuario che contiene numerose informazioni tra cui analisi di settore e tavole statistiche che riportano dati aggiornati sulla struttura mangimistica italiana (annuario 2008 allegato).

- **Is any financial assistance provided to food and feed businesses in the context of the national control programme?**

Non viene fornita alcuna assistenza finanziaria

- **Registration of farms**

La registrazione degli allevamenti avviene in accordo a quanto previsto dal Ordinanza Ministeriale 26 agosto 2005 e successive modifiche “Misure di polizia veterinaria in materia di malattie infettive e diffusive dei volatili da cortile”.


Registro di mortalità

Registro movimenti mezzi e persone da e per l’azienda

Dichiarazione di provenienza e destinazione degli animali: ai sensi del D.P.R. 317 del 30 aprile 1996 e successive modifiche e integrazioni (Modello IV).
Documents to accompany animals when dispatched

Certificato sanitario per l'invio al macello ai sensi del Regolamento 854/2004 Capo X parte A.

Other relevant measures to ensure the traceability of animals
MINISTERO DEL LAVORO, DELLA SALUTE E DELLE POLITICHE SOCIALI

PNAA 2009-2011

PNAA
2009-2010-2011

PIANO NAZIONALE
DI SORVEGLIANZA E DI VIGILANZA SANITARIA
SULL'ALIMENTAZIONE DEGLI ANIMALI
2009-2010-2011
From: Capuano Donatella [mailto:d.capuano@sanita.it]
Sent: Monday, August 31, 2009 1:52 PM
To: IDEI Serele (SANCO)
Cc: Ruocco Luigi

Subject: IT-REQUEST FOR ADDITIONAL INFO SCP 2010 - ITALY

Dear Sirs, following your kind request for additional info concerning National Control Programmes for Salmonella in brooding flocks and laying hens of Gallus gallus and turkeys (email of the 1st August 2009), we declare that:

- all the programmes have been amended, clarifying that, when foreseen, confirmatory sampling can be performed only in exceptional cases, when the competent authority has reasons to suspect false positive or false negative results, and not on a routine basis. The programmes are in accordance with relevant legislation (Reg. 1003/2005, Reg. 214/2009, Reg. 1168/2006, Reg. 546/2007 and Reg. 584/2008);
- when reporting the results of the programmes, exceptional cases must be addressed and explained;
- all estimated costs of analysis (bacteriological examination, serotyping) are foreseen in the frame of official sampling.

Amended programmes are attached.

Best regards
National programme for the control of *Salmonella* Enteritidis and *Typhimurium* in fattening and breeding turkeys

Italy

Application for co-financing 2010
PART A

(a) This national control programme is presented to the Commission for approval according to article 5 of Regulation (EC) 2160/2003. It has the objective of reducing the infection prevalence in fattening and breeding turkeys of Salmonella Enteritidis and Typhimurium on the national territory. According to Regulation (EC) 584/2008 this programme has the objective to achieve the following targets:

- a reduction of the maximum percentage of fattening turkey flocks remaining positive of Salmonella Enteritidis and Salmonella Typhimurium to 1% by 31 December 2012;
- a reduction of the maximum percentage of breeding turkey flocks remaining positive of Salmonella Enteritidis and Salmonella Typhimurium to 1% by 31 December 2012.

(b) BREEDING TURKEYS
Sampling at the initiative of the operator shall take place at least:
(a) in adult flocks at least every three weeks during the laying period at the holding, the last sampling have to be done within three weeks before the last date foreseen for depopulation.
Furthermore the sampling shall take place:
(b) in day-old-chicks
(c) in rearing flocks at four weeks of age
(d) in rearing flocks two weeks before moving to the laying phase or laying unit.

FATTENING TURKEYS
Sampling at the initiative of the operator shall take place in all flocks within three weeks before the last date foreseen for depopulation.
Sampling of feed must take place at least according to PNAA 2009-2011 and whenever the Veterinary Service considers it necessary.

(d)

1.1
The infections from Salmonella represent, in Italy like in other industrialized Countries, one of the most frequent foodborne diseases in humans, and foods of avian origin are ascribed amongst main infection causes. The most recent European legislation on food safety (White Book, Regulation (EC) 178/2002) identifies in the production chain control the more effective approach in order to guarantee the hygiene of foodstuffs, identifying in the primary production a key point for the surveillance and the control.

Regulation (EC) 2160/2003 requires a Community target for reducing Salmonella prevalence in breeding and fattening turkeys to be laid down, and therefore comparable data on current prevalence in Member States (MS) needed to be available. To this end a special baseline study was carried out in order to estimate the prevalence of Salmonella spp. in turkeys. The objectives, the sampling frame, the diagnostic testing methods as well as the collection of data, evaluation and reporting and timelines of this baseline study are specified in Commission Decision 2006/682/EC.

In Italy the prevalence of infection of S. Enteritidis and S. Typhimurium estimated during the baseline study was 6.1% (CI 95%: 3.6-10.2) as far as fattening turkeys are concerned and 8.3% (CI 95%: 2.5-24.4) as far as breeding turkeys are concerned.
Regulation (EC) 2160/2003 provides that for a transitional period of three years, the Community target for turkeys is to cover *Salmonella* Enteritidis and *Salmonella* Typhimurium.

The Community target referred to in Article 4(1) of Regulation (EC) 2160/2003 for the reduction of *Salmonella* Enteritidis and *Salmonella* Typhimurium in turkeys (Community target) shall be a reduction of the maximum percentage of flocks remaining positive to 1% or less by 31 December 2012.

1.2

The responsible central Authority of the control and the coordination of the sanitary control program is the Ministry of Health. At peripheral level the Regions, through the Local Veterinary Services, are responsible for the performance of the programme.

The National Reference Laboratory for Salmonella is appointed at Istituto Zooprofilattico Sperimentale delle Venezie (D.M. 4 October 1999).

The isolations of *S. Enteritidis* and *S. Typhimurium* from samples taken both by the food business operator and by the Competent Authority as far as the fattening turkeys are concerned, and from samples taken by the Competent Authority for confirmation as far as the breeding turkeys are concerned, will always have to be notified by fax directly to the Regional Veterinary Service.

Moreover in case of isolation of *S. Enteritidis* and *S. Typhimurium* the results of epidemiological investigations and a synthetic report of the adopted sanitary measures will have to be sent both to the Regional Veterinary Service and to the National Reference Laboratory for Salmonella.

1.3

All the laboratory investigations in the framework of official controls are performed by Istituti Zooprofilattici Sperimentali (10 in the country), accredited according to Regulation (EC) 2160/2003 and to ISO 17025. Private laboratories performing own-checks analysis must be accredited, according to Regulation (EC) 2160/2003 and to ISO 17025.

1.4

Detection method

The method recommended by the Community Reference Laboratory (CRL) for *Salmonella* in Bilthoven, the Netherlands, for detection shall be used. This method is described in the amendment 1 to ISO 6579:2002 (2007): "Detection of *Salmonella* spp. in animal faeces and in samples of the primary production stage".

In this method, a semi-solid medium (modified semi-solid Rappaport-Vassiladis medium, MSRV) is used as the single selective enrichment medium.

Serootyping, phageotyping and antimicrobial resistance testing

At least one isolate from each positive sample shall be serotyped, following the Kauffmann-White scheme.

All the *Salmonella* Enteritidis and Typhimurium isolates will be send to the National Reference Laboratory for Salmonella that will submit the isolates to phage typing according to the protocol elaborated by Health Protection Agency (HPA).

Alternative methods

With regard to samples taken at the initiative of the operator, the methods of analysis provided for in Article 11 of Regulation (EC) No 882/2004, may be used instead of the methods for the preparation of samples, detection methods and serotyping provided for in point 3 of this Annex, if validated in accordance with EN/ISO 16140/2003.
1.5 BREEDING TURKEYS
The hatcheries must be submitted to official controls by the Competent Authority at least twice a year.

Sampling by the Competent Authority shall take place at least:
(a) in all flocks, once a year, on 10% of holdings comprising at least 250 breeding turkeys, between 30 and 45 weeks of age, including in any case all the holdings where S. Enteritidis or Typhimurium was detected during the previous 12 months and all holdings with elite, great grand parents and grand parents breeding turkeys
(b) in case of detection of Salmonella Enteritidis or Typhimurium in a sample taken by the food business operator (excluding the sampling before the birds are moved to the slaughterhouse) or taken by the Competent Authority (routine sampling), an official confirmatory sampling must be performed; in this case 5 pair of boot swabs and two dust samples must be taken for each flock resulted positive; Competent Authority have moreover to verify that the results for examination for salmonella are not affected by the use of antimicrobials
(c) in cases where the Competent Authority considers it appropriate.

A sampling carried out by the Competent Authority may replace one sampling at the initiative of the operator.

Sampling of feed must takes place at least according to PNAA 2009-2011 and whenever the Veterinary Service considers it necessary.

FATTENING TURKEYS
Sampling by the Competent Authority shall take place at least:
(a) in all flocks, once a year, on 10% of holdings comprising at least 500 fattening turkeys.
(b) in all flocks of the same holding in case of detection of Salmonella Enteritidis or Typhimurium in a samples taken by the food business operator, unless the meat of the turkeys in the flock is destined for industrial heat treatment or another treatment to eliminate salmonellae
(c) in all flocks on the holding when one flock tested positive for Salmonella Enteritidis or Typhimurium during the previous round in samples taken by the food business operator
(d) in cases where the Competent Authority considers it appropriate.

In any case the sampling shall take place within three weeks before the last date foreseen for depopulation.

A sampling carried out by the Competent Authority may replace one sampling at the initiative of the operator.

Sampling of feed must takes place at least according to PNAA 2009-2011 and whenever the Veterinary Service considers it necessary.

1.6
In the case of isolation of S. Enteritidis or S. Typhimurium, the following measures must be implemented.
FATTENING TURKEYS

If the presence of S. Enteritidis or S. Typhimurium is found in flocks during own checks or official controls, animals must be submitted to sanitary restrictive measures and slaughtered applying measures to avoid the risk of diffusion of salmonellae.

All the meat derived from the positive flocks must be heat treated before further processing unless negative result for the research of Salmonella spp. from muscle of 15 animals per flock; this examination may be performed also on animals before moving to the slaughterhouse.

If the flock is of foreign origin, the veterinary service who has executed the control must give immediate communication of the results of the microbiological tests to the Ministry of Health, and to the Regional Veterinary Service, transmitting all the data concerning the batch of animals and the intention to slaughter the animals according to what reported previously.

BREEDING TURKEYS

If the presence of S. Enteritidis or S. Typhimurium is confirmed, the animals must be submitted to sanitary restrictive measures, eliminated and destroyed according to Regulation 1774/2000, or in alternative, slaughtered applying measures to avoid the risk of diffusion of salmonellae.

All the meat derived from the positive flocks must be heat treated before further processing unless negative result for the research of Salmonella spp. from muscle of 15 animals per flock, this examination may be performed also on animals before moving to the slaughterhouse.

If the flock is of foreign origin, the veterinary service who has executed the control must give immediate communication of the results of the microbiological tests to the Ministry of Health, and to the Regional Veterinary Service, transmitting all the data concerning the batch of animals and the intention to eliminate or slaughter the animals.

Eggs still present at the hatcheries following the positive result of the confirmatory sampling must be destroyed or heat treated.

After the slaughtering or destruction of a flock positive for S. Enteritidis or S. Typhimurium, the house where positive animals were farmed must be repopulated only with vaccinated animals and in any case only after the application of the measures reported in the paragraph “environmental disinfection”.

The sheds in which the animals resulted positive for S. Enteritidis and S. Typhimurium were housed will have to be submitted to an accurate disinfection and pest control, carried out under the official control. The decontamination will have to be confirmed by an environmental microbiological control carried out at list a 10 days before the restocking of new flocks.

1.7 NATIONAL LEGISLATION

- D.M. 4 October 1999: national reference laboratories in the veterinary sector
- DPR n. 587 of 3 March 1993: regulation applying the Directive 80/539/EC on animal health conditions governing intra-Community trade in and imports from third countries of poultry and hatching eggs
• Circolare n.1 of the Ministry of Health of 12 January 1995: national control programme laying down requirements for the recognition of the plants allowed to export poultry and hatching eggs intra-Community. Practical criteria.
• Ordinanza of the Ministry of Health of 26 August 2005 and subsequent modification and integration laying down veterinary measures on infective and diffusive diseases in poultry

LEGISLATION ABOUT FEED

Feed hygiene
Regulation (EC) 183/2005 laying down requirements for feed hygiene

Control programmes
National programme 2009-2011 concerning monitoring and sanitary control of animal feed (Nota of the Ministry of Health 0024961-P-18/12/2008)

2.3
The Veterinary services with a frequency established at regional level must verify in poultry farms the application of the biosecurity measures defined by the Ordinanza of the Ministry of Health of 25 August 2005 and subsequent modifications and integrations. As far as specifically the breeding turkeys the measures identified by Circolare n.1 of the Ministry of Health of 12 January 1995 must be applied.
PART B

1. IDENTIFICATION OF THE PROGRAMME

Member State: Italy

Disease: infection from Salmonella Enteritidis and Typhimurium

Animal population covered by the programme: for breeding turkeys the sampling frame shall cover all flocks of breeding and fattening turkeys referred to in Article 1 of Regulation (EC) 2160/2003. All the farms with more than 250 birds must be included.

Years of implementation: 2010-2012

Contact:

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Dr. Donatella Capuano, tel: +39 06 59846364; fax: + 39 06 59846185
e-mail: d.capuano@sanita.it

Date sent to the Commission: 30 April 2009

2. HISTORICAL DATA ON THE EPIDEMIOLOGICAL EVOLUTION OF THE DISEASE

Consistency of the national production of turkeys (year 2008)

<table>
<thead>
<tr>
<th>REGION</th>
<th>BREEDING TURKEYS</th>
<th>FATTENING TURKEYS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of holdings</td>
<td>Number of holdings</td>
</tr>
<tr>
<td>EMILIA ROMAGANA</td>
<td>1</td>
<td>56</td>
</tr>
<tr>
<td>FRIULI VENEZIA GIULIA</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>LAZIO</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>LOMBARDIA</td>
<td></td>
<td>173</td>
</tr>
<tr>
<td>PIEMONTE</td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>TOSCANA</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>TRENTINO ALTO ADIGE (TN)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>UMBRIA</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>VENETO</td>
<td>40</td>
<td>579</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>862</td>
</tr>
</tbody>
</table>

Infection prevalence in fattening turkeys in Italy

The following table reports the result of the baseline study on the prevalence of Salmonella spp. in fattening turkeys, carried out from October 2006 to September 2007 according to Commission Decision 2006/652/EC.
FATTENING TURKEYS

<table>
<thead>
<tr>
<th>Member State</th>
<th>N. flock sampled</th>
<th>Prevalence (%)</th>
<th>CI 95% prevalence (%)</th>
<th>2. Enteritidis and/or S. Typhimurium</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL EU</td>
<td>5762</td>
<td>28.6</td>
<td>31.8-25.4</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Infection prevalence in breeding turkeys in Italy

The following table reports the result of the baseline study on the prevalence of Salmonella spp. in breeding turkeys, carried out from October 2006 to September 2007 according to Commission Decision 2006/662/EC.

<table>
<thead>
<tr>
<th>Member State</th>
<th>N. flock sampled</th>
<th>Prevalence (%)</th>
<th>CI 95% prevalence (%)</th>
<th>2. Enteritidis and/or S. Typhimurium</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL EU</td>
<td>5397</td>
<td>19.5</td>
<td>6.5-27.8</td>
<td>1.7</td>
</tr>
</tbody>
</table>

Both in fattening and breeding turkeys S. Enteritidis strains have never been isolated during the baseline study.

3. Description of the submitted programme

This national control programme is presented to the Commission for approval according to article 5 of Regulation (EC) 2160/2003. It has the objective of reducing the infection prevalence in fattening and breeding turkeys of Salmonella Enteritidis and Typhimurium on the national territory. According to Regulation (EC) 584/2008 this programme has the objective to achieve the following targets:

- a reduction of the maximum percentage of fattening turkey flocks remaining positive of Salmonella Enteritidis and Salmonella Typhimurium to 1% by 31 December 2012;
- a reduction of the maximum percentage of breeding turkey flocks remaining positive of Salmonella Enteritidis and Salmonella Typhimurium to 1% by 31 December 2012;

The programme is based on a monitoring scheme according to Regulation (EC) 584/2008 consisting in own-checks and official controls in holdings. Control measures must be applied in case of isolation of S. Enteritidis and/or S. Typhimurium; in case of isolation of not relevant serovars an epidemiological investigation must be carried out.

4. Measures of the submitted programme

4.1 Summary of the measures under the programme

Duration of the programme: 3 years (2010-2012)

☑ Control
  ☐ Testing
  ☐ Slaughtering of positive animals
  ☐ Killing of positive animals
  ☐ Destruction or heat treatment of eggs still present in hatcheries produced by groups in which the presence of S. Enteritidis or S. Typhimurium has been found
Vaccination, only for breeding turkeys
Implementation of biosecurity measures when appropriate

Vaccination for the control of zoonotic salmonellae is not mandatory according to Commission Regulation (EC) 1177/2006, but allowed, with the exception of the use of live vaccines indistinguishable from wild strains. The vaccination is mandatory according to the national control programme for the animals used to restock a positive breeding flock resulted positive for S. Enteritidis or S. Typhimurium (the first dose within the first 48 hours of life).

According to the EFSA scientific report on analysis of the baseline survey on the prevalence of Salmonella in turkey flocks, vaccinated flocks resulted at lower risk of infection than unvaccinated flocks, therefore vaccination might be considered as a tool for the control in Member States where Salmonella is present.

The use of antimicrobials for the control of Salmonella spp. is forbidden but may be allowed by way of derogation and following authorization by Competent Authority and under the supervision of the National Reference Laboratory for Salmonella, in exceptional circumstances according to Commission Regulation (EC) 1177/2006.

4.2 DESIGNATION OF THE CENTRAL AUTHORITY IN CHARGE OF SUPERVISING AND COORDINATING THE DEPARTMENTS RESPONSIBLE FOR IMPLEMENTING THE PROGRAMME

The responsible central Authority of the control and the coordination of the sanitary control program is the Ministry of Health. At peripheral level the Regions, through the Local Veterinary Services, are responsible for the performance of the programme.

The National Reference Laboratory for Salmonella is appointed at Istituto Zooprofilattico Sperimentale delle Venezie (D.M. 4 October 1999).

All the laboratory investigations in the framework of official controls are performed by Istituti Zooprofilattici Sperimentali (10 in the country), accredited according to Regulation (EC) 2160/2003 and to ISO 17025. Private laboratories performing own-checks analysis must be accredited, according to Regulation (EC) 2160/2003 and to ISO 17025.

OWN-CHECK PROGRAMME
The holder of the company has to submit to the Competent Authority an own-check programme.

In the own-check programme the following information must be reported at least:
- data on how the farm is registered, the name of the veterinary responsible for the own-check programme
- description of the farm
- biosecurity measures implemented
- information on feed including microbiological guarantees requested to the producer and own-check microbiological analysis
- sampling plan for the control of Salmonella spp.
- name of the accredited laboratory analyzing the samples for Salmonella
- measures implemented in case of positive results

The own-check programme must be submitted to the Competent Authority who may require modification or integration to be made before the approval; the approval must be reported in a document kept both by the holder of the company and by the Competent Authority.
4.3 DESCRIPTION AND DEMARCATION OF THE GEOGRAPHICAL AND ADMINISTRATIVE AREAS IN WHICH THE PROGRAMME IS TO BE IMPLEMENTED

The program concerns all the national territory.

4.4 MEASURES IMPLEMENTED UNDER THE PROGRAMME

TERMS OF LEGISLATION

COMMUNITY LEGISLATION

- Council Decision 90/638/EC of 27 November 1990 laying down Community criteria for the eradication and monitoring of certain animal diseases
- Council Decision 2004/450/EC of 29 April 2004 laying down standard requirements for the content of application for Community financing for programmes for the eradication and monitoring of animal diseases
- Commission Decision 2006/662/EC of 29 September 2006 concerning a financial contribution from the Community towards a baseline survey on the prevalence of Salmonella in turkeys to be carried out in the Member States
- Commission Decision 2008/425/EC of 25 April 2008 laying down standard requirements for the submission by Member States of national programmes for the eradication, control and monitoring of certain animal diseases and zoonoses for Community financing

NATIONAL LEGISLATION

- D.M. 4 October 1999: national reference laboratories in the veterinary sector
- DPR n. 587 of 3 March 1993: regulation applying the Directive 90/539/EC on animal health conditions governing intra-Community trade in and imports from third countries of poultry and hatching eggs
- Circolare n.1 of the Ministry of Health of 12 January 1995: national control programme laying down requirements for the recognition of the plants allowed to export poultry and hatching eggs intra-Community. Practical criteria.
- Ordinanza of the Ministry of Health of 26 August 2005 and subsequent modification and integration laying down veterinary measures on infective and diffusive diseases in poultry

LEGISLATION ABOUT FEED

Feed hygiene
Regulation (EC) 183/2005 laying down requirements for feed hygiene

Control programmes
National programme 2009-2011 concerning monitoring and sanitary control of animal feed (Nota of the Ministry of Health 0024981-P-18/12/2008)

4.4.1 MEASURES AND APPLICABLE LEGISLATION AS REGARDS THE REGISTRATION OF HOLDINGS

The registration of poultry holdings in National Data Base (except less 250 heads) is compulsory in Italy according to article 1 of Ordinanza of the Ministry of Health of 25 August 2005.
The Local Veterinary Service are responsible for the maintenance of the registration of poultry holdings and for the registration in the National Data Base of any modification (closings, openings, changes of corporate name) of breeding holdings and hatcheries in the area of competence. The keeper or owner of animals is responsible for the communication to NDB of data concerning consistency of the holding.

4.4.3 MEASURES AND APPLICABLE LEGISLATION AS REGARDS THE NOTIFICATION OF THE DISEASE

The isolations of S. Enteritidis and S. Typhimurium from samples taken both by the food business operator and by the Competent Authority, as far as the fattening turkeys are concerned, and from samples taken by the Competent Authority for confirmation as far as the breeding turkeys are concerned, will always have to be notified by fax directly to the Regional Veterinary Service.
Moreover in case of isolation of S. Enteritidis and S. Typhimurium the results of epidemiological investigations and a synthetic report of the adopted sanitary measures will have to be sent both to the Regional Veterinary Service and to the National Reference Laboratory for Salmonella.

4.4.4 MEASURE IN CASE OF A POSITIVE RESULT

In the case of isolation, because of an official sampling, in a flock of turkeys, of salmonellae other than S. Enteritidis and S. Typhimurium, the competent Veterinary Service carries out an epidemiological investigation.

Instead, in the case of isolation of S. Enteritidis or S. Typhimurium, the following measures must be implemented:
FATTENING TURKEYS

1) If the presence of S. Enteritidis or S. Typhimurium is found in flocks during own checks, the holder of the company or the approved veterinarian must immediately communicate the result to the Veterinary Service.

2) If the presence of S. Enteritidis or S. Typhimurium is found in flocks during own checks or official controls, animals must be submitted to sanitary restrictive measures and slaughtered applying measures to avoid the risk of diffusion of salmonellae.
   All the meat derived from the positive flocks must be heat treated before further processing unless negative result for the research of Salmonella spp. from muscle of 15 animals per flock; this examination may be performed also on animals before moving to the slaughterhouse.
   If the flock is of foreign origin, the veterinary service who has executed the control must give immediate communication of the results of the microbiological tests to the Ministry of Health, and to the Regional Veterinary Service, transmitting all the data concerning the batch of animals and the intention to slaughter the animals according to what reported previously.
   Following the identification of S. Enteritidis or S. Typhimurium, the Veterinary Service, in collaboration with the holder of the company and the approved veterinarian, must proceed to an accurate epidemiological investigation.
   Suitable sanitary measures must be immediately adopted in the holding in order to avoid or to limit the spread of the infection or contamination and, eventually, further sanitary measures have to be applied on the basis of the results of the epidemiological investigations.

According to the results of the epidemiological investigation the Veterinary Service may decide to intensify the frequency of official sampling in order to verify the efficacy of the sanitary measures implemented.

BREEDING TURKEYS

1) If the presence of S. Enteritidis or S. Typhimurium is found in flocks during own checks, the holder of the company or the approved veterinarian must immediately communicate the result to the Veterinary Service. After the notification, the Veterinary Service puts in place the necessary controls for the confirmation of the result except in the case of sampling done within three weeks before the birds are moved to the slaughterhouse.

2) If the presence of S. Enteritidis or S. Typhimurium is found in flocks during routine official controls, the Veterinary Service puts in place the necessary controls for the confirmation of the results.

3) (a) If the presence of S. Enteritidis or S. Typhimurium is confirmed, the animals must be submitted to sanitary restrictive measures, eliminated and destroyed according to Regulation 1774/2000, or in alternative, slaughtered applying measures to avoid the risk of diffusion of salmonellae.
   All the meat derived from the positive flocks must be heat treated before further processing unless negative result for the research of Salmonella spp. from muscle of 15 animals per flock; this examination may be performed also on animals before moving to the slaughterhouse.
If the flock is of foreign origin, the veterinary service who has executed the control
must give immediate communication of the results of the microbiological tests to
the Ministry of Health, and to the Regional Veterinary Service, transmitting all the
data concerning the batch of animals and the intention to eliminate or slaughter
the animals.
Following the identification of S. Enteritidis or S. Typhimurium, the Veterinary
Service, in collaboration with the holder of the company and the approved
veterinarian, must proceed to an accurate epidemiological investigation.
Suitable sanitary measures must be immediately adopted in the holding in order to
avoid or to limit the spread of the infection or contamination and, eventually,
further sanitary measures have to be applied on the basis of the results of the
epidemiological investigations.
According to the results of the epidemiological investigation the Veterinary Service
may decide to intensify the frequency of official sampling in order to verify the
efficacy of the sanitary measures implemented.

(b) If the positivity for S. Enteritidis or S. Typhimurium is found in laying animals,
until the official confirmation, the hatcheries of destination of the eggs must be
identified and the suspicion must be notified to the Veterinary services
responsible for the control at the hatcheries, in order to allow the application of
appropriate sanitary measures aimed at avoiding the diffusion of infection or
contamination.

(c) Eggs still present at the hatcheries following the positive result of the
confirmatory sampling must be destroyed or heat treated.

4) If the presence of S. Enteritidis or S. Typhimurium is found at the hatchery the
result must be notified to the Veterinary services responsible for the holdings of
destination of the chickens and of origin of the eggs. In breeding flocks of origin
of the eggs a confirmatory sampling must be performed.
If the eggs are of foreign origin, the veterinary service who has executed the
control must give immediate communication of the results of the microbiological
tests to the Ministry of Health, and to the Regional Veterinary Service,
transmitting all the data concerning the batch of eggs identifying the restrictive
measures applied.

5) After the slaughtering or destruction of a flock positive for S. Enteritidis or S.
Typhimurium, the house where positive animals were farmed must be
repopulated only with vaccinated animals and in any case only after the
application of the measures reported in the paragraph "environmental
disinfection".

Epidemiological Investigation

Epidemiological investigations shall be conducted following the guideline elaborated by
the Ministry of Health with the collaboration of the National Reference Laboratory for
Salmonella. During the epidemiological investigation feeding stuff will be sampled in
order to investigate its role in the infection.

Environmental Disinfections
The sheds in which the animals resulted positive for S. Enteritidis and S. Typhimurium were housed will have to be submitted to an accurate disinfection and pest control, carried out under the official control. The decontamination will have to be confirmed by an environmental microbiological control carried out at least 10 days before the restocking of new flocks.

4.4.5 QUALIFICATIONS OF HOLDINGS

An holding is defined as accredited when an official control according to the programme described in this document has been performed with negative results. Moreover, the sampling in the framework of own-checks must be performed as previously described. The accreditation is maintained until further controls give the suspicion of the presence of salmonella in the farm and only if the official veterinarian assesses the presence of the minimal structural requirements. The accreditation is cancelled and restrictive measures will be applied in the following cases:
- breeding turkeys: positive result for S. Enteritidis or S. Typhimurium following a confirmatory sampling or following an own check control in animals at the end of the cycle;
- fattening turkeys: positive result for S. Enteritidis or S. Typhimurium following an official sampling or following an own check control.

The holding will be re-accredited after a negative official control performed on all the flocks of the same holding.

4.4.7 MEASURES AND APPLICABLE LEGISLATION AS REGARDS THE CONTROL OF THE DISEASE

BREEDING TURKEYS

Frequency and status of sampling
Breeding turkeys flocks shall be sampled at the initiative of the food business operator (operator) according to the own-check programme and by the Competent Authority.

Sampling at the initiative of the operator shall take place at least:
(a) in adult flocks at least every three weeks during the laying period at the holding, the last sampling have to be done within three weeks before the last date foreseen for depopulation.
Furthermore the sampling shall take place:
(b) in day-old-chicks
(c) in rearing flocks at four weeks of age
(d) in rearing flocks two weeks before moving to the laying phase or laying unit.

In any case an approved own-check programme must be applied at the hatcheries of destination of the eggs; hatcheries must be submitted to official controls by the Competent Authority at least twice a year.

Sampling by the Competent Authority shall take place at least:
(a) in all flocks, once a year, on 10% of holdings comprising at least 250 breeding turkeys, between 30 and 45 weeks of age, including in any case all the holdings where
S. Enteritidis or Typhimurium was detected during the previous 12 months and all holdings with elite, great great parents and grand parents breeding turkeys (b) in cases of detection of Salmonella Enteritidis or Typhimurium in a sample taken by the food business operator (excluding the sampling before the birds are moved to the slaughterhouse) or taken by the Competent Authority (routine sampling), an official confirmatory sampling must be performed. In this case 5 pair of boot swabs and two dust samples must be taken for each flock resulted positive; Competent Authority have moreover to verify that the results for examination for salmonella are not affected by the use of antimicrobials (c) in cases where the Competent Authority considers it appropriate.

A sampling carried out by the Competent Authority may replace one sampling at the initiative of the operator.

Sampling of feed must takes place at least according to PNAA 2009-2011 and whenever the Veterinary Service considers it necessary.

FATTENING TURKEYS

MONITORING IN FATTENING TURKEYS FLOCKS

Frequency and status of sampling
Fattening turkeys flocks shall be sampled at the initiative of the food business operator (operator) according to the own-check programme and by the Competent Authority.

Sampling at the initiative of the operator shall take place in all flocks within three weeks before the last date foreseen for depopulation.

Sampling by the Competent Authority shall take place at least:
(a) in all flocks, once a year, on 10% of holdings comprising at least 500 fattening turkeys.
(b) in all flocks of the same holding in case of detection of Salmonella Enteritidis or Typhimurium in a samples taken by the food business operator, unless the meat of the turkeys in the flocks is destined for industrial heat treatment or another treatment to eliminate salmonellae
(c) in all flocks on the holding when one flock tested positive for Salmonella Enteritidis or Typhimurium during the previous round in samples taken by the food business operator
(d) in cases where the Competent Authority considers it appropriate.

In any case the sampling shall take place within three weeks before the last date foreseen for depopulation.

A sampling carried out by the Competent Authority may replace one sampling at the initiative of the operator.

Sampling of feed must takes place at least according to PNAA 2009-2011 and whenever the Veterinary Service considers it necessary.
SMPLING PROTOCOL

BREEDING TURKEYS

Routine sampling at the initiative of the food business operator
Samples consist of faecal and dust samples and shall aim to detect 1% within flock prevalence with a 95% confidence limit. To that effect samples shall comprise:
- one pair of boot swabs representing all the sections of the house
- one dust sample, representing all sections of the house, of 250 ml corresponding to about 50 grams.

In case dust is not present another pair of boot swab must be collected.

Day-old-chicks sampling: at least 15 animals (5 males and 10 females) must be randomly sampled before the discharge; moreover papers from ten boxes randomly selected must be sampled. The animals must be submitted to the research of salmonella and residues.

Official sampling
Routine sampling must be done according to what reported previously (point 3.1).
In case of confirmatory sampling 5 pair of boot swabs and 2 dust samples must be taken for each group; Competent Authority have moreover to verify that the results for examination for salmonella are not affected by the use of antimicrobials.
When the presence of Salmonella Enteritidis or Typhimurium is not detected but antimicrobials or bacterial growth inhibitory effect are detected the flock has to be considered infected for the purpose of the Community target.

FATTENING TURKEYS

Routine sampling at the initiative of the food business operator
Samples consist of faecal samples: at least two pairs of boot swabs shall be taken; for free range flocks samples shall only be collected in the area inside the house. All boot swabs must be pooled into one sample.
In flocks with less than 100 animals, where it is not possible to use boot swabs as access to the house is not possible, they may be replaced by hand drag swabs, where the boot swabs or socks are worn over gloved hands and rubbed over surfaces contaminated with fresh faeces.
It shall be ensured that all sections in a house are represented in the sampling in a proportionate way.

Official sampling
Routine sampling must be done according to what reported previously (point 4.1).
In case of sampling by the Competent Authority because of suspicion and in any other case considered appropriate, the Competent Authority shall satisfy itself by conducting further tests as appropriate so that the results of examination for salmonella are not affected by the use of antimicrobials.
When the presence of Salmonella Enteritidis or Typhimurium is not detected but antimicrobials or bacterial growth inhibitory effect are detected the flock has to be considered infected for the purpose of the Community target.

EXAMINATION OF THE SAMPLES
Transport and preparation of the samples
Samples shall be sent by express mail or courier to the laboratories referred to in Article 11 of Regulation (EC) 2160/2003, on the day of collection. At the laboratory, samples shall be kept refrigerated until examination, which shall be carried out within 48 hours following receipt.

Boot swab samples
(a) The one pair/two pairs of boot swabs shall be carefully unpacked to avoid dislodging adherent faecal material, pooled and placed in 225 ml Buffered Peptone Water (BPW) which has been pre-warmed to room temperature;
(b) The sample shall be swirled to fully saturate it and culture shall be continued by using the detection method in 5.2.
(c) In case of confirmatory sampling the five pair of boot swabs must be pooled into two samples that have to be analyzed according to "a" and "b".

Dust samples
Each dust sample must be analyzed individually according to the following protocol.

(a) at the laboratory place each dust sample into an equal weight of Buffered Peptone Water which has been pre-warmed to room temperature and mix gently
(b) allow the sample to soften for 10-15 minutes then mix gently
(c) immediately after mixing remove 50 g of the mixture and add to 200 ml of Buffered Peptone Water which has been pre-warmed to room temperature
(d) continue culture of the sample by using the detection method in 5.2.

Detection method
The method recommended by the Community Reference Laboratory (CRL) for Salmonella in Bithoven, the Netherlands, for detection shall be used. This method is described in the amendment 1 to ISO 6579:2002 (2007): 'Detection of Salmonella spp. in animal faeces and in samples of the primary production stage'. In this method, a semi-solid medium (modified semi-solid Rappaport-Vassiliadis medium, MSRV) is used as the single selective enrichment medium.

Serotyping, phagetyping and antimicrobial resistance testing
At least one isolate from each positive sample shall be serotyped, following the Kaufmann-White scheme.
All the Salmonella Enteritidis and Typhimurium isolates will be send to the National Reference Laboratory for Salmonella that will submit the isolates to phage typing according to the protocol elaborated by Health Protection Agency (HPA).

Alternative methods
With regard to samples taken at the initiative of the operator, the methods of analysis provided for in Article 11 of Regulation (EC) No 882/2004, may be used instead of the methods for the preparation of samples, detection methods and serotyping provided for in point 3 of this Annex, if validated in accordance with EN ISO 16140/2003.

Storage of strains
Laboratories shall guarantee that at least one isolated strain of Salmonella spp. per house per year can be collected and stored using the normal methods for culture collection which must be ensure integrity of the strains for a minimum of two years.
Strains will be available for the National Reference Laboratory for Antibiotic Resistance for further analysis.

4.4.8 MEASURES AND APPLICABLE LEGISLATION AS REGARDS THE COMPENSATION OF OWNERS OF SLAUGHTERED AND KILLED ANIMALS

In the case of animals culled and destroyed by the official veterinary service, in application of the plan, the owner is granted a reimbursement calculated according to the national rules (Legge 218/88).

If the utilization of meats of slaughtered animals is authorized, from the indemnity calculated according to the previous paragraph the amount derived from the utilization of meats is deducted.

Furthermore, it's possible in the same way the reimbursement of the fixed or mobile equipment (if they are not properly suited for disinfection) or of contaminated feedingsuffs or agricultural products, if the destruction is required by the official veterinary service.

4.4.9 INFORMATION AND ASSESSMENT ON BIO-SECURITY MEASURES

The Veterinary services with a frequency established at regional level must verify in poultry farms the application of the biosecurity measures defined by the Ordinance of the Ministry of Health of 25 August 2005 and subsequent modifications and integrations. A far as specifically the breeding turkeys the measures identified by Circolare n.1 of the Ministry of Health of 12 January 1995 must be applied.

5. GENERAL DESCRIPTION OF THE COSTS AND BENEFITS

The infections from Salmonella represent, in Italy like in other industrialized Countries, one of the most frequent foodborne diseases in humans, and foods of avian origin are ascribed amongst main infection causes. The most recent European legislation on food safety (White Book, Regulation (EC) 178/2002) identifies in the production chain control the more effective approach in order to guarantee the hygiene of foodstuffs, identifying in the primary production a key point for the surveillance and the control. Regulation (EC) 2160/2003 requires a Community target for reducing Salmonella prevalence in breeding and fattening turkeys to be laid down, and therefore comparable data on current prevalence in Member States (MS) needed to be available. To this end a special baseline study was carried out in order to estimate the prevalence of Salmonella spp. in turkeys. The objectives, the sampling frame, the diagnostic testing methods as well as the collection of data, evaluation and reporting and timelines of this baseline study are specified in Commission Decision 2006/662/EC.

In Italy the prevalence of infection of S. Enteritidis and S. Typhimurium estimated during the baseline study was 6.1% (CI 95%: 3.5-10.2) as far as fattening turkeys are concerned and 8.3% (CI 95%: 2.5-24.4) as far as breeding turkeys are concerned.

Regulation (EC) 2160/2003 provides that for a transitional period of three years, the Community target for turkeys is to cover Salmonella Enteritidis and Salmonella Typhimurium.

The Community target referred to in Article 4(1) of Regulation (EC) 2160/2003 for the reduction of Salmonella Enteritidis and Salmonella Typhimurium in turkeys (Community target) shall be a reduction of the maximum percentage of flocks remaining positive to 1% or less by 31 December 2012.
### Targets related to testing

#### Targets on diagnostic tests

<table>
<thead>
<tr>
<th>Region</th>
<th>Type of test</th>
<th>Target population</th>
<th>Type of sample</th>
<th>Objective</th>
<th>Number of planned tests</th>
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### Year 2010

#### Targets related to testing

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<th>Total number of animals</th>
<th>Total number of flocks under the programme</th>
<th>Total number of animals under the programme</th>
<th>Expected number of flocks to be checked</th>
<th>Number of flocks expected to be positive</th>
<th>Number of flocks expected to be depopulated</th>
<th>Total number of animals expected to be depopulated or destroyed</th>
<th>Expected number of eggs to be destroyed (number or kg)</th>
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#### Targets on testing of flocks

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<th>Number of flocks expected to be positive</th>
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<th>Total number of animals expected to be depopulated or destroyed</th>
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<td>(b1) (b2) (b3) (b4) (b5) (b6) (b7) (b8)</td>
<td>(c1) (c2) (c3) (c4) (c5) (c6) (c7) (c8)</td>
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### Animal species: breeding turkeys

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**FATTENING TURKEYS**

**Detailed analysis of the costs of the programme**

<table>
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<tr>
<th>Costs related to</th>
<th>Specification</th>
<th>Number of units</th>
<th>Unitary cost in EUR</th>
<th>Total amount in EUR</th>
<th>Community funding requested (Y/N)</th>
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<tr>
<td></td>
<td>Test: Number of serological test of relevant Newcastle disease virus planned to be carried out</td>
<td>130</td>
<td>30</td>
<td>3900</td>
<td>Yes</td>
</tr>
<tr>
<td>1.2 Cost of sampling</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3 Other costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Vaccination or treatment of animal products</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 Purchase of vaccine against Newcastle disease virus</td>
<td>Number of purchased vaccines doses planned for each vaccination phase is part of the programme as set out explicitly under point 4 Annex II</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2 Distribution costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.3 Administration costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.4 Control costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Slaughter and destruction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1 Compensation of animals</td>
<td>Compensation of floors to be deployed</td>
<td>300000</td>
<td>6</td>
<td>1800000</td>
<td>Yes</td>
</tr>
<tr>
<td>3.2 Transport costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3 Decontamination costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.4 Loss in value of slaughtering</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Cleaning and disinfection</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Studies (staff contracted for the programme only)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Consumables and specific equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Other costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Detailed analysis of the costs of the programme**

**BREEDING TURKEYS**

<table>
<thead>
<tr>
<th>Costs related to</th>
<th>Specification</th>
<th>Number of units</th>
<th>Unitary cost in EUR</th>
<th>Total amount in EUR</th>
<th>Community funding requested (yes/no)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Testing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Cost of the analysis</td>
<td>Test number of serological tests planned to be carried out in the framework of the official sampling</td>
<td>200</td>
<td>20</td>
<td>4040</td>
<td>yes</td>
</tr>
<tr>
<td>1.2 Cost of sampling</td>
<td>Test Number of animals: tests planned to be carried out</td>
<td>45</td>
<td>30</td>
<td>1350</td>
<td>yes</td>
</tr>
<tr>
<td>2. Vaccination and treatment of animal products</td>
<td>Number of purchased vaccine doses planned if a vaccination policy is part of the programme as set out explicitly under point 1 Annex I</td>
<td>15480</td>
<td>0.5</td>
<td>7740</td>
<td>yes</td>
</tr>
<tr>
<td>2.2 Distribution costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.3 Administration costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.4 General costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Slaughter and destruction</td>
<td>Compensation of animals</td>
<td>25 000</td>
<td>50</td>
<td>1 250 000</td>
<td>yes</td>
</tr>
<tr>
<td>3.2 Transport costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3 Destruction costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.4 Loss in case of slaughter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.5 Costs from treatment of animal products (milk, eggs, hatching eggs, etc.)</td>
<td>78 520</td>
<td>0.2</td>
<td>15 704</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>4. Cleaning and disinfection</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Staff (staff contracted for the programme only)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Consumables and specific equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Other costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ANNEX: GENERAL INFORMATION

- **Official controls at other stages of the food-chain (including sampling schemes)**


- **Structure of the production of feed**

Secondo gli ultimi dati ufficiali dell’ISTAT (anno 2005), in Italia la produzione di mangimi ammoniacate 13 milioni e 805 mila tonnellate prodotte da circa 600 stabilimenti distribuiti su tutto il territorio nazionale e destinati alle varie specie animali (avicolli, bovini, suini, conigli, ovini, equini, pesci, animali familiari, ecc.).

L’Assalzoo - Associazione Nazionale tra i Produttori di Alimenti Zootecnici – è l’Associazione nazionale dell’industria mangimistica italiana alla quale aderiscono oltre 120 aziende, che rappresentano circa il 75% della produzione mangimistica industriale realizzata in Italia. L’Assalzoo pubblica annualmente un annuario che contiene numerose informazioni tra cui analisi di settore e tavole statistiche che riportano dati aggiornati sulla struttura mangimistica italiana (annuario 2008 allegato).

- **Is any financial assistance provided to food and feed businesses in the context of the national control programme?**

Non viene fornita alcuna assistenza finanziaria

**Registration of farms**

La registrazione degli allevamenti avviene in accordo a quanto previsto dal Ordinanza Ministeriale 26 agosto 2005 e successive modifiche “Misure di polizia veterinaria in materia di malattie infettive e diffusive dei volatile da cortile”.


Registro di mortalità

Registro movimenti merce e persone da e per l’azienda

Dichiarazione di provenienza e destinazione degli animali: ai sensi del D.P.R. 317 del 30 aprile 1996 e successive modifiche e integrazioni (Modello IV).
Documents to accompany animals when dispatched

Certificate sanitario per l’invio al macello ai sensi del Regolamento 854/2004 Cupo X parte A.

Other relevant measures to ensure the traceability of animals
PNAAR
2009-2010-2011

PIANO NAZIONALE
DI SORVEGLIANZA E DI VIGILANZA SANITARIA
SULL’ALIMENTAZIONE DEGLI ANIMALI
2009-2010-2011
ASSOCIAZIONE NAZIONALE
TRA I PRODUTTORI DI ALIMENTI ZOOTECNICI

ASSALZOO

ANNUARIO

2008
From: Capuano Donatella [mailto:d.capuano@sanita.it]
Sent: Monday, August 31, 2009 1:52 PM
To: IDEI Sarolta (SANCO)
Cc: Ruoceo Luigi

Subject: IT-REQUEST FOR ADDITIONAL INFO SCP 2010 - ITALY

Dear Sirs, following your kind request for additional info concerning National Control Programmes for Salmonella in breeding flocks and laying hens of Gallus gallus and turkeys (e-mail of the 1st August 2009), we declare that:

- all the programmes have been amended, clarifying that, when foreseen, confirmatory sampling can be performed only in exceptional cases, when the competent authority has reasons to suspect false positive or false negative results, and not on a routine basis. The programmes are in accordance with relevant legislation (Reg. 1003/2005, Reg. 213/2009, Reg. 1168/2006, Reg. 646/2007 and Reg. 584/2008);
- when reporting the results of the programmes, exceptional cases must be addressed and explained;
- all estimated costs of analysis (bacteriological examination, serotyping) are foreseen in the frame of official sampling.

Amended programmes are attached.

Best regards
Technical multi-annual national for the control of *Salmonella* Enteritidis and Typhimurium, in broiler flocks of *Gallus gallus* in Italy

Application for cofinancing 2010
PART A

(a) This national control program is presented to the Commission for approval according to article 5 of Regulation (EC) 2160/2003. It has the objective of reducing the infection prevalence in broilers of *Salmonella* Enteritidis and Typhimurium on the national territory. According to Regulation (EC) 848/2007 the Community target for the reduction of *Salmonella* Enteritidis and Typhimurium in broilers shall be a reduction of the maximum percentage of flocks of broilers remaining positive to 1% or less by 31 December 2011.

(b) Flocks of broilers shall be sampled on the initiative of the food business operator (operator) and by the Competent Authority. Sampling on the initiative of the operator shall take place in accordance with Article 5(3) of Regulation (EC) No 2160/2003 within three weeks before the birds are moved to the slaughterhouse.

(c) If the presence of *S. Enteritidis* or Typhimurium is found during own checks or official controls the animals must be submitted to sanitary restrictive measures and slaughtered applying measures to avoid the risk of diffusion of salmonellae. All the meat derived form the positive flocks must be heat treated before further processing unless negative result for the research of *Salmonella* spp. from meat of 15 animals per flock. The research of salmonella spp. from meat is at the holder’s expense.

(d) 1.1 The infections from *Salmonella* represent, in Italy like in other industrialized Countries, one of the most frequent foodborne diseases in humans, and foods of avian origin are ascribed amongst main infection causes. The most recent European legislation on food safety (White Book, Regulation (EC) 178/2002) identifies in the production chain control the more effective approach in order to guarantee the hygiene of foodstuffs, identifying in the primary production a key point for the surveillance and the control. Regulation (EC) 2160/2003 requires a Community target for reducing *Salmonella* prevalence in broilers to be laid down, and therefore comparable data on current prevalence in Member States (MS) needed to be available. To this end a special baseline study was carried out in order to estimate the prevalence of *Salmonella* spp. in broilers. The objectives, the sampling frame, the diagnostic testing methods as well as the collection of data, evaluation and reporting and timelines of this baseline study are specified in Commission Decision 2005/636/EC.

In Italy the observed prevalence of *S. Enteritidis* and *S. Typhimurium* was 2.3%. Regulation (EC) 2160/2003 provides that for a transitional period of three years, the Community target for broilers of *Gallus gallus* is to cover *Salmonella* Enteritidis and *Salmonella* Typhimurium. The Community target referred to in Article 4(1) of Regulation (EC) 2160/2003 for the reduction of *Salmonella* Enteritidis and *Salmonella* Typhimurium in broilers of *Gallus gallus* (Community target) shall be a reduction of the maximum percentage of flocks of broilers remaining positive to 1% or less by 31 December 2011.
The objective of this program is to reduce the prevalence from 2.3% to 1% in the three years of application. This objective is considered to be achievable also because of the reduction of the prevalence in breeders flocks of *Gallus gallus* as the consequence of the application of the control by Member States.

1.2
The responsible central Authority of the control and the coordination of the sanitary control program is the Ministry of Health. At peripheral level the Regions, through the Local Veterinary Services, are responsible for the performance of the program.
The National Reference Laboratory for Salmonella is appointed at Istituto Zooprofilattico Sperimentale delle Zanzibar (D.M. 4 October 1999).

1.3
All the laboratory investigations in the framework of official controls are performed by Istituti Zooprofilattici Sperimentali (10 in the country), accredited according to Regulation (EC) 2160/2003 and to ISO 17025. Private laboratories performing own-checks analysis must be accredited, according to Regulation (EC) 2160/2003 and to ISO 17025.

1.4
Detection method
The method recommended by the Community Reference Laboratory (CRL) for Salmonella in Biltoven, the Netherlands, for detection shall be used. This method is described in the current version of draft Annex D of ISO 6579 (2002): 'Detection of Salmonella spp. in animal faeces and in samples of the primary production stage'.
In this method, a semi-solid medium (modified semi-solid Rappaport-Vassiladis medium, MSRV) is used as the single selective enrichment medium.

Serotyping
At least one isolate from each positive sample shall be serotyped, following the Kaufmann-White scheme.

Alternative methods
With regard to samples taken at the initiative of the operator, the methods of analysis provided for in Article 11 of Regulation (EC) No 882/2004, may be used instead of the methods for the preparation of samples, detection methods and serotyping provided for in point 3 of this Annex, if validated in accordance with EN/ISO 16140/2003.

1.5
Sampling by the Competent Authority shall include each year at least one flock of broilers on 10% of holdings with more than 5,000 birds. Moreover sampling shall be done on a risk basis each time the Competent Authority considers it necessary.
A sampling carried out by the Competent Authority may replace the sampling on the initiative of the food business operator.

Sampling of feed must takes place at least according to PNAA 2009-2011 and whenever the Veterinary Service considers it necessary.

1.6
If the presence of *S. Enteritidis* or *Typhimurium* is found during own checks or official controls the animals must be submitted to sanitary restrictive measures and slaughtered applying measures to avoid the risk of diffuson of salmonellae.

All the meat derived from the positive flocks must be heat treated before further processing unless negative result for the research of *Salmonella* spp. from meat of 15 animals per flock. The research of salmonella spp. from meat is at the holder's expense.

If the flock is of foreign origin, the Veterinary Service who has executed the control must give immediate communication of the results of the microbiological tests to the Ministry of Health, and to the Regional Veterinary Service, transmitting all the data concerning the batch of animals and the intention to slaughter the animals.

Following the identification of salmonella, the Veterinary Service, in collaboration with the holder of the company and the approved veterinarian, must proceed immediately to an accurate epidemiological investigation.

The animals from positive flocks must be sent to the slaughterhouse under restrictive sanitary measures.

The official veterinarian provides that the slaughtering of infected birds happens at the end of the slaughtering day in order to guarantee a correct separation amongst batches; sanitization procedures of environment and equipment must be put in place.

The sheds in which the animals positive for *S. Enteritidis* or *Typhimurium* were housed will have to be submitted to an accurate disinfection and pest control, carried out under the official control. The decontamination will have to be confirmed by an environmental microbiological control carried out before the restocking of new flocks.

1.7 NATIONAL LEGISLATION

- D.M. 4 October 1999: national reference laboratories in the veterinary sector
- DPR n. 587 of 3 March 1993: regulation applying the Directive 90/539/EC on animal health conditions governing intra-Community trade in and imports from third countries of poultry and hatching eggs
- Circolare n.1 of the Ministry of Health of 12 January 1995: national control laying down requirements for the recognition of the plants allowed to export poultry and hatching eggs intra-Community. Practical criteria.
- Ordinanza of the Ministry of Health of 25 August 2003 and subsequent modification and integration laying down veterinary measures on infective and diffusive diseases in poultry

LEGISLATION ABOUT FEED

Feed hygiene

Regulation (EC) 183/2005 laying down requirements for feed hygiene

Control

National 2009-2011 concerning monitoring and sanitary control of animal feed (Nota of the Ministry of Health 0024961-P-18/12/2008)
2.3
The Veterinary services with a frequency established at regional level must verify in poultry farms the application of the biosecurity measures defined by the Ordinanza of the Ministry of Health of 25 August 2005 and subsequent modification and integration.
PART B

1. IDENTIFICATION OF THE PROGRAMME

Member State: Italy

Disease: infection from Salmonella Enteritidis and Typhimurium

Animal population covered by the programme: The sampling frame shall cover all flocks of broilers of Gallus gallus referred to in Article 1 of Regulation (EC) No 2160/2003. Holdings with more than 250 broilers must be included in the.

Years of implementation: 2009-2011

Contact:

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e-mail: l.ruocco@sanita.it

Dr. Donatella Capuano, tel: +39 06 59946854; fax: +39 06 59946185
e-mail: d.capuano@sanita.it

Date sent to the Commission: 30 April 2009

2. HISTORICAL DATA ON THE EPIDEMIOLOGICAL EVOLUTION OF THE DISEASE

Consistency of the national production of broilers of Gallus gallus (year 2008)

<table>
<thead>
<tr>
<th>REGION</th>
<th>N. HOLDINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABRUZZO</td>
<td>221</td>
</tr>
<tr>
<td>BASILICATA</td>
<td>2</td>
</tr>
<tr>
<td>CALABRIA</td>
<td>13</td>
</tr>
<tr>
<td>CAMOPIANIA</td>
<td>57</td>
</tr>
<tr>
<td>EMILIA ROMAGNA</td>
<td>307</td>
</tr>
<tr>
<td>FRIULI VENEZIA GIULIA</td>
<td>136</td>
</tr>
<tr>
<td>Lazio</td>
<td>707</td>
</tr>
<tr>
<td>LIGURIA</td>
<td>4</td>
</tr>
<tr>
<td>LOMBARDIA</td>
<td>510</td>
</tr>
<tr>
<td>MARCHE</td>
<td>1855</td>
</tr>
<tr>
<td>MOLISE</td>
<td>185</td>
</tr>
<tr>
<td>PIEMONTE</td>
<td>447</td>
</tr>
<tr>
<td>PUGLIA</td>
<td>84</td>
</tr>
<tr>
<td>SARDEGNA</td>
<td>75</td>
</tr>
<tr>
<td>SICILIA</td>
<td>34</td>
</tr>
<tr>
<td>TOSCANA</td>
<td>68</td>
</tr>
<tr>
<td>TRENTO ALTO ADIGE (TN)</td>
<td>18</td>
</tr>
<tr>
<td>UMBRIA</td>
<td>71</td>
</tr>
<tr>
<td>VENETO</td>
<td>1074</td>
</tr>
<tr>
<td>TOTALE</td>
<td>5888</td>
</tr>
</tbody>
</table>
Infection prevalence in broiler flocks of *Gallus gallus* in Italy

The following table reports the results of the baseline study on the prevalence of *Salmonella* spp. in broilers, carried out from October 2005 to September 2006 according to Commission Decision 2005/636/EC.

<table>
<thead>
<tr>
<th>Presence number</th>
<th>Salmonella spp.</th>
<th>S. Enteritidis</th>
<th>S. Typhimurium</th>
<th>S. Enteritidis and/or S. Typhimurium</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>P estimated</td>
<td>IC 95%</td>
<td>P estimated</td>
</tr>
<tr>
<td>ITALY</td>
<td>315</td>
<td>28.3</td>
<td>25.5-30.9</td>
<td>2.4</td>
</tr>
<tr>
<td>EUROPA</td>
<td>7120</td>
<td>23.7</td>
<td>23-24.5</td>
<td>0.9</td>
</tr>
</tbody>
</table>

3. Description of the Submitted Programme

This national control program is presented to the Commission for approval according to article 5 of Regulation (EC) 2160/2003. It has the objective of reducing the infection prevalence in broilers of *Salmonella* Enteritidis and Typhimurium on the national territory. According to Regulation (EC) 646/2007 the Community target for the reduction of *Salmonella* Enteritidis and Typhimurium in broilers shall be a reduction of the maximum percentage of flocks of broilers remaining positive to 1% or less by 31 December 2011.

The programme is based on a monitoring scheme according to Regulation (EC) 646/2007, consisting in own-checks and official controls in holdings. Control measures are: destruction of carcasses from positive flocks, the optimization of biosecurity measures following an accurate epidemiological investigation.

4. Measures of the Submitted Programme

4.1 Summary of the Measures Under the Programme

Duration of the program: 3 years (2009-2011)

- Control
  - Testing
  - Slaughter of positive animals
  - Destruction of carcasses from positive flocks¹
  - Vaccination
  - Treatment
  - Disposal of products
  - Optimization of biosecurity measures

¹ The reimbursement, if foreseen, will be calculated according to the next commission’s decision regarding co-financed plans for 2010 year.
The use of antimicrobials for the control of *Salmonella* spp. in broilers is forbidden according to Commission Regulation (EC) 1177/2006.

**4.2 DESIGNATION OF THE CENTRAL AUTHORITY IN CHARGE OF SUPERVISING AND COORDINATING THE DEPARTMENTS RESPONSIBLE FOR IMPLEMENTING THE PROGRAMME**

The responsible central Authority of the control and the coordination of the sanitary control program is the Ministry of Health. At peripheral level the Regions, through the Local Veterinary Services, are responsible for the performance of the program.

The National Reference Laboratory for *Salmonella* is appointed at Istituto Zooprofilattico Sperimentale delle Venezie (D.M. 4 October 1999).

All the laboratory investigations in the framework of official controls are performed by Istituti Zooprofilattici Sperimentali (10 in the country), accredited according to Regulation (EC) 2160/2003 and to ISO 17025. Private laboratories performing own-checks analysis must be accredited, according to Regulation (EC) 2160/2003 and to ISO 17025.

**OWN-CHECK PROGRAMME**

The holder of the company have to submit to the Competent Authority an own-check. In the own-check the following information must be reported at least:

- data on how the farm is registered, the name of the veterinary responsible for the own-check
- description of the farm
- biosecurity measures implemented
- information on feed including microbiological guarantees requested to the producer and own-check microbiological analysis
- sampling plan for the control of *Salmonella* spp.
- name of the accredited laboratory analyzing the samples for *Salmonella*
- measures implemented in case of positive results

The own-check must be submitted to the Competent Authority who may require modification or integration to be made before the approval; the approval must be reported in a document kept both by the holder of the company and by the Competent Authority. The results of the analysis performed within the own-check program must be kept by the holder of the animals and transmitted to the Competent Authority.

**RESULTS AND REPORTING**

**Calculation of prevalence for the verification of the Community target**

A flock of broilers shall be considered positive for the purpose of verifying the achievement of the Community target, where the presence of *Salmonella Enteritidis* and/or *Salmonella Typhimurium* (other than vaccine strains) was detected in the flock at any occasion. Positive flocks shall be counted only once per round, irrespective of the number of sampling and testing operations and only be reported in the year of the first positive sampling.

**Reporting**
The results and any additional relevant information according to Regulation (EC) 646/2007 shall be reported as part of the report on trends and sources provided for in Article 9(1) of Directive 2003/99/EC of the European Parliament and of the Council (1).

A form to collect data elaborated by the Ministry of Health has to be filled in by the official veterinarian any time the Competent Authority carries out an official control. For reporting purposes the holder of the company involved in the program has to send the results of the sampling on the initiative of the food business operator to the Competent Veterinary Service. All the documents mentioned in this program have to be kept for at least three years.

4.3 DESCRIPTION AND DEMARCATION OF THE GEOGRAPHICAL AND ADMINISTRATIVE AREAS IN WHICH THE PROGRAMME IS TO BE IMPLEMENTED

The programme concerns all the national territory.

4.4 MEASURES IMPLEMENTED UNDER THE PROGRAMME

TERMS OF LEGISLATION

COMMUNITY LEGISLATION

- Council Decision 90/638/EC of 27 November 1990 laying down Community criteria for the eradication and monitoring of certain animal diseases
- Council Decision 2004/450/EC of 29 April 2004 laying down standard requirements for the content of application for Community financing for the eradication and monitoring of animal diseases
- Commission Decision 636/2005/EC of 1 September 2005 concerning a financial contribution by the Community towards a baseline survey on the prevalence of Salmonella spp. in broiler flocks of Gallus gallus to be carried out in the Member States
reduction of the prevalence of *Salmonella enteritidis* and *Salmonella typhimurium* in broilers and repealing Regulation (EC) No 1091/2005

- **Commission Decision 2008/425/EC** of 25 April 2008 laying down standard requirements for the submission by Member States of national programmes for the eradication, control and monitoring of certain animal diseases and zoonoses for Community financing

**National Legislation**

- **D.M. 4 October 1999**: national reference laboratories in the veterinary sector
- **DPR n. 537 of 3 March 1993**: regulation applying the Directive 90/639/EC on animal health conditions governing intra-Community trade in and imports from third countries of poultry and hatching eggs
- **Circolare n.1 of the Ministry of Health** of 12 January 1995: national control laying down requirements for the recognition of the plants allowed to export poultry and hatching eggs intra-Community. Practical criteria.
- **Ordinanza of the Ministry of Health** of 26 August 2005 and subsequent modification and integration laying down veterinary measures on infective and diffusive diseases in poultry

**Legislation about Feed**

**Feed hygiene**

Regulation (EC) 183/2005 laying down requirements for feed hygiene

**Control**

National 2009-2011 concerning monitoring and sanitary control of animal feed (Nota of the Ministry of Health 0024961-P-18/12/2008)

**4.4.1 Measures and Applicable Legislation as Regards the Registration of Holdings**

The registration of poultry holdings in National Data Base (except less 250 heads) is compulsory in Italy according to article 1 of Ordinanza of the Ministry of Health of 25 August 2005.

The Local Veterinary Service are responsible for the maintenance of the census of poultry holdings and for the registration in the National Data Base of any modification (closings, openings, changes of corporate name) of breeding holdings and hatcheries in the area of competence. The keeper or owner of animals is responsible for the communication to NDB of data concerning consistence of the holding.

**4.4.3 Measures and Applicable Legislation as Regards the Notification of the Disease**

The isolations of *S. Enteritidis* and Typhimurium, will always have to be notified by fax directly to the Regional Veterinary Service.

Whenever *S. Enteritidis* and *S. Typhimurium* are isolated the results of epidemiological investigations and a synthetic report of the adopted sanitary measures will have to be sent
both to the Regional Veterinary Service and to the National Reference Laboratory for Salmonella.

4.4.4 MEASURE IN CASE OF A POSITIVE RESULT

In the case of isolation of salmonellae other than S. Enteritidis and S. Typhimurium in a flock of broilers because of an official control, the Competent Veterinary Service carries out an epidemiological investigation.

Instead, in the case of isolation of S. Enteritidis or Typhimurium, the following measures must be implemented:

If the presence of S. Enteritidis or Typhimurium is found in flocks during own checks, the holder of the company or the approved veterinarian must immediately communicate the result to the Veterinary Service.

If the presence of S. Enteritidis or Typhimurium is found during own checks or official controls the animals must be submitted to sanitary restrictive measures and slaughtered applying measures to avoid the risk of diffusion of salmonellae.

All the meat derived from the positive flocks must be heat treated before further processing unless negative result for the research of Salmonella spp. from meat of 15 animals per flock. The research of salmonella spp. from meat is at the holder's expense.

If the flock is of foreign origin, the Veterinary Service who has executed the control must give immediate communication of the results of the microbiological tests to the Ministry of Health, and to the Regional Veterinary Service, transmitting all the data concerning the batch of animals and the intention to slaughter the animals.

Following the identification of salmonella, the Veterinary Service, in collaboration with the holder of the company and the approved veterinarian, must proceed immediately to an accurate epidemiological investigation.

Suitable sanitary measures must be immediately adopted in the holding in order to avoid or to limit the spread of the infection or contamination and, eventually, further sanitary measures have to be applied on the basis of the results of the epidemiological investigations.

According to the results of the epidemiological investigation the Veterinary Service may decide to intensify the frequency of official sampling in order to verify the efficacy of the sanitary measures implemented.

EPIDEMIOLOGICAL INVESTIGATION

Epidemiological investigations shall be conducted following the guidelines elaborated by the Ministry of Health with the collaboration of the National Reference Laboratory for Salmonella. During the epidemiological investigation feeding stuff will be sampled in order to investigate its role in the infection. Moreover the Ministry of Health will organize training of the official veterinarians on request by the Regional Veterinary Services and whenever it is considered appropriate in order to guarantee that epidemiological approach and sanitary measures adopted are effective and harmonized within national territory.
SLAUGHTERING OF INFECTED FLOCKS

The animals from positive flocks must be sent to the slaughterhouse under restrictive sanitary measures. The official veterinarian provides that the slaughtering of infected birds happens at the end of the slaughtering day in order to guarantee a correct separation amongst batches; sanitization procedures of environment and equipment must be put in place.

ENVIRONMENTAL DISINFECTIONS

The sheds in which the animals positive for S. Enteritidis or Typhimurium were housed will have to be submitted to an accurate disinfection and pest control, carried out under the official control. The decontamination will have to be confirmed by an environmental microbiological control carried out before the restocking of new flocks.

4.4.5 QUALIFICATIONS OF HOLDINGS

An holding is defined as accredited when the own checks programme has been approved, and all the flocks have been submitted to at least one control with negative results. The accreditation is maintained until further controls give the suspicion of the presence of salmonella in the farm and only if the official veterinarian assesses the presence of the minimal structural requirements.

The accreditation is cancelled and restrictive measures will be applied in case of positive result for S. Enteritidis or S. Typhimurium following an official sampling or following an own check control.

The holding will be re-accredited after a negative official control performed on all the flocks of the same holding.

4.4.7 MEASURES AND APPLICABLE LEGISLATION AS REGARDS THE CONTROL OF THE DISEASE

Frequency and status of sampling

Flocks of broilers shall be sampled on the initiative of the food business operator (operator) and by the Competent Authority.

Sampling on the initiative of the operator shall take place in accordance with Article 5(3) of Regulation (EC) No 2160/2003 within three weeks before the birds are moved to the slaughterhouse.

However, by way of derogation the food business operator may decide to sample at least one flock of broilers per round on holdings with several flocks following the authorization by the Competent Authority if:
(i) an all in/all out system is used;
(ii) the same management applies to all flocks;
(iii) feed and water supply is common to all flocks;
(iv) during one year and at least six rounds, Salmonella spp. were tested according to the monitoring scheme previously described in all flocks on the holding and samples of all flocks of at least one round were taken by the Competent Authority; and
(v) all results from the testing for *Salmonella Enteritidis* or *Salmonella Typhimurium* were negative.

In order to obtain such authorization the holder of the animals has to submit to the Competent Authority the documentation containing at least the information from point i to v. The Competent Authority within one month of receiving of the request may request to the holder of the company further information. The Competent Authority within one month from the receipt of such further information has to proceed in approving or not the request. In case of disapproval the Competent Authority shall provide a document where the reasons of such decision are clearly identified.

Sampling by the Competent Authority shall include each year at least one flock of broilers on 10% of holdings with more than 5,000 birds. Moreover sampling shall be done on a risk basis each time the Competent Authority considers it necessary. A sampling carried out by the Competent Authority may replace the sampling on the initiative of the food business operator.

Sampling of feed must takes place at least according to PNAA 2009-2011 and whenever the Veterinary Service considers it necessary.

**Sampling protocol**

At least two pairs of boot/sock swabs shall be taken per each house. For free range flocks of broilers, samples shall only be collected in the area inside the house. All boot/sock swabs must be pooled into one sample. Before putting on the boot/sock swabs, their surface shall be moistened with maximum recovery diluents (0.8% sodium chloride, 0.1% peptone in sterile deionised water), or sterile water.

The use of farm water containing antimicrobials or additional disinfectants is prohibited. It shall be ensured that all sections in a house are represented in the sampling in a proportionate way.

On completion of sampling the boot/sock swabs shall be carefully removed so as not to dislodge adherent material. Boot swabs may be inverted to retain material. They shall be placed in a bag or pot and labelled.

The Competent Authority shall supervise education of the food business operators to guarantee the correct application of the sampling protocol.

In the case of sampling by the Competent Authority because of suspicion of *Salmonella* infection and in any other case considered appropriate, the Competent Authority shall conduct further tests in order to exclude the use of antimicrobials in those flocks. The analysis to detect antimicrobial substances shall be performed on at least 5 animals/flock. Where the presence of *Salmonella Enteritidis* and *Salmonella Typhimurium* is not detected but antimicrobials or bacterial growth inhibitory effect are detected, it shall be considered as an infected flock of broilers for the purpose of the Community target referred to in Article 1(2).

**EXAMINATION OF THE SAMPLES**

**Transport and preparation of the samples**

Samples shall be sent by express mail or courier to the laboratories referred to in Article 11 and 12 of Regulation (EC) No 2160/2003, within 24 hours after collection. At the
laboratory, samples shall be kept refrigerated until examination, which shall be carried out within 48 hours following receipt.

**Boot swab samples**
(a) The two pairs of boot swabs ('or socks') shall be carefully unpacked to avoid dislodging adherent faecal material, pooled and placed in 225 ml Buffered Pepsine Water (BPW) which has been pre-warmed to room temperature;
(b) The sample shall be swirled to fully saturate it and culture shall be continued by using the detection method in.

**Detection method**
The method recommended by the Community Reference Laboratory (CRL) for Salmonella in Bilthoven, the Netherlands, for detection shall be used. This method is described in the current version of draft Annex D of ISO 6579 (2002): ‘Detection of Salmonella spp. in animal faeces and in samples of the primary production stage’.
In this method, a semi-solid medium (modified semi-solid Rappaport-Vassiladis medium, MSRV) is used as the single selective enrichment medium.

**Serotyping**
At least one isolate from each positive sample shall be serotyped, following the Kaufmann-White scheme.

**Alternative methods**
With regard to samples taken at the initiative of the operator, the methods of analysis provided for in Article 11 of Regulation (EC) No 882/2004, may be used instead of the methods for the preparation of samples, detection methods and serotyping provided for in point 3 of this Annex, if validated in accordance with EN/ISO 16140/2003.

**Storage of strains**
At least one isolated strain per house per year shall be collected by the Competent Authority and stored for future phagotyping or anti-microbial susceptibility testing, using the normal methods for culture collection, which must ensure integrity of the strains for a minimum of two years.

4.4.8 MEASURES AND APPLICABLE LEGISLATION AS REGARDS THE COMPENSATION OF OWNERS OF SLAUGHTERED AND KILLED ANIMALS

In the case of animals culled and destroyed by the official veterinary service, in application of the plan, the owner is granted a reimbursement, if foreseen, calculated according to the next commission’s decision regarding co-financed plans for 2010 year.

4.4.9 INFORMATION AND ASSESSMENT ON BIO-SECURITY MEASURES

The Veterinary services with a frequency established at regional level must verify in poultry farms the application of the biosecurity measures defined by the Ordinanza of the Ministry of Health of 25 August 2005 and subsequent modification and integration.

5. GENERAL DESCRIPTION OF THE COSTS AND BENEFITS

The infections from Salmonella represent, in Italy like in other industrialized Countries, one of the most frequent foodborne diseases in humans, and foods of avian origin are ascribed
amongst main infection causes. The most recent European legislation on food safety (White Book, Regulation (EC) 178/2002) identifies in the production chain control the most effective approach in order to guarantee the hygiene of foodstuffs, identifying in the primary production a key point for the surveillance and the control. Regulation (EC) 2160/2003 requires a Community target for reducing Salmonella prevalence in broilers to be laid down, and therefore comparable data on current prevalence in Member States (MS) needed to be available. To this end a special baseline study was carried out in order to estimate the prevalence of Salmonella spp. in broilers. The objectives, the sampling frame, the diagnostic testing methods as well as the collection of data, evaluation and reporting and timelines of this baseline study are specified in Commission Decision 2005/638/EC.

In Italy the observed prevalence of S. Enteritidis and S. Typhimurium was 2.3%.

Regulation (EC) 2160/2003 provides that for a transitional period of three years, the Community target for broilers of Gallus gallus is to cover Salmonella Enteritidis and Salmonella Typhimurium.

The Community target referred to in Article 4(1) of Regulation (EC) 2160/2003 for the reduction of Salmonella Enteritidis and Salmonella Typhimurium in broilers of Gallus gallus (Community target) shall be a reduction of the maximum percentage of flocks of broilers remaining positive to 1% or less by 31 December 2011.

The objective of this program is to reduce the prevalence from 2.3% to 1% in the three years of application. This objective is considered to be achievable also because of the reduction of the prevalence in breeders flocks of Gallus gallus as the consequence of the application of the control by Member States.
### Targets related to testing

#### Targets on diagnostic tests

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<thead>
<tr>
<th>Animal species: broiler</th>
<th>Year</th>
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<table>
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<tr>
<th>Region</th>
<th>Type of test</th>
<th>Target population</th>
<th>Type of sample</th>
<th>Objective</th>
<th>Number of planned tests</th>
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<td>booteawbs</td>
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<td>feed</td>
<td>control</td>
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<td>Total</td>
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<td>16706</td>
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</table>

#### Targets related to testing

**Year**: 2010

**Situation on date**

**Infection**: Salmonella Enteritidis, Typhimurium

<table>
<thead>
<tr>
<th>Region</th>
<th>Type of test</th>
<th>Total number of broilers detected</th>
<th>Total number of animals under the programme</th>
<th>Total number of broilers to be checked</th>
<th>Number of broilers expected to be positive</th>
<th>Number of broilers expected to be depopulated</th>
<th>Total number of animals expected to be destroyed (Kda)</th>
<th>Expected number of eggs expected to be destroyed (Kda)</th>
<th>Expected number of chicks expected to be destroyed (Kda)</th>
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<tbody>
<tr>
<td>ITALY</td>
<td>BROILER</td>
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<td>194380000</td>
<td>17004</td>
<td>476</td>
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* official controls

**Number of planned tests**

16706
### Detailed analysis of the costs of the programme

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<tr>
<th>Cost related to</th>
<th>Specification</th>
<th>Number of units</th>
<th>Unitary cost in EUR</th>
<th>Total amount in EUR</th>
<th>Community fund or repaid (where applicable)</th>
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<td>Test number of bacteriological tests planned to be carried out in the framework of the official sampling</td>
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<td>Test number of sampling or relevant parasites tests planned to be advanced</td>
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<td>1.2 Cost of sampling</td>
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<tr>
<td>1.3 Other costs</td>
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<td>2. Vaccination or treatment of animal products</td>
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<td>2.1 Purchase of vaccine and treatment of animal products</td>
<td>Number of purchase vaccine doses planned if a vaccination policy is part of the programme as set out in point 1 of Annex III</td>
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<td>2.2 Disinfection costs</td>
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<td>2.3 Administrative costs</td>
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<tr>
<td>2.4 Control costs</td>
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<td>3. Slaughter and destruction</td>
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<td>3.2 Transport costs</td>
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<td>3.3 Disposal costs</td>
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<td>3.4 Costs of slaughtering</td>
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<tr>
<td>3.5 Costs from frame of animal products (skin, eggs, hatching eggs, etc.)</td>
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<td>4. Cleaning and disinfection</td>
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<td>5. Services (if contracted for the programme only)</td>
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<td>6. Consumables and specific equipment</td>
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<td>7 Other costs</td>
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</table>
ANNEX: GENERAL INFORMATION

- **Official controls at other stages of the food-chain (including sampling schemes)**


- **Structure of the production of feed**

Secondo gli ultimi dati ufficiali dell'ISTAT (anno 2005), in Italia la produzione di mangimi ammonta a 13 milioni e 805 mila tonnellate prodotte da circa 600 stabilimenti distribuiti su tutto il territorio nazionale e destinati alle varie specie animali (avicolli, bovini, suini, conigli, ovini, equini, pesci, animali familiari, ecc.).

L'Assalzoo - Associazione Nazionale tra i Produttori di Alimenti Zootecnici - è l'Associazione nazionale dell'industria mangimistica italiana alla quale aderiscono oltre 120 aziende, che rappresentano circa il 75% della produzione mangimistica industriale realizzata in Italia. L'Assalzoo pubblica annualmente un annuario che contiene numerose informazioni tra cui analisi di settore e tavole statistiche che riportano dati aggiornati sulla struttura mangimistica italiana (annuario 2008 allegato).

- **Is any financial assistance provided to food and feed businesses in the context of the national control programme?**

Non viene fornita alcuna assistenza finanziaria

- **Registration of farms**

La registrazione degli allevamenti avviene in accordo a quanto previsto dal Ordinanza Ministeriale 26 agosto 2005 e successive modifiche "Misure di polizia veterinaria in materia di malattie infettive e diffusive dei volatili da cortile".


Registro di mortalità

Registro movimenti mezzi e persone da e per l'azienda

Dichiarazione di provenienza e destinazione degli animali: ai sensi del D.P.R. 317 del 30 aprile 1996 e successive modifiche e integrazioni (Modello IV).
Documents to accompany animals when dispatched

Certificato sanitario per l'invio al macello ai sensi del Regolamento 854/2004 Capo X parte A.

Other relevant measures to ensure the traceability of animals
Ministero del Lavoro, della Salute e delle Politiche Sociali
PNAA 2009-2011

PNAA
2009-2010-2011

PIANO NAZIONALE
DI SORVEGLIANZA E DI VIGILANZA SANITARIA
SULL’ALIMENTAZIONE DEGLI ANIMALI
2009-2010-2011
ASSOCIAZIONE NAZIONALE TRA I PRODUTTORI DI ALIMENTI ZOOTECNICI

ASSALZOO

ANNUARIO

2008
From: Capuano Donatella [mailto:d.capuano@sanita.it]
Sent: Monday, August 31, 2009 1.52 PM
To: IDEI Sarolta (SANCO)
Cc: Ruocco Luigi

Subject: IT-REQUEST FOR ADDITIONAL INFO SCP 2010 - ITALY

Dear Sirs, following your kind request for additional info concerning National Control Programmes for Salmonella in breeding flocks and laying hens of Gallus gallus and turkeys (e-mail of the 1st August 2009), we declare that:

- all the programmes have been amended, clarifying that, when foreseen, confirmatory sampling can be performed only in exceptional cases, when the competent authority has reasons to suspect false positive or false negative results, and not on a routine basis. The programmes are in accordance with relevant legislation (Reg. 1003/2005, Reg. 213/2009, Reg. 1168/2006, Reg. 646/2007 and Reg. 584/2008);
- when reporting the results of the programmes, exceptional cases must be addressed and explained;
- all estimated costs of analysis (bacteriological examination, serotyping) are foreseen in the frame of official sampling.

Amended programmes are attached.

Best regards
National programme for the control of Salmonella Enteritidis Typhimurium, Hadar, Infantis and Vircow in breeders flocks of Gallus gallus

Italy

Application for co-financing 2010
PART A

(a) This national control programme is presented to the Commission for approval according to article 5 of Regulation (EC) 2160/2003. It has the objective of reducing the infection prevalence in breeding flocks of Gallus gallus of Salmonella Enteritidis, Typhimurium, Infantis, Hadar and Virchow on the national territory. According to Regulation (EC) 2160/2003, Regulation (EC) 1003/2005 and the national epidemiological situation achieved applying the national control program 2007-2009 this programme has the objective to achieve the following target:

- a maximum percentage of flocks remaining positive for Salmonella Enteritidis, Typhimurium, Infantis, Hadar and Virchow \( \leq 1\% \) by 31 December 2012.

(b) Breeding flocks shall be sampled at the initiative of the food business operator (operator) according to the own-check programme and by the Competent Authority.

Sampling at the initiative of the operator shall take place at least:

(a) in adult flocks at least every two weeks during the laying period at the holding

Furthermore the sampling shall take place:

(b) in day-old-chicks

(c) in rearing flocks at four weeks of age

(d) in rearing flocks two weeks before moving to the laying phase or laying unit.

In any case an approved own-check programme must be applied at the hatcheries of destination of the eggs; hatcheries must be submitted to official controls by the Competent Authority at least twice a year.

Sampling by the Competent Authority shall take place at the holding at least:

(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).

A sampling carried out by the Competent Authority may replace one sampling at the initiative of the operator.

(c) In the case of isolation of S. Enteritidis or S. Typhimurium, the following measures must be implemented:

1) If the presence of S. Enteritidis or S. Typhimurium is found in flocks during own checks, the holder of the company or the approved veterinarian must immediately communicate the result to the Veterinary Service. After the notification, the Veterinary Service puts in place the necessary controls for the confirmation of the result.
2) If the presence of S. Enteritidis or S. Typhimurium is found in flocks during routine official controls, the Veterinary Service puts in place the necessary controls for the confirmation of the results.

3) (a) If the presence of S. Enteritidis or S. Typhimurium is confirmed, the animals must be submitted to sanitary restrictive measures, eliminated and destroyed according to Regulation 1774/2000, or in alternative, slaughtered applying measures to avoid the risk of diffusion of salmonellosis. All the meat derived from the positive flocks must be heat treated before further processing unless negative result for the research of Salmonella spp. from muscle of 15 animals per flock, this examination may be performed also on animals before moving to the slaughterhouse.

If the flock is of foreign origin, the veterinary service who has executed the control must give immediate communication of the results of the microbiological tests to the Ministry of Health, and to the Regional Veterinary Service, transmitting all the data concerning the batch of animals and the intention to eliminate or slaughter the animals.

(b) If the positivity for S. Enteritidis or S. Typhimurium is found in laying animals, until the official confirmation, the hatcheries of destination of the eggs must be identified and the suspicion must be notified to the Veterinary services responsible for the control at the hatcheries, in order to allow the application of appropriate sanitary measures aimed at avoiding the diffusion of infection or contamination.

(c) Eggs still present at the hatcheries following the positive result of the confirmatory sampling must be destroyed or heat treated.

(d)

1.1

The infections from Salmonella represent, in Italy like in other industrialized Countries, one of the most frequent foodborne diseases in humans, and foods of avian origin, eggs and egg-products in particular, are ascribed amongst main infection causes. The most recent European legislation on food safety (White Book, Regulation (EC) 178/2002) identifies in the production chain control the more effective approach in order to guarantee the hygiene of foodstuffs, identifying in the primary production a key point for the surveillance and the control. As far as specifically the avian production is concerned, in structuring a control programme the typically pyramidal structure of this production must be taken into account, since from a limited number of breeders an enormous number of animals is produced, which represents the world production of both poultry meat and eggs. It is clear that in such a situation the presence of infection from salmonella at the apex of the productive structure, therefore in the breeders, can quickly be diffused, above all for those serotypes which are vertically transmitted, from breeders to broilers and layers, constituting a serious risk for public health. For these reasons this programme has the objective of reducing the infection prevalence of Salmonella serotypes with public health relevance at the apex of the pyramid in order to obtain a noteworthy prevalence reduction in other productive categories (laying hens and broiler) with the final objective to reduce infection from salmonella in humans.

1.2
The responsible central Authority of the control and the coordination of the sanitary control program is the Ministry of Health. At peripheral level the Regions, through the Local Veterinary Services, are responsible for the performance of the programme. The National Reference Laboratory for Salmonella is appointed at Istituto Zooprofilattico Sperimentale delle Venezie (D M. 4 October 1959).

The isolations of S. Enteritidis and S. Typhimurium from samples taken by the Competent Authority for confirmation will always have to be notified by fax directly to the Regional Veterinary Service. Moreover in case of isolation of S. Enteritidis and Typhimurium, the results of epidemiological investigations and a synthetic report of the adopted sanitary measures will have to be sent both to the Regional Veterinary Service and to the National Reference Laboratory for Salmonella.

1.3
All the laboratory investigations in the framework of official controls are performed by Istituti Zooprofilattici Sperimentali (10 in the country), accredited according to Regulation (EC) 2160/2003 and to ISO 17025. Private laboratories performing own-checks analysis must be accredited, according to Regulation (EC) 2160/2003 and to ISO 17025. Confirmatory tests are performed by the National Reference Laboratory.

1.4
Detection method
The method recommended by the Community Reference Laboratory (CRL) for Salmonella in Bilthoven, the Netherlands, for detection shall be used. This method is described in the amendment 1 to ISO 6579:2002 (2007): 'Detection of Salmonella spp. in animal faeces and in samples of the primary production stage'. In this method, a semi-solid medium (modified semi-solid Rappaport-Vassiliadis medium, MSRV) is used as the single selective enrichment medium.

Serotyping, phagetyping and antimicrobial resistance testing
At least one isolate from each positive sample shall be serotyped, following the Kaufmann-White scheme. All the Salmonella Enteritidis and Typhimurium isolates will be send to the National Reference Laboratory for Salmonella that will submit the isolates to phage typing according to the protocol elaborated by Health Protection Agency (HPA).

Alternative methods
With regard to samples taken at the initiative of the operator, the methods of analysis provided for in Article 11 of Regulation (EC) No 882/2004, may be used instead of the methods for the preparation of samples, detection methods and serotyping provided for in point 3 of this Annex, if validated in accordance with EN/ISO 16140/2003.

1.5
Hatcheries must be submitted to official controls by the Competent Authority at least twice a year.

Sampling by the Competent Authority shall take place at the holding at least:
(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).

(d) in case of detection of Salmonella Enteritidis or Typhimurium in a sample taken by the food business operator or taken by the Competent Authority (routine sampling, without a previous positivity during own checks), an official confirmatory sampling must be performed; in this case 5 pair of boot swabs and two dust samples must be taken for each flock resulted positive (in this case analysis have to be performed by the National Reference Laboratory for Salmonella). Competent Authority have moreover to verify that the results for examination for salmonella are not affected by the use of antimicrobials

(e) in cases where the Competent Authority considers it appropriate.

Sampling of food must takes place at least according to PNAA 2009-2011 and whenever the Veterinary Service considers it necessary.

A sampling carried out by the Competent Authority may replace one sampling at the initiative of the operator.

1.6

If the presence of S. Enteritidis or S. Typhimurium is confirmed, the animals must be submitted to sanitary restrictive measures, eliminated and destroyed according to Regulation 1774/2000, or in alternative, slaughtered applying measures to avoid the risk of diffusion of salmonellae.

All the meat derived form the positive flocks must be heat treated before further processing unless negative result for the research of Salmonella spp. from muscle of 15 animals per flock, this examination may be performed also on animals before moving to the slaughterhouse.

If the flock is of foreign origin, the veterinary service who has executed the control must give immediate communication of the results of the microbiological tests to the Ministry of Health, and to the Regional Veterinary Service, transmitting all the data concerning the batch of animals and the intention to eliminate or slaughter the animals.

After the slaughtering or destruction of a flock positive for S. Enteritidis or S. Typhimurium, the house where positive animals were farmed must be repopulated only with vaccinated animals and in any case only after the application of the measures reported in the paragraph “environmental disinfection”

The sheds in which the animals resulted positive for S. Enteritidis and S. Typhimurium were housed will have to be submitted to an accurate disinfection and pest control, carried out under the official control. The decontamination will have to be confirmed by an environmental microbiological control carried out at list 10 days before the restocking of new flocks.

1.7

National Legislation

- D.M. 4 October 1999: national reference laboratories in the veterinary sector
- DPR n. 587 of 3 March 1993: regulation applying the Directive 90/539/EC on animal health conditions governing intra-Community trade in and imports from third countries of poultry and hatching eggs
- Circolare n.1 of the Ministry of Health of 12 January 1995: national control programme laying down requirements for the recognition of the plants allowed to export poultry and hatching eggs intra-Community. Practical criteria.
- Ordinanza of the Ministry of Health of 25 August 2005 and subsequent modification and integration laying down veterinary measures on infective and diffusive diseases in poultry

LEGISLATION ABOUT FEED

Feed hygiene
Regulation (EC) 183/2005 laying down requirements for feed hygiene

Control programmes
National programme 2009-2011 concerning monitoring and sanitary control of animal feed (Nota of the Ministry of Health 0024961-P-18/12/2008)

2.3
The Veterinary services with a frequency established at regional level must verify in poultry farms the application of the biosecurity measures defined by the Ordinanza of the Ministry of Health of 25 August 2005 and subsequent modification and integration. A far as specifically the breeding flocks the measures identified by Circolare n.1 of the Ministry of Health of 12 January 1995 must be applied.
PART B

1. IDENTIFICATION OF THE PROGRAMME

Member State: Italy

Disease: infection from Salmonella Enteritidis, Typhimurium, Infantis, Hadar, Vircon

Animal population covered by the programme: The sampling frame shall cover all flocks of breeders referred to in Article 1 of Regulation (EC) 2100/2003. All the farms with more than 250 birds must be included.

Years of implementation: 2010-2012

Contact:

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Date sent to the Commission: 30 April 2009
2. HISTORICAL DATA ON THE EPIDEMIOLOGICAL EVOLUTION OF THE DISEASE

Consistency of the national production of breeders of *Gallus gallus* (year 2009)

In 2007, Regions have notified 494 flocks of breeders of *Gallus gallus* as existing on the national territory.

Infection prevalence in breeder flocks of *Gallus gallus* in Italy

The National control programme according to Reg. 2160/2003 started in Italy in 2007, following the provisions of Reg. 1003/2005. Restrictive measures were foreseen for flocks positive for S. Enteritidis, Typhimurium, Infantis, Hadar and Virchow.

In 2007, 391 flocks have been tested in the framework of the national control programme; 1 resulted positive for S. Enteritidis and 1 for S. Typhimurium (0.5%). 4 flocks resulted positive for other Salmonella serovars.

Data from 2008 are still provisional. From data reported up to now, 324 flocks have been tested in the framework of the programme, and 13 resulted positive for the relevant serovars. This would represent a prevalence of 4%, but this result can be modified once all the regions report their activity, increasing the number of checked flocks.
3. DESCRIPTION OF THE SUBMITTED PROGRAMME

This national control programme is presented to the Commission for approval according to article 5 of Regulation (EC) 2160/2003. It has the objective of reducing the infection prevalence in breeding flocks of *Gallus gallus* of *Salmonella* Enteritidis, Typhimurium, Infantis, Hadar and Virgoc on the national territory. According to Regulation (EC) 2160/2003, Regulation (EC) 1003/2005 and the national epidemiological situation achieved applying the national control program 2007-2009 this programme has the objective to achieve the following target:

- a maximum percentage of flocks remaining positive for *Salmonella* Enteritidis, Typhimurium, Infantis, Hadar and Virgoc ≤ 1% by 31 December 2012.

The programme is based on a monitoring scheme according to Regulation (EC) 2160/2003, Regulation (EC) 1003/2005 and Regulation 213/2009, consisting in own-checks and official controls in holdings. Control measures that must be applied in case of isolation of *S. Enteritidis* and/or *S. Typhimurium* are: killing (at the slaughterhouse) or slaughtering of the animals, the destruction or heat treatment of eggs still present in hatcheries produced by groups in which the presence of *S. Enteritidis* or *S. Typhimurium* has been found and the implementation of biosecurity measures when appropriate; in case of isolation of *S. Infantis*, *Hadar* or *Virgoc* no sanitary restrictive control measures are foreseen but biosecurity control measures must be implemented according to the results of the epidemiological investigation.

In case of isolation of not relevant serovars an epidemiological investigation must be carried out.

4. MEASURES OF THE SUBMITTED PROGRAMME

4.1 SUMMARY OF THE MEASURES UNDER THE PROGRAMME

Duration of the programme: 3 years (2010-2012)

- Control
  - Testing
  - Slaughtering of positive animals (for *S. Enteritidis* and *Typhimurium*)
  - Killing of positive animals (for *S. Enteritidis* and *Typhimurium*)
  - Destruction or heat treatment of eggs still present in hatcheries produced by groups in which the presence of *S. Enteritidis* or *S. Typhimurium* has been found
  - Implementation of biosecurity measures when appropriate

Vaccination for the control of zoonotic salmonellae is not mandatory according to Commission Regulation (EC) 1177/2006, but allowed, with the exception of the use of live vaccines indistinguishable from wild strains. The vaccination is mandatory according to the national control programme for the animals used to restock a positive breeding flock resulted positive for *S. Enteritidis* or *S. Typhimurium* (the first dose within the first 48 hours of life).

The use of antimicrobials for the control of *Salmonella* spp. is forbidden but may be allowed by way of derogation and following authorization by Competent Authority and
under the supervision of the National Reference Laboratory for Salmonella, in exceptional circumstances according to Commission Regulation (EC) 1177/2006.

4.2 DESIGNATION OF THE CENTRAL AUTHORITY IN CHARGE OF SUPERVISING AND COORDINATING THE DEPARTMENTS RESPONSIBLE FOR IMPLEMENTING THE PROGRAMME

The responsible central Authority of the control and the coordination of the sanitary control program is the Ministry of Health. At peripheral level the Regions, through the Local Veterinary Services, are responsible for the performance of the programme. The National Reference Laboratory for Salmonella is appointed at Istituto Zooprofilattico Sperimentale delle Venezie (D.M. 4 October 1999).

All the laboratory investigations in the framework of official controls are performed by Istituti Zooprofilattici Sperimentali (10 in the country), accredited according to Regulation (EC) 2160/2003 and to ISO 17025. Private laboratories performing own-checks analysis must be accredited, according to Regulation (EC) 2160/2003 and to ISO 17025. Confirmatory tests are performed by the National Reference Laboratory.

OWN-CHECK PROGRAMME

The holder of the company have to submit to the Competent Authority an own-check programme. In the own-check programme the following information must be reported at least:

- data on how the farm is registered, the name of the veterinary responsible for the own-check programme
- description of the farm
- biosecurity measures implemented
- information on feed including microbiological guarantees requested to the producer and own-check microbiological analysis
- sampling plan for the control of Salmonella spp.
- name of the accredited laboratory analyzing the samples for Salmonella
- measures implemented in case of positive results

The own-check programme must be submitted to the Competent Authority who may require modification or integration to be made before the approval; the approval must be reported in a document kept both by the holder of the company and by the Competent Authority.

4.3 DESCRIPTION AND DEMARCATION OF THE GEOGRAPHICAL AND ADMINISTRATIVE AREAS IN WHICH THE PROGRAMME IS TO BE IMPLEMENTED

The program concerns all the national territory.

4.4 MEASURES IMPLEMENTED UNDER THE PROGRAMME

TERMS OF LEGISLATION

COMMUNITY LEGISLATION
Council Decision 90/638/EC of 27 November 1990 laying down Community criteria for the eradication and monitoring of certain animal diseases


Council Decision 2004/450/EC of 29 April 2004 laying down standard requirements for the content of application for Community financing for programmes for the eradication and monitoring of animal diseases


Commission Decision 2008/425/EC of 25 April 2008 laying down standard requirements for the submission by Member States of national programmes for the eradication, control and monitoring of certain animal diseases and zoonoses for Community financing


NATIONAL LEGISLATION

D.M. 4 October 1999: national reference laboratories in the veterinary sector

DPR n. 587 of 3 March 1993: regulation applying the Directive 90/539/EC on animal health conditions governing intra-Community trade in and imports from third countries of poultry and hatching eggs

Circolare n.1 of the Ministry of Health of 12 January 1995: national control programme laying down requirements for the recognition of the plants allowed to export poultry and hatching eggs intra-Community. Practical criteria.

Ordinanza of the Ministry of Health of 28 August 2005 and subsequent modification and integration laying down veterinary measures on infective and diffusive diseases in poultry


LEGISLATION ABOUT FEED
Feed hygiene
Regulation (EC) 183/2005 laying down requirements for feed hygiene

Control programmes
National programme 2009-2011 concerning monitoring and sanitary control of animal feed (Nota of the Ministry of Health 0024961-P-18/12/2008)

4.4.1 MEASURES AND APPLICABLE LEGISLATION AS REGARDS THE REGISTRATION OF HOLDINGS

The national census of poultry holdings is compulsory in Italy (except less 250 heads) according to article 1 of Ordinanza of the Ministry of Health of 25 August 2005. The Local Veterinary Service is responsible for the maintenance of the registration of poultry holdings and for the registration in the National Data Base of any modification (closings, openings, changes of corporate name) of breeding holdings and hatcheries in the area of competence. The keeper or owner of animals is responsible for the communication to NDB of data concerning consistence of the holding.

4.4.3 MEASURES AND APPLICABLE LEGISLATION AS REGARDS THE NOTIFICATION OF THE DISEASE

The isolations of S. Enteritidis and S. Typhimurium from samples taken by the Competent Authority for confirmation will always have to be notified by fax directly to the Regional Veterinary Service. Moreover in case of isolation of S. Enteritidis and Typhimurium, the results of epidemiological investigations and a synthetic report of the adopted sanitary measures will have to be sent both to the Regional Veterinary Service and to the National Reference Laboratory for Salmonella.

4.4.4 MEASURE IN CASE OF A POSITIVE RESULT

In the case of isolation, because of an official sampling of salmonellae other than S. Enteritidis and S. Typhimurium, the competent Veterinary Service carries out an epidemiological investigation.

Instead, in the case of isolation of S. Enteritidis or S. Typhimurium, the following measures must be implemented:

1) If the presence of S. Enteritidis or S. Typhimurium is found in flocks during own checks, the holder of the company or the approved veterinarian must immediately communicate the result to the Veterinary Service. After the notification, the Veterinary Service puts in place the necessary controls for the confirmation of the result.

2) If the presence of S. Enteritidis or S. Typhimurium is found in flocks during routine official controls, the Veterinary Service puts in place the necessary controls for the confirmation of the results.

3) a) If the presence of S. Enteritidis or S. Typhimurium is confirmed, the animals must be submitted to sanitary restrictive measures, eliminated and destroyed
according to Regulation 1774/2000, or in alternative, slaughtered applying measures to avoid the risk of diffusion of salmonellae.

All the meat derived from the positive flocks must be heat treated before further processing unless negative result for the research of Salmonella spp. from muscle of 15 animals per flock, this examination may be performed also on animals before moving to the slaughterhouse.

If the flock is of foreign origin, the veterinary service who has executed the control must give immediate communication of the results of the microbiological tests to the Ministry of Health, and to the Regional Veterinary Service, transmitting all the data concerning the batch of animals and the intention to eliminate or slaughter the animals.

Following the identification of relevant serovars, the Veterinary Service, in collaboration with the holder of the company and the approved veterinarian, must proceed to an accurate epidemiological investigation.

Suitable sanitary measures must be immediately adopted in the holding in order to avoid or to limit the spread of the infection or contamination and, eventually, further sanitary measures have to be applied on the basis of the results of the epidemiological investigations.

According to the results of the epidemiological investigation the Veterinary Service may decide to intensify the frequency of official sampling in order to verify the efficacy of the sanitary measures implemented.

(b) If the positivity for S. Enteritidis or S. Typhimurium is found in laying animals, until the official confirmation, the hatcheries of destination of the eggs must be identified and the suspicion must be notified to the Veterinary services responsible for the control at the hatcheries, in order to allow the application of appropriate sanitary measures aimed at avoiding the diffusion of infection or contamination.

(c) Eggs still present at the hatcheries following the positive result of the confirmatory sampling must be destroyed or heat treated.

4) If the presence of S. Enteritidis or S. Typhimurium is found at the hatchery the result must be notified to the Veterinary services responsible for the holdings of destination of the chickens and of origin of the eggs. In breeding flocks of origin of the eggs a confirmatory sampling must be performed.

If the eggs are of foreign origin, the veterinary service who has executed the control must give immediate communication of the results of the microbiological tests to the Ministry of Health, and to the Regional Veterinary Service, transmitting all the data concerning the batch of eggs identifying the restrictive measures applied.

5) After the slaughtering or destruction of a flock positive for S. Enteritidis or S. Typhimurium, the house where positive animals were farmed must be repopulated only with vaccinated animals and in any case only after the application of the measures reported in the paragraph "environmental disinfection"
Epidemiological investigations shall be conducted following the guideline elaborated by the Ministry of Health with the collaboration of the National Reference Laboratory for Salmonella. During the epidemiological investigation feeding stuff will be sampled in order to investigate its role in the infection.

**ENVIRONMENTAL DISINFECTIONS**

The sheds in which the animals resulted positive for S. Enteritidis and S. Typhimurium were housed will have to be submitted to an accurate disinfection and pest control, carried out under the official control. The decontamination will have to be confirmed by an environmental microbiological control carried out at least 10 days before the restocking of new flocks.

**4.4.5 QUALIFICATIONS OF HOLDINGS**

An holding is defined as accredited when an official control according to the programme described in this document has been performed with negative results. Moreover, the sampling in the framework of own-checks must be performed as previously described. The accreditation is maintained until further controls give the suspicion of the presence of salmonella in the farm and only if the official veterinarian assesses the presence of the minimal structural requirements. The accreditation is cancelled and restrictive measures will be applied in case of a positive result for S. Enteritidis or S. Typhimurium following a confirmatory sampling.

The holding will be re-accredited after a negative official control performed on all the flocks of the same holding.

**4.4.7 MEASURES AND APPLICABLE LEGISLATION AS REGARDS THE CONTROL OF THE DISEASE**

**Frequency and status of sampling**

Breeding flocks shall be sampled at the initiative of the food business operator (operator) according to the own-check programme and by the Competent Authority.

Sampling at the initiative of the operator shall take place at least:
(a) in adult flocks at least every two weeks during the laying period at the holding
Furthermore the sampling shall take place:
(b) in day-old-chicks
(c) in rearing flocks at four weeks of age
(d) in rearing flocks two weeks before moving to the laying phase or laying unit.

In any case an approved own-check programme must be applied at the hatcheries of destination of the eggs; hatcheries must be submitted to official controls by the Competent Authority at least twice a year.

Sampling by the Competent Authority shall take place at the holding at least:
(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).
(d) In case of detection of Salmonella Enteritidis or Typhimurium in a sample taken by the food business operator or taken by the Competent Authority (routine sampling, without a previous positivity during own checks), an official confirmatory sampling must be performed; in this case 5 pair of boot swabs and two dust samples must be taken for each flock resulted positive (in this case analysis have to be performed by the National Reference Laboratory for Salmonella); Competent Authority have moreover to verify that the results for examination for salmonella are not affected by the use of antimicrobials.
(e) in cases where the Competent Authority considers it appropriate.

Sampling of feed must takes place at least according to PNAA 2009-2011 and whenever the Veterinary Service considers it necessary.

A sampling carried out by the Competent Authority may replace one sampling at the initiative of the operator.

Sampling protocol

Routine sampling at the initiative of the food business operator
(a) Samples consist of fecal and dust samples and shall aim to detect 1% within flock prevalence with a 95% confidence limit. To that effect samples shall comprise:
   ✓ one pair of boot swabs representing all the sections of the house
   ✓ one dust sample, representing all sections of the house, of 250 ml corresponding to about 50 grams.
In case dust is not present another pair of boot swab must be collected.
Samples must be tested individually.

(b) In cage breeding flocks, sampling may consist of naturally mixed faeces from dropping belts, scrapers or deep pits, depending on the type of house. Two samples of at least 150g shall be collected to be tested individually.

Day-old-chicks sampling: at least 15 animals (5 males and 10 females) must be randomly sampled before the discharge; moreover papers from ten boxes randomly selected must be sampled. The animals must be submitted to the research of salmonella and residues.

Official sampling
Routine sampling must be done according to what reported previously (point 3.1).
In case of confirmatory sampling 5 pair of boot swabs and 2 dust samples must be taken for each group; Competent Authority have moreover to verify that the results for examination for salmonella are not affected by the use of antimicrobials.
When the presence of Salmonella Enteritidis and Typhimurium is not detected but antimicrobials or bacterial growth inhibitory effect are detected the flock has to be considered infected for the purpose of the Community target.
EXAMINATION OF THE SAMPLES

Transport and preparation of the samples
Samples shall be sent by express mail or courier to the laboratories referred to in Article 11 of Regulation (EC) 2180/2003, on the day of collection. At the laboratory, samples shall be kept refrigerated until examination, which shall be carried out within 48 hours following receipt.

Boot swab samples
(a) Each pair of boot swabs shall be carefully unpacked to avoid dislodging adherent faecal material and placed in 225 ml Buffered Peptone Water (BPW) which has been pre-warmed to room temperature;
(b) The sample shall be swirled to fully saturate it and culture shall be continued by using the detection method.
(c) In case of confirmatory sampling each sample must be tested individually and samples that have to be analyzed according to “a” and “b”.

Dust samples
Each dust sample must be analyzed individually according to the following protocol.

(a) at the laboratory place each dust sample into an equal weight of Buffered Peptone Water which has been pre-warmed to room temperature and mix gently
(b) allow the sample to soften for 10-15 minutes then mix gently
(c) immediately after mixing remove 50 g of the mixture and add to 200 ml of Buffered Peptone Water which has been pre-warmed to room temperature
(d) continue culture of the sample by using the detection method.

Detection method
The method recommended by the Community Reference Laboratory (CRL) for Salmonella in Bithoven, the Netherlands, for detection shall be used. This method is described in the amendment 1 to ISO 6579:2002 (2007): ‘Detection of Salmonella spp. in animal faeces and in samples of the primary production stage’.
In this method, a semi-solid medium (modified semi-solid Rappaport-Vassiladis medium, MSRV) is used as the single selective enrichment medium.

Serotyping, phagetyping and antimicrobial resistance testing
At least one isolate from each positive sample shall be serotyped, following the Kaufmann-White scheme.
All the Salmonella Enteritidis and Typhimurium isolates will be send to the National Reference Laboratory for Salmonella that will submit the isolates to phage typing according to the protocol elaborated by Health Protection Agency (HPA).

Alternative methods
With regard to samples taken at the initiative of the operator, the methods of analysis provided for in Article 11 of Regulation (EC) No 882/2004, may be used instead of the methods for the preparation of samples, detection methods and serotyping provided for in point 3 of this Annex, if validated in accordance with EN/ISO 16140/2003.

Storage of strains
Laboratories shall guarantee that at least one isolated strain of Salmonella spp. per house per year can be collected and stored using the normal methods for culture collection which must ensure integrity of the strains for a minimum of two years. Strains will be available for the National Reference Laboratory for Antibiotic Resistance for further analysis.

4.4.8 MEASURES AND APPLICABLE LEGISLATION AS REGARDS THE COMPENSATION OF OWNERS OF SLAUGHTERED AND KILLED ANIMALS

In the case of animals culled and destroyed by the official veterinary service, in application of the plan, the owner is granted a reimbursement calculated according to the national rules (Legge 218/88).

If the utilization of meats of slaughtered animals is authorized, from the indemnity calculated according to the previous paragraph the amount derived from the utilization of meats is deducted.

Furthermore, it's possible in the same way the reimbursement of the fixed or mobile equipment (if they are not properly suited for disinfection) or of contaminated feedstuffs or agricultural products, if the destruction is required by the official veterinary service.

4.4.9 INFORMATION AND ASSESSMENT ON BIO-SECURITY MEASURES

The Veterinary services with a frequency established at regional level must verify the application of the biosecurity measures defined by the Ordinanza of the Ministry of Health of 25 August 2005 and subsequent modification and integration. As far as specifically the breeding flocks the measures identified by Circolare n. 1 of the Ministry of Health of 12 January 1995 must be applied.

5. GENERAL DESCRIPTION OF COSTS AND BENEFITS

The infections from Salmonella represent, in Italy like in other industrialized Countries, one of the most frequent foodborne diseases in humans, and foods of avian origin, eggs and egg-products in particular, are ascribed amongst main infection causes. The most recent European legislation on food safety (White Book, Regulation (EC) 178/2002) identifies in the production chain control the more effective approach in order to guarantee the hygiene of foodstuffs, identifying in the primary production a key point for the surveillance and the control. As far as specifically the avian production is concerned, in structuring a control programme the typically pyramidal structure of this production must be taken into account, since from a limited number of breeders an enormous number of animals is produced, which represents the world production of both poultry meat and eggs. It is clear that in such a situation the presence of infection from salmonella at the apex of the productive structure, therefore in the breeders, can quickly be diffused, above all for those serotypes which are vertically transmitted, from breeders to broilers and layers, constituting a serious risk for public health. For these reasons this programme has the objective of reducing the infection prevalence of Salmonella serotypes with public health relevance at the apex of the pyramid in order to obtain a
noteworthy prevalence reduction in other productive categories (laying hens and broiler) with the final objective to reduce infection from salmonella in humans.
### 6.1.1 Data on evolution of zoonotic salmonellosis

**Year: 2007**

**Situation on date: 31.12.2007**

**Animal species:** breeder flocks of *Gallus gallus*  
**Infection:** S. Enteritidis, Typhimurium, Infantis, Hadar and Virchow

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<th>Total n° of flocks under the programme</th>
<th>Number of positive flocks</th>
<th>Number of flocks depopulated</th>
<th>Total number of animals slaughtered or destroyed</th>
<th>Quantity of eggs destroyed</th>
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**Year: 2008**

**Situation on date: 31.03.09 (PROVISIONAL DATA)**

**Animal species:** breeder flocks of *Gallus gallus*  
**Infection:** S. Enteritidis, Typhimurium, Infantis, Hadar and Virchow

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<th>Total n° of flocks under the programme</th>
<th>Number of positive flocks</th>
<th>Number of flocks depopulated</th>
<th>Total number of animals slaughtered or destroyed</th>
<th>Quantity of eggs destroyed</th>
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### Targets

#### Targets related to testing

#### Targets on diagnostic tests

**Animal species: breeders (Gallus gallus)**

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**Total**

| Year | 2010 |

### Situation on date: 31/12/2010

**Animal species: Breeders (Gallus gallus)**

**Infectors: S. Enteritidis and/or S. Typhimurium**

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<tr>
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<th>Type of test</th>
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<th>Expected number of birds to be culled</th>
<th>Number of birds expected to be destroyed</th>
<th>Expected number of birds to be destroyed (number of kg)</th>
<th>Expected number of eggs to be destroyed (number of kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>breeders</td>
<td>500</td>
<td>750000</td>
<td>600</td>
<td>750000</td>
<td>50</td>
<td>750000</td>
<td>300000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
7.2.1 Targets on vaccination

Animal species: breeders \((Gallus\ gallus)\)

<table>
<thead>
<tr>
<th>Region</th>
<th>Total number of herds in vaccination programme</th>
<th>Total number of animals in vaccination programme</th>
<th>Targets on vaccination programme</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Number of herds in vaccination programme</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>75000</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>75000</td>
<td>5</td>
</tr>
<tr>
<td>Costs related to</td>
<td>Specification</td>
<td>Number of units</td>
<td>Unitary cost in EUR</td>
</tr>
<tr>
<td>-----------------</td>
<td>---------------</td>
<td>-----------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>1. Testing</td>
<td>Test: number of bacteriological tests planned to be carried out in the framework of the official sampling</td>
<td>315</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Test: Number of serotyping of relevant isolates tests planned to be carried out</td>
<td>150</td>
<td>20</td>
</tr>
<tr>
<td>1.2 Cost of sampling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3 Other costs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Vaccination or treatment of animal products</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 Purchase of vaccine/treatment of animal products</td>
<td>Number of purchase vaccine doses planned if a vaccination policy is part of the programme as set out explicitly under point 4 Annex II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2 Distribution costs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.3 Administration costs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.4 Control costs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Slaughter and destruction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1 Carcass of animals</td>
<td></td>
<td>7600</td>
<td>16</td>
</tr>
<tr>
<td>3.2 Transport costs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3 Disinfection costs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.4 Loss in case of slaughtering</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.5 Costs from removal of animal products (milk, eggs, hatching eggs, etc.)</td>
<td>Number of eggs destroyed</td>
<td>30800</td>
<td>0.1</td>
</tr>
<tr>
<td>4 Cleaning and disinfection</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Salaries related to the programme only</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Consumables and specific equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Other costs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ANNEX: GENERAL INFORMATION

- **Official controls at other stages of the food-chain (including sampling schemes)**


- **Structure of the production of feed**

Secondo gli ultimi dati ufficiali dell'ISTAT (anno 2005), in Italia la produzione di mangimi ammonta a 13 milioni e 805 mila tonnellate prodotte da circa 600 stabilimenti distribuiti su tutto il territorio nazionale e destinati alle varie specie animali (uvicoli, bovini, suini, conigli, ovini, equini, pesci, animali familiari, ecc.).

L'Assalzoe - Associazione Nazionale tra i Produttori di Alimenti Zootecnici - è l'Associazione nazionale dell'industria mangimistica italiana alla quale aderiscono oltre 120 aziende, che rappresentano circa il 75% della produzione mangimistica industriale realizzata in Italia. L'Assalzoe pubblica annualmente un annuario che contiene numerose informazioni tra cui analisi di settore e tavole statistiche che riportano dati aggiornati sulla struttura mangimistica italiana (annuario 2008 allegato).

- **Is any financial assistance provided to food and feed businesses in the context of the national control programme?**

Non viene fornita alcuna assistenza finanziaria.

**Registration of farms**

La registrazione degli allevamenti avviene in accordo a quanto previsto dal Ordinanza Ministeriale 26 agosto 2005 e successive modifiche “Misure di politica veterinaria in materia di malattie infettive e diffusive dei volatili da cortile”.


Registro di mortalità

Registro movimenti mezzi e persone da e per l'azienda

Dichiarazione di provenienza e destinazione degli animali: ai sensi del D.P.R. 317 del 30 aprile 1996 e successive modifiche e integrazioni (Modello IV).
Documents to accompany animals when dispatched

Certificato sanitario per l'invio al macello ai sensi del Regolamento 854/2004 Capo X parte A.

Other relevant measures to ensure the traceability of animals
PNAAN
2009-2010-2011

PIANO NAZIONALE
DI SORVEGLIANZA E DI VIGILANZA SANITARIA
SULL’ALIMENTAZIONE DEGLI ANIMALI
2009-2010-2011
From: Capuano Donatella [mailto:d.capuano@sanita.it]
Sent: Monday, August 31, 2009 1:52 PM
To: IDEI Sarolta (SANCO)
Cc: Ruocco Luigi

Subject: IT-REQUEST FOR ADDITIONAL INFO SCP 2010 - ITALY

Dear Sirs, following your kind request for additional info concerning National Control Programmes for Salmonella in breeding flocks and laying hens of Gallus gallus and turkeys (e-mail of the 1st August 2009), we declare that:

- all the programmes have been amended, clarifying that, when foreseen, confirmatory sampling can be performed only in exceptional cases, when the competent authority has reasons to suspect false positive or false negative results, and not on a routine basis. The programmes are in accordance with relevant legislation (Reg. 1063/2005, Reg. 213/2009, Reg. 1168/2006, Reg. 546/2007 and Reg. 584/2008);
- when reporting the results of the programmes, exceptional cases must be addressed and explained;
- all estimated costs of analysis (bacteriological examination, serotyping) are foreseen in the frame of official sampling.

Amended programmes are attached.

Best regards
Ministero del Lavoro, della Salute e delle Politiche Sociali
PNAAS 2009-2011

PNAAS
2009-2010-2011

PIANO NAZIONALE DI SORVEGLIANZA E DI VIGILANZA SANITARIA SULL'ALIMENTAZIONE DEGLI ANIMALI
2009-2010-2011
ASSOCIAZIONE NAZIONALE
TRA I PRODUTTORI DI ALIMENTI ZOOTECNICI

ASSALZOO

ANNUARIO

2008
Oggetto: Additional info concerning National Control Programmes for Salmonella in breeding flocks, laying hens, broilers of Gallus gallus and turkeys.

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- all estimated costs of analysis (bacteriological examination, serotyping) are foreseen in the frame of official sampling.

Amended programmes are attached.

Best regards.

The Director General

[Signature]

Date: [Handwritten date]