EUROPEAN COMMISSION
HEALTH & CONSUMERS DIRECTORATE-GENERAL
Unit 04 - Veterinary Control Programmes

SANCO/12914/2010

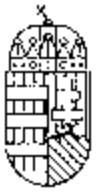
Programmes for the eradication, control and monitoring of certain animal diseases and zoonoses

Control programme of Salmonella

Approved* for 2011 by Commission Decision 2010/712/EU

Hungary

* in accordance with Council Decision 2009/470/EC



Central Agricultural Office
Animal Health and Animal Welfare Directorate

HUNGARY

Application

for Community financing for the national control programme of Hungary for

Salmonella spp.
in broiler flocks of Gallus gallus

for the year 2011.

30th of April, 2010

Part A

General requirements for the national salmonella control programmes

(a) The main objective of the programme is to comply with existing Community legislation, to achieve Community prevalence targets within the defined time period available as regards broiler flocks of Gallus gallus in the territory of Hungary. The target is a reduction of the maximum percentage of flocks of broilers remaining positive of Salmonella enteritidis and Salmonella typhimurium to 1 % or less by 31 December

(b) The programme covers the two zoonotic Salmonella serotypes most relevant in relation to public health (S. Enteritidis, S. Typhimurium).

(c) Protection against salmonellosis is mandatory pursuant to the relevant EU provision as of 1 January 2009. A Decree was created and came into force on the 7th of January, 2008, Decree 2/2008. (I. 4.) of the Minister of Agriculture and Rural Development on specific rules of protection against salmonellosis. This Decree was repealed and a new Decree came in force on the 6th on January 2010 (Decree 180/2009. (XII. 29.) of the Minister of Agriculture and Rural Development on specific rules of protection against salmonellosis (hereinafter: "Decree"). The aim of creating the first Decree was to ensure compliance with the changes in the Community legislation. The Decree sets the conditions of the obligatory control measures in breeding, laying flocks and in broiler flocks of Gallus gallus against specified Salmonella serotypes. The Decree complies with the minimum sampling requirements laid down in part B of Annex II to Regulation (EC) No 2160/2003 of the European Parliament and of the Council[1] indicating the relevant animal population and phases of production which sampling cover

— day-old chicks (national legislation)

— birds leaving for slaughter

The new Decree was issued, because sampling of turkey flock became mandatory. Also, the structure of the Decree is new and experiences regarding the implementations of the Programmes were built in.

More information about testing scheme: please see *Part B Chapter 7.2*

(d) The Decree compiles with the specific requirements laid down in Parts C, D and E of Annex II to Regulation (EC) No 2160/2003

1 General

1.1. The short summary referring to the occurrence of the salmonellosis [zoonotic salmonella] in Hungary with specific reference to the results obtained in the framework of monitoring in accordance with Article 4 of Directive 2003/99/EC of the European Parliament and of the Council[2], particularly highlighting the prevalence values of the salmonella serovars targeted in the salmonella control programmes: Please see Part B Chapter 3.

1.2. The structure and organization of the relevant competent authorities: Please see Annex I.

1.3. Laboratories involved in the programme must be accredited by the National Accreditation Body (NAT) and supervised by the National Salmonella Reference Laboratory (NRL) of the Republic of Hungary (Food and Feed Safety Directorate (formerly named: National Food

---

1 OJ L 325, 12.12.2003, p. 1.

2 OJ L 325, 12.12.2003, p. 31.

Investigation Institute), Central Agricultural Office). The NRL is in charge of coordination of the laboratories, the use of appropriate laboratory methods as well as for co-operation with the Community Reference Laboratory in Bilthoven (NL).

1.4. Methods used in the examination of the samples in the framework of the programme: Please see Part B Chapter 7.3

1.5. Official controls (including sampling schemes) at feed, flock and/or herd level: Please see Part B Chapter 7.2.1.

1.6. Measures taken by the competent authorities with regard to animals or products in which the presence of *Salmonella spp.* have been detected, in particular to protect public health: Please see Part B Chapter 4.4.3. and Chapter 4.4.4.

1.7. National legislation relevant to the implementation of the programme, including national provisions concerning the activities set out in the programme: Please see Part B Chapter 4.4.7

1.8. Financial assistance provided to food and feed businesses in the context of the programme:
Costs and benefits are calculated based on the previous year's data of the Poultry Product Board of Hungary. In the case of broiler flocks costs will occur from the intensive sampling of the flocks as well as the tests performed on the samples (including both testing on the initiative of the operator and the veterinary authority), the measures to be applied in the case of infection (slaughter or killing of the flock, condemnation, transportation, cleansing and desinfection) as well as financial losses due to decreased income for the poultry industry.
In case of a positive flock, when compensation occurs, valuation of the birds is performed by the district chief veterinary officer according to a scale provided by the Poultry Product Board. It is based on a calculating system, where the day-old chicks' price is considered as 100%, and the value of a bird depends on its production cycle and age (given in percentage)

Valuation/valorisation of birds is calculated based on the previous year's data of the Poultry Product Board of Hungary. Table containing these data is sent to the central veterinary office.

2. Act No. XLVI. of 2008. on the food chain and its official control and Decree No. 45/2010. (IV23.) Minister of Agriculture and Rural Development on the rules of financing the national programs for the eradication, control and monitoring of certain animal diseases and zoonoses and Decree No. 148/2007. (XII.7.) on the prevention of certain animal diseases and the order of claiming financial support and payment regarding their overcome in 2010 give the financial guarantee of the national programme. Concerning food and feed businesses covered by the programme

2.1. The structure of the production

Broiler flocks are kept usually until the age of 38-42 days (depending on the technology). As cleansing take place after every flock, each year 6 flocks can be reared in a certain airspace in average. The Regulation requires all relevant broiler flocks to be tested 3 weeks before leaving for the slaughterhouse. The National legislation requires all relevant broiler flocks to be tested as day old chicks too.

2.2. The structure of the production of feed.

Feeding of poultry, including broiler flocks of Gallus gallus is based on cereal products, mainly on corn, barley and wheat. Soybean and fishmeal is used as a source of protein.
Commercial feed producers are operating according to GMP standards. Broiler flocks mainly use commercial pelleted feed, the technology of production of which includes heat treatment.
In Hungary, control of feedingstuffs is performed according to two main piece of legislation:
Act No. XLVI. of 2008 on the food chain and its official control, Governmental Decree 274/2006 (XII. 23) on the establishment and operation of the Central Agricultural Office and Decree of the Ministry of Agriculture and Rural Development No. 43/2003. (IV. 26.) on the implementation of the above Act.
In the Act general principles of the control of feed are laid down general principles of the control of feed, sets the competent authorities and allocates the tasks to these services.
Feed production plant may be authorised by the competent regional organization (County Directorate of Food Chain Safety and Animal Health) of the Central Agricultural Office. The authorisation must be renewed at periods of a maximum of 5 years. Other authorities are also involved in the authorisation process.
The registration of the feed production units is done by the Directorate of Food Chain Safety and Animal Health of County Agricultural Office.
The Act states that the feedingstuffs produced may neither pose a direct health risk to liveflock, nor an indirect risk to public health.
Therefore, the competent Directorate of Food Chain Safety and Animal Health of County Agricultural Office perform regular controls of the feed production plants, including the production, keeping, marketing, transport and use of feed produced. Controls also include compliance with feed hygiene rules, safety, composition, microbiological safety of feedingstuffs, as well as many other parameters such as the presence of prohibited substances, packaging, labelling etc.
In case of non-compliance with any of the parameters listed in the Act and the Decree, the competent County Directorate may prohibit the production, keeping, marketing, transport, export, import or transport of the relevant feed. If such feed was already used, the Directorate of Food Chain Safety and Animal Health of County Agricultural Office has a duty to notify the county level public health authority.
The Decree gives detailed instruction to authorities and stakeholders on how to implement the Act. Annex 20 to the Decree sets out the maximum tolerable amount of Salmonella spp. in food and the related ISO standards. According to ISO 6579:2002. feedingstuffs must show zero Salmonella spp. / 25 grams.

In addition, the same Annex states that feedingstuffs must be free of any pathogens which may pose a direct risk to animal health and/or an indirect risk to public health.

2.3. Relevant guidelines

Hungary has relevant guidelines for good animal husbandry practices or other guidelines (mandatory or voluntary) on biosecurity measures defining the hygiene management at farms, the measures preventing incoming infections carried by animals, feed, drinking water, people working at farms, and about hygiene in transporting animals to and from farms. The guideline of Decree No. 2/2008. (I. 4.) of the Minister of Agriculture and Rural Development on specific rules of protection against salmonellosis, the guideline about feed control, the guideline of animal transports and the Hungarian Poultry Product Board's guideline for good practice. The guideline for the new decree is under procedure. All farms have to made an own biosecurity programme and all have to get checked by the Directorate of Food Chain Safety and Animal Health of County Agricultural Office.

.

2.4. Routine veterinary supervision of farms:

Controls are planned annually by the Food Chain Safety Deputy President of Central Agricultural Office. Number of controls depends on risk assessment.

An official veterinarian can also perform on-spot checks when taking samples, but it is not necessarily connected. Inspections are performed based on a national program.

2.5. Registration of farms:

All poultry farms have to registered according to Decree no. 119/2007. (X.18) of MARD on keeping places, breeding farms and national registration system of their data if they meet the relevant criteria. For more information please see Part B Chapter 4.4.1.

All poultry farms have to registered according to Ministerial Decree no. 119/2007. (X.18) on keeping places, breeding farms and national registration system of their data, which meet one of these criteria:

- has to be registered due to a piece of legislation regarding animal health (such as the national Decree on Salmonella)
- the owner would like to apply for financial support

All commercial poultry farms have to be registered:

- which are considered as large-scale holdings according to a different piece of registration (that means: 2000 broilers or 500 other adult poultry)
- which sends poultry directly to the slaughterhouse
- which have a slaughtering permit for small producers.

2.6. Record-keeping at farms: All documents concerning to the programme must be kept for 3 years. The documentation has to contain all data about animals, tests, transports, samples and medication

2.7. Documents to accompany animals when dispatched.

Commercial poultry consignments are accompanied with animal health certificates according to Directive 90/539/EC. Consignments with national destinations are accompanied with animal health certificates according to Decree 41/1997. (V. 28.) FM appendices 8/a and 8/b.

In accordance with Paragraph 85. of Decree No 41/1997. of the Minister of Agriculture on the publication of the Animal Health Code, the official veterinarian carries out a flock examination within 12 hours before transportation, and on the basis of the financing/allowance plan, fills out the animal health certification in the appendices 8/a. and 8/b., certifies the place of origin of the day-old animals, their circumstances free from epidemic, the name of the vaccine used, the time and method of the immunization. Because of the changes occurred since the publication of the legislation, this ordinance cannot be fulfilled in these days.

„Animals can only be transported when accompanied by a valid certification attested by the veterinarian responsible for treatment" in accordance with point 4.2.1. point (Starting of poultry consignments) of the guide which was prepared for poultry hatcheries that are obliged to TIR registration, in accordance with point d) of Paragraph 6. of Decree No 120/2007. (X. 18.) of the Minister of Agriculture and Rural Development on establishing and operating of the Poultry Information System (hereinafter: BIR regulation). In pursuance with point 4.2.1., „The hatchery starting the consignment has to fill in the Poultry movement form 2740, on the upper part of which the data of starting has to be given".

The poultry animal health certificate laid down in the BIR regulation is not to replace the certificate 8/b., as the authority responsible for animal health takes part in issuing the latter only.

At the same time, even the certification 8/a. can not be replaced by the introduction of the BIR regulation, as certain data that have to be certified by the veterinarian in the certificate 8/a are not placed on the latter, for example immunizations carried out in the flock, diagnostic examinations and the results thereof.

In pursuance of the abovementioned regulations, all three certifications are required for the transport of the day-old poultry. The BIR certification is drawn up by the veterinarian responsible for treatment, while certifications 8/a. and 8/b. are filled in by the approved veterinarian, in accordance with the Governmental Decree No 113/2006. (V. 12.) on the competence and detailed rules of the activity of the approved veterinarian, with the exception of the case when the approved veterinarian is not the treating veterinarian, because in those cases the certification 8/a. has to be filled in by the veterinarian of the hatchery.

As it can be seen from above, the current legislation of movement documentations doesn't seem to be unambiguous as regards several points.

For solving the problem, a working group was established. The working group is predestined for revising the form and content of certificates for inland live animal transportation and as far as possible, for the harmonisation thereof.

2.8. Other relevant measures to ensure the traceability of animals. Please see Part A 2.7. and Part B Chapter 4.2. and Chapter 4.4.1.

At central level three persons are responsible for the TRACES, of which one is responsible for the technical part (for example: giving access to the system). The two other colleagues (one at

MRD and one at CAO) are the trade contact points of Hungary and are keeping the contact wit the counterparts of the member states.

Part B

1. Identification of the programme

Member State: **Hungary**

Disease: **Infection of animals with zoonotic *Salmonella spp.***

Animal population covered by the programme: **Broiler flocks of Gallus gallus**

Year of implementation: **2011**

Reference of this document: **02.3/897/5/2010.**

Contact (name, phone, fax, e-mail): **Dr. Imre Nemes**
Director
Animal Health and Animal Welfare Directorate
Central Agricultural Office
Tel: +36-1-460-6300 ext. 112
Fax: +36-1-222-6064
e-mail: nemesi@oai.hu

Date sent to the Commission: **30th of April, 2010**

2. Historical data on the epidemiological evolution of zoonotic *salmonellosis* specified in point 1

Monitoring and control programmes for Salmonella spp. (S. Enteritidis and S. Typhimurium) started in Hungary in 1997 by issuing official guidelines for the poultry sector. The goal of the project was to achieve similar targets as which were set by Council Directive 92/117/EEC. The collection of guidelines were ordered by the Ministry of Agriculture and were prepared by an expert group consisting of both Hungarian experts of various backgrounds (Hungarian Academy of Science, National Food Investigation Institute, Central Veterinary Institute and numerous practicing veterinarians) and experts of the Agri-Livestock Consultant Ltd (W. Edel and C. Wray). The work was financed by the PHARE programme of the European Union under project No. HU 9304-05-02. The programme covered the whole poultry sector in relation of Gallus gallus, breeding flocks, hatcheries, broiler flocks, table egg producing layer flocks, egg packaging and distribution establishments, poultry slaughterhouses, cutting plants as well as feed mills. The guidelines stated clearly that there is an urgent need for centralised official administrative measures in the form of a ministerial decree by the Minister of Agriculture.

The first decree was created in the year 2002: Decree 49/2002. (V. 24.) of the Minister of Agriculture and Rural Development on protection against salmonellosis and poultry typhus and on retaining officially free status, and was modified by the Decree 97/2003. (VIII. 19) Minister of Agriculture and Rural Development. A new Decree was created and came into force on the

7th of January, 2008, and can be referred to as Decree 2/2008. (I. 4.) of the Minister of Agriculture and Rural Development on specific rules of protection against salmonellosis. The aim of creating the new Decree was to ensure compliance with the changes in the Community legislation.

Decree 2/2008 of MARD set the conditions of the obligatory control measures in breeding, laying flocks and voluntary (mandatory from 2009) measures in broiler flocks of Gallus gallus against specified Salmonella serotypes. As a prerequisite, there is an obligation of the holdings keeping broiler flocks of Gallus gallus to be registered by the State Veterinary Service. Results of testing required by the Decree are also to be notified to the Directorates of Food Chain Safety and Animal Health of County Agricultural Office (formerly named: County Animal Health and Food Control Station). Decree 2/2008 of MARD had been amended 5 times till it was repealed and replaced by Decree 180/2009 of MARD (hereinafter referred as 'Decree') as of 6th of January, 2010. The new Decree covers the same area, but the structure of it was modified and enhanced based on experience.

The baseline study of the prevalence of Salmonella spp. in broiler flocks of Gallus gallus carried out according to Commission Decision 2005/636/EC shows that infection of broiler flocks for Salmonella Enteritidis and Salmonella Typhimurium is 8,1%. According to monitoring tests carried out infection with Salmonella Infantis is 58,3% (87% of the Salmonella infection is Salmonella Infantis). The Community target which is set by Commission Regulation No 646/2007 (EC) Art. (1) of flocks of broilers remaining positive of Salmonella Enteritidis and Salmonella Typhimurium is 1% or less by 31 December 2011. This goal can only be achieved by a rigorous control programme using extensive professional and financial resources.

3. Description of the submitted programme

The main objective of the programme is to comply with existing Community legislation to achieve Community prevalence targets within the defined time period available as regards broiler flocks of Gallus gallus in the territory of Hungary. The European legislation set targets of Salmonella Enteritidis and Salmonella Typhimurium (according to Commission Regulation No 646/2007 (EC), No 584/2008 (EC)), with effect from 84 months after entry into force of Regulation (EC) No 2160/2003 of the European Parliament and of the Council, fresh poultry meat from broiler flocks of Gallus gallus may not be placed on the market for human consumption unless absence of Salmonella in 25 grams. As Salmonella Infantis is the most common Salmonella in broilers in Hungary, as a national target, national control programme shall cover Salmonella Infantis in broilers as well.

All broiler flocks of Gallus gallus included in the programme are registered in the territory of Hungary.

Laboratories involved in the programme must be accredited by the National Accreditation Body (NAT) and supervised by the National Salmonella Reference Laboratory (NRL) of the Republic of Hungary (Food and Feed Safety Directorate, Central Agricultural Office) The NRL will be in charge of coordination of the laboratories, the use of appropriate laboratory methods as well as for co-operation with the Community Reference Laboratory in Bilthoven (NL).

4. Measures of the submitted programme

4.1. Summary of measures under the programme of the broiler flocks

Duration of the programme:

First year: 2009	Last year: 2011
☒ Control	☐ Control/Eradication
☒ Testing	☐ Testing
☒ Slaughter of positive animals	☐ Slaughter of positive animals
☒ Killing of positive animals	☐ Killing of positive animals
☐ Vaccination	☐ Extended slaughter or killing
☐ Treatment	☐ Disposal of products
☒ Disposal of products	

☒ Monitoring or surveillance

☐ Other measures *(specify)*: Because many times we can not find any slaughterhouse for slaughter the positive flocks, in that cases we need to use the "killing of positive animals".

- After emptying the relevant holding (infected with SE/ST) operators are required to implement proper cleansing and desinfection. Effectiveness of the procedure is controlled by the competent regional animal health authority. Restocking is only authorised, when cleansing and desinfection is deemed to be satisfactory.

4.2. Designation of the central authority charged with supervising and coordinating the departments responsible for implementing the programme:

All holdings must be registered at the district veterinary office. The official senior veterinary officer keeps and updates the record of holdings participating the programme. The official senior veterinary officer also declares the status of the holdings according to their actual serological status.

The 19 Directorates of Food Chain Safety and Animal Health of County Agricultural Offices coordinate and supervise the programme in their territory. They are required to annually report the actual status of the programme to the Animal Health and Animal Welfare Directorate of the Central Agricultural Office.

Name:	Central Agricultural Office Animal Health and Animal Welfare Directorate
Name in Hungarian:	Mezőgazdasági Szakigazgatási Hivatal Központ Állategészségügyi és Állatvédelmi Igazgatóság
Address:	1149 Budapest, Tábornok u. 2., Hungary
Tel.:	+36-1-460-6300
Fax:	+36-1-222-6065

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

The programme will be implemented on the whole territory of Hungary. The programme is compulsory as from the 1st January, 2009

4.4. Measures implemented under the programme

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

All poultry farms have to registered according to Ministerial Decree no. 119/2007. (X.18) on keeping places, breeding farms and national registration system of their data, which meet one of these criteria:

- has to be registered due to a piece of legislation regarding animal health (such as the national Decree on Salmonella)
- the owner would like to apply for financial support

All commercial poultry farms have to be registered:

- which are considered as large-scale holdings according to a different piece of registration (that means: 2000 broilers or 500 other adult poultry)
- which sends poultry directly to the slaughterhouse
- which have a slaughtering permit for small producers.

According to Paragraph 5. of the Decree the operator is obliged to register for the national control programmes, pursuant to Article 8 (3). Article 8 (3) states that:

A business operator obliged to or voluntarily undergoing control pursuant to paragraph (1) shall apply for participation in the national control programme by submitting an epidemiological action plan approved by the private veterinarian responsible for the supervision of the poultry flock or hatchery at the competent district office by virtue of the location of the holding site, which shall register the business operator in accordance with Article 3(4) (a).

4.4.2. Measures and terms of legislation as regards the identification of animals: –

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

According to point 7 of paragraph 9 of the Decree:

The laboratory shall immediately notify the district office and the veterinarian taking the sample of the test results and - in the event of positive results - the business operator and the regional organization of the CAO as well. In the event of positive results the laboratory shall send the isolated strain for confirmatory testing and serotyping together with one original copy of the sampling form to the NRL. The testing laboratory must retain the copy of the sampling form for three years.

4.4.4. Measures and terms of legislation as regards the measures in case of a positive result:

In the frame of the *Salmonella* control programme in **broilers** the provisions of CR No 1168/2006/EC paragraph 1/2/4 are implemented.

According to the Decree:

Procedure in the event of positive test results

Article 11

(1) If the sample taken from a flock of breeding hens, a flock of laying hens or a flock of breeding turkeys results positive the operator shall revise the epidemiological action plan within 22 working days and shall resubmit it to the District Office for approval. The revised plan shall contain the review of the hygiene conditions, especially the efficiency of the desinfection and pest control procedures, the results of the test to find possible reasons for infection and the list of measures considered necessary. The District Office shall evaluate the plan within 22 working days and may ask the operator to amend it if they find it unsatisfactory.

(2) If a sample taken at a flock of broilers and fattening turkeys results positive the business operator shall revise the epidemiological action plan within 11 working days of receiving the result and shall resubmit it to the District Office for approval. The action plan shall contain the review of the hygiene conditions; especially the efficiency of the desinfection procedures and of pest control (insect and rodent extermination), the results of the test to identify possible reasons for infection and the list of measures considered necessary. The District Office shall evaluate the plan within 11 working days and may ask a business operator to amend it if they find it unsatisfactory.

(3) If the results of salmonella testing of broiler and fattening turkey flocks results positive, there is a rapid method – available on the business operator's request – of excluding infection by Salmonella Enteritidis and Salmonella Typhimurium serotypes at a certified laboratory designated by the CAO using group-specific 'O' antibody. In this case the laboratory which performs the 'O' group typing will send the isolated strain to the NRL for serotyping.

(4) If, using the group specific 'O' antibody, infection by Salmonella Enteritidis and Salmonella Typhimurium serotypes can be excluded, then the given flock of broilers or fattening turkeys may be slaughtered by decision of the District Office. Measures pursuant to paragraph (2) and (5) shall be applied at the same time.

(5) When, during serotyping, the NRL detects infection with a serotype other than Salmonella Enteritidis or Salmonella Typhimurium, the District Office shall immediately withdraw the official certificate of infection-free status of the flock, if the operator has one, in respect of the given serotype. The operator shall clean the site after the production cycle (building, equipment and machinery, connecting rooms and paths) and - in accordance with specific piece of legislation on issuing the Animal Health Code – for stringent desinfection, rodent extermination and desinsectisation.

(6) Operators may restock the airspace concerned only if they verify the efficiency of desinfection when an environmental swab sample tests negative in a laboratory. The business operator shall bear the costs of taking and testing environmental swabs.

(7) If in the case of a flock of breeding hens the NRL detects infection by a salmonella serotype that is considered a Community target under Regulation (EC) No 1003/2005, Article 12 (9) shall apply in respect of feed and Article 12(8) in respect of restocking of the air space.

Procedure in the event of Salmonella enteritidis or Salmonella typhimurium infection

Article 12

(1) If during serotyping the NRL detects infection with Salmonella Enteritidis or Salmonella typhimurium the District Office shall order restriction of movement of the flock concerned and

the products originating therefrom and shall withdraw the official certificate of infection-free status without delay. The official certificate of infection-free status in respect of other flock from the holding shall also be withdrawn at the same time unless the infected flock have been appropriately isolated.

(2) Testing may only be repeated by official sampling ordered by the regional organization of the CAO pursuant to Article 9(1). Sampling for the official test may only be carried out by official or approved veterinarians within the shortest time possible. The NRL shall test the samples and at the same time conduct an examination to detect antimicrobial inhibitory effects. If the result from the repeated sampling is negative or it results in an infection with salmonella serotypes not covered by the national control programmes and no antimicrobial inhibitory effect can be detected, the District Office shall lift the restriction of movement in respect of the flock and the products thereof. If antimicrobial inhibitory effects can be detected the District Office shall investigate the circumstances of the use of antibiotics and maintain the restriction on movement until it is proven that antibiotics were used for purposes other than to treat the infection of salmonella.

(3) If repeated testing reveals infection by Salmonella Enteritidis or Salmonella Typhimurium or the regional organization of the CAO not orders a repeated test, the flock concerned may be slaughtered after preliminary consultation with the slaughterhouse and the official veterinarian supervising the slaughterhouse and in accordance with the specific veterinary health rules on separate slaughter.

(4) In the event of infection by Salmonella Enteritidis or Salmonella Typhimurium in a flock of breeding hens and turkeys Annex II/C to Regulation (EC) No 2160/2003 shall apply and Annex II/D to Regulation (EC) No 2160/2003 shall apply to flocks of laying hens.

(5) Meat from an infected flock may be placed on the domestic market without eliminating salmonella if the production processes following the slaughter of the infected flock are separated from the processing and treatment of other raw materials of animal origin and the official veterinarian supervising the slaughterhouse has been informed 48 hours before slaughter. Food materials originating from slaughtering and processing infected flock shall carry the text "for consumption only after heat treatment (thorough frying or cooking)" clearly and indelibly marked on every smallest packaging unit close to the identification label, close to the traceability marking; and on the accompanying commercial document.

(6) If meat from infected flock is processed after salmonella elimination (heat treatment, heat treatment as part of product manufacturing) the processes following slaughter of the infected flock shall be separated from the processing of other raw materials of animal origin until salmonella has been efficiently eliminated, this has been certified and the official veterinarian supervising the slaughterhouse has been informed 48 hours before slaughter. Food materials originating from infected flock shall carry the text "Originates from salmonella-infected flock" on every smallest packaging unit close to the identification label and the premises traceability marking and may only be used to produce food when the technological manufacturing processes guarantee that the product will be salmonella-free. Every such food item shall be verified by microbiology testing carried out in a laboratory before the are cleared for retail trade and the official veterinarian supervising the slaughterhouse shall be informed thereof. The production plant may place heat treated products certified as salmonella-free on the market on the basis of the results of own checks.

(7) After the keeping place of the infected flock has been emptied the operator shall provide for cleaning the building, equipment and machinery, connecting rooms and paths and - in accordance with specific piece of legislation on the issuing of Animal Health Code – for reinforced desinfection, rodent extermination and disinsectisation. The remaining litter shall be disposed of in accordance with special legislation on the treatment of waste of animal origin.

After these tasks have been accomplished the business operator shall inform the District Office, which will verify the efficiency of the measures implemented.

(8) The District Office shall authorise the restocking of the airspace concerned only if the effectiveness of desinfection was verified by environmental swab samples test negative in the laboratory.

(9) The feed fed to infected flock shall be tested without delay in accordance with the special legislation on the manufacturing, placing on the market and use of feed, except when day-old birds test positive. Until testing yields negative results such feed may only be fed to infected flock. If feed tests positive it has to be disposed of in accordance with the special legislation on the manufacturing, placing on the market and use of feed, and the equipment used for its storage and transportation shall be disinfected. If infection has been detected, specific testing shall be carried out to detect salmonella at the feed operator from which the feed originates.

(10) Hatcheries to which infected hatching eggs have been transported shall act in accordance with Annex II/C(3) and (5) of Regulation (EC) No 2160/2003 and shall apply the provisions of paragraph (7) and (8). If a hatchery has a certificate of infection-free status the district office shall immediately withdraw this. The hatchery must cooperate in tracing the origins of infection on the basis of its records and shall bear the costs.

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

See point 4.4.4.!

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

See point 4.4.4.!

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

- Regulation (EC) No. 2160/2003. of the European Parliament and of the Council on the control of Salmonella and other food-borne zoonotic agents
- Commission Regulation (EC) No 646/2007 of 12 June 2007 implementing Regulation (EC) No 2160/2003 of the European Parliament and of the Council as regards a Community target for the reduction of the prevalence of Salmonella Enteritidis and Salmonella Typhimurium in broilers and repealing Regulation (EC) No 1091/2005
- Commission Regulation (EC) No 1177/2006 of 1 August 2006 implementing Regulation (EC) No 2160/2003 of the European Parliament and of the Council as regards requirements for the use of specific control methods in the framework of the national programmes for the control of salmonella in poultry
- Act No. XLVI. of 2008. on the food chain and its official control
- Decree No. 180/2009. (XII. 29.)of Minister of Agriculture and Rural Development Decree No. 41/1997. (V. 28.) of Minister of Agriculture (Code of veterinary rules)

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

- Act No. XLVI. of 2008. on the food chain and its official control
- Decree No. 45/2010. (IV.23.) Minister of Agriculture and Rural Development on the rules of financing the national programs for the eradication, control and monitoring of certain animal diseases and zoonoses

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

Hungary has relevant guidelines for good animal husbandry practices or other guidelines (mandatory or voluntary) on biosecurity measures defining the hygiene management at farms, the measures preventing incoming infections carried by animals, feed, drinking water, people working at farms, and about hygiene in transporting animals to and from farms. The guideline of Decree No. 2/2008. (I. 4.) of the Minister of Agriculture and Rural Development on specific rules of protection against salmonellosis, the guideline about feed control, the guideline of animal transports and the Hungarian Poultry Product Board's guideline for good practice. The guideline for the new decree is under procedure. All farms have to made an own biosecurity programme and all have to get checked by the Directorate of Food Chain Safety and Animal Health of County Agricultural Office.

5. General description of the costs and benefits:

Costs are calculated based on estimation and information of the Poultry Product Board of Hungary. In case of broiler flocks, costs will occur from the intensive sampling of the flocks as well as the tests performed on the samples (including testing on initiative of both the operator and the veterinary authority), the measures to be applied in the case of infection with S. Enteritidis and S. Typhimurium (slaughter or killing of the flock, condemnation, transportation, cleaning and desinfection) as well as financial losses due to decreased income for the poultry industry.

A detailed description of the costs is listed under point 8.

Benefits in case of the successful programme include improved food safety which contributes largely to the achievement of public health goals of the Community.

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

Year: 2009.01.01.-05.31. **First year of the programme**

Animal species: Gallus gallus, broilers **Disease:[a]: zoonotic salmonella**

Régió (a1)	Type of flock[b]	Total number of flocks[c]	Total number of animals	Total number of flocks under the programme	Total number of animals under the programme	Number of flocks checked[d]	Number of positive[e] flocks[a]			Number of flocks depopulated[a]		Total number of animals slaughtered or destroyed [a]	
							(a1)	(a2)	(a3)	(a3)	(a4)	(a4)	(a3)
Bács-Kiskun	broiler	136	2002500	136	2002500		0	10	50	0	1	5000	0
Baranya	broiler	181	1565750	181	1565750		3	1	32	0	0	0	0
Borsod-Abaúj-Zemplén	broiler	45	641850	45	641850		0	0	23	0	0	0	0
Békés	broiler	81	1093399	81	1093399		0	0	10	0	0	0	0
Csongrád	broiler	57	1061560	57	1061560		0	1	41	0	0	0	0
Fejér	broiler	61	580000	61	580000		0	0	3	0	0	0	0
Győr-Moson-Sopron	broiler	71	847500	71	847500		0	0	29	0	0	0	0
Hajdú-Bihar	broiler	260	3347294	260	3347294		4	3	82	0	0	0	0
Heves	broiler	22	261200	22	261200		0	0	15	0	0	0	0
Jász-Nagykun-Szolnok	broiler	30	409500	30	409500		0	2	3	0	0	0	0
Komárom-Esztergom	broiler	59	857860	59	857860		6	0	29	0	0	0	0
Nógrád	broiler	12	89600	12	89600		0	0	0	0	0	0	0
Főváros-Pest	broiler	22	172000	22	172000		1	0	4	0	0	0	0
Somogy	broiler	11	267811	11	267811		0	0	4	0	0	0	0
Szabolcs-Szatmár-Bereg	broiler	235	2680988	235	2680988		3	0	11	0	0	0	0
Tolna	broiler	34	185098	34	185098		1	0	10	0	0	0	0
Vas	broiler	81	866780	81	866780		0	1	2	0	0	0	0
Veszprém	broiler	13	393000	13	393000		0	1	9	0	0	0	0

Zala	broiler	20	1328112	20	1328112	1	2	4	0	2	43000	0
Summ.:		1431	18651802	1431	18651802	19	21	361	0	3	48000	0

For zoonotic Salmonellosis indicate the serotypes covered by the control programmes: (a1) for *Salmonella* Enteritidis, (a2) for *Salmonella* Typhimurium, (a3) for other serotypes-specify as appropriate, (a4) for *Salmonella* Enteritidis or *Salmonella* Typhimurium.

(b) For example, breeding flocks (rearing, adult flocks), production flocks, laying hen flocks, breeding turkeys,broiler turkeys, breeding pigs,slaughter pigs,etc. Flocks or herds or as appropriate.

(c) Total number of flocks existing in the region including eligible flocks and non-eligible flocks for the programme.

(d) Check means to perform a flock level test under the programme for the presence of salmonella. In this column a flock must not be counted twice even if it has been checked more than once.

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

Year: 2009.01.01.-12.31. **First year of the programme**

Animal species: Gallus gallus, broilers **Disease:[a]: zoonotic salmonella**

Régió (a1)	Type of flock[b]	Total number of flocks[c]	Total number of animals	Total number of flocks under the programme	Total number of animals under the programme	Number of flocks checked[d]	Number of positive[e] flocks[a]			Number of flocks depopulated[a]		Total number of animals slaughtered or destroyed [a]	
							(a1)	(a2)	(a3)	(a3)	(a4)	(a4)	(a3)
Bács-Kiskun	broiler	415	13055934	415	13055934	415	1	1	76	0	2	330000	0
Baranya	broiler	792	11369593	790	11086593	780	4	0	413	0	4	320000	0
Borsod-Abaúj-Zemplén	broiler	290	6943879	255	6913879	255	0	0	92	0	0	0	0
Békés	broiler	184	5363886	184	5363886	184	1	1	58	0	2	760000	0
Csongrád	broiler	158	3604250	158	3604250	158	0	2	34	0	2	454000	0
Fejér	broiler	178	1603500	178	1603500	178	1	0	5	0	1	120000	0
Győr-Moson-Sopron	broiler	62	1084513	62	1084513	62	0	1	50	0	1	30000	0
Hajdú-Bihar	broiler	1063	17411730	1063	17411730	1063	1	0	246	0	1	100000	0
Heves	broiler	88	755500	78	755500	78	0	0	19	1	0	0	150000
Jász-Nagykun-Szolnok	broiler	140	3139490	140	3139490	140	0	0	28	0	0	0	0
Komárom-Esztergom	broiler	225	15955050	225	12494610	225	0	0	69	0	0	0	0
Nógrád	broiler	15	115000	15	115000	15	1	1	11	0	2	30000	0
Főváros-Pest	broiler	44	344000	44	344000	44	1	0	4	0	0	0	0
Somogy	broiler	36	810846	36	810846	36	0	0	12	0	0	0	0

Szabolcs-Szatmár-Bereg	broiler	107	2401437	107	2401437	107	1	1	89	0	2	4870 0	0
Tolna	broiler	142	1361862	127	1243892	138	1	0	19	0	1	2100 0	0
Vas	broiler	408	7526000	408	7526000	408	0	0	91	0	0	0	0
Veszprém	broiler	117	391000	117	441000	117	0	0	26	0	2	5200 0	0
Zala	broiler	89	7599685	89	4145500	89	1	0	94	3	1	1500 0	9000 0
Summ.:		4553	1008371 55	4491	93541560	4492	13	7	1436	4	21	3511 00	1050 00

For zoonotic Salmonellosis indicate the serotypes covered by the control programmes: (a1) for *Salmonella* Enteritidis, (a2) for *Salmonella* Typhimurium, (a3) for other serotypes-specify as appropriate, (a4) for *Salmonella* Enteritidis or *Salmonella* Typhimurium.

(b) For example, breeding flocks (rearing, adult flocks), production flocks, laying hen flocks, breeding turkeys,broiler turkeys, breeding pigs,slaughter pigs,etc. Flocks or herds or as appropriate.

(c) Total number of flocks existing in the region including eligible flocks and non-eligible flocks for the programme.

(d) Check means to perform a flock level test under the programme for the presence of salmonella. In this column a flock must not be counted twice even if it has been checked more than once.

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

Stratified data on surveillance and laboratory tests

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

Year: 2009.01.01.-13.31. **Animal species[a]: Gallus gallus** **Category[b]: broiler**

Description of the used serological tests: following the Kaufmann-White scheme

Description of the used microbiological or virological tests: ISO 6579/2002

Description of the other used tests:

Region[c]	Serological tests		Microbiological or virological tests		Other tests	
	Number of samples tested[d]	Number of positive samples[e]	Number of samples tested[d]	Number of positive samples[e]	Number of samples tested[d]	Number of positive samples[e]
Total	1845	1845	10980	1845		
Total						

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

(e) Number of positive samples.

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

Year: 2009 **Animal species[a]: Gallus gallus** **Category[b]: broiler**

Region[b]	Number of herds infected[c]	Number of animals infected
Total	1453	52966028

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

7. Targets

7.1. Targets related to testing

7.1.1. Targets on diagnostic tests

Number and specification of tests

Mandatory testing will be performed in all registered broiler flocks of *Gallus gallus*. A preliminary calculation was made on the approximate number of tests to be performed in the flocks. The number of tests calculated is based on the total of flocks containing more than 2000 hens (4500 flocks at the moment according to the national register) and the testing scheme as provided for in Commission Regulation No 584/2008 of 20 June 2008 implementing Regulation (EC) No 2160/2003 of the European Parliament and of the Council as regards a Community target for the reduction of the prevalence of Salmonella enteritidis and Salmonella typhimurium in turkeys, Commission Regulation No 646/2007 of 12 June 2007 implementing Regulation (EC) No 2160/2003 of the European Parliament and of the Council as regards Community target for the reduction of the prevalence of Salmonella Enteritidis and Salmonella Typhimurium in broilers and repealing Regulation (EC) No 1091/2005.

Broiler flocks are kept usually until the age of 38-42 days (depending on the technology). As cleansing take place after every flock, each year 3-6 flocks can be reared in a certain airspace in average. The Regulation requires all relevant broiler flocks to be tested 3 weeks before leaving for the slaughterhouse.

Given that in Hungary are 4500 broiler flocks (~120000000 animals) the total number of samples to be taken is 4500x 3 x2 = 27000 samples. (As according to Commission Regulation (EC) No 646/2007 at least two pairs of boot/sock swabs shall be taken and all boot/sock swabs must be pooled into one sample.) Official samples number will be ~ 450.

Based on the baseline study data, 8.1% of the flocks are infected with Salmonella Enteritidis or Salmonella Typhimurium, 66% of the flocks are infected with any Salmonella serotypes.
The latest data showed remarkable reduction: 0,45% of the flocks are infected with Salmonella Enteritidis or Salmonella Typhimurium, 32,9% of the flocks are infected with any Salmonella serotypes.

Summarily, nearly 9000 (8883) samples are expected to be tested for the detection of Salmonella spp.

Serotyping will be performed from each positive isolate. Positivity is expected to be detected in 32,9% of flocks summary 1000 positive isolate will need serotyping per year.

However, an exact number of tests, which will be performed, is not possible, because not every operator rears the same amount of flocks every year Approximately 120,000,000 broilers are slaughtered in Hungary a year. Meat originated from Salmonella infected flocks will not be purchased by meat processing plants, therefore compensation is required (120,000,000 x 0.0045 x 1.6 €; about 1.6 € is the price of a broiler to be slaughtered).

7.1.2. Targets on testing of flocks[3]

Year: **2011** **Situation on date:**

Animal species: Gallus gallus, broiler **Disease:**[a]**: zoonotic salmonella**

Region (a1)	Type of flock[b]	Total number of flocks[c]	Total number of animals	Total number of flocks under the programme	Total number of animals under the programme	Number of flocks checked[d]	Number of positive[e] flocks[a]			Number of flocks depopulated[a]		Total number of animals slaughtered or destroyed [a]		Quantity of eggs destroyed (number) [a]		Quantity of eggs channelled to egg products (number)	
							(a1)	(a2)	(a3)	(a3)	(a4)	(a4)	(a3)	(a4)	(a3)	(a4)	(a3)
Total	Broiler flocks	4553	120000000	4491	93541560	4491	13	7	1436	4	21	451100	105 000	0	0	0	0

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

7.2. Testing scheme

1. Frequency and status of sampling

(a) The sampling frame shall cover all flocks of broilers covered by the scope of Regulation (EC) No 2160/2003.
(b) Flocks of broilers shall be sampled on the initiative of the food business operator and by the competent authority.

[3] Specify types of flocks if appropriate(breeders, layers, broilers).

– Sampling on the initiative of the food business operator shall take place in accordance with National legislation at day old chicks, and accordance with Article 5(3) of Regulation (EC) No 2160/2003 within three weeks before the birds are moved to the slaughterhouse.

Sampling by the competent authority shall include each year at least one flock of broilers on 10 % of the holdings with more than 5 000 birds. It 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.

(c) However, by way of derogation from point (a), the competent authority may decide to sample at least one flock of broilers per round on holdings with several flocks 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 set out in point (b) 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.

2. Sampling protocol

At least two pairs of boot/sock swabs shall be taken. 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. In day old chicks the sampling method is the same in breeders and layers.

In flocks with less than 100 broilers, where it is not possible to use boot/sock swabs as access to the houses 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, or if not feasible, by other sampling techniques for faeces fit for the intended purpose.

Before putting on the boot/sock swabs, their surface shall be moistened with maximum recovery diluents (MRD: 0,8 % sodium chloride, 0,1 % peptone in sterile deionised water), or sterile water or any other diluent approved by the NRL referred to in Article 11 of Regulation (EC) No 2160/2003. The use of farm water containing antimicrobials or additional disinfectants shall be prohibited. The recommended way to moisten boot swabs shall be to pour the liquid inside before putting them on. Alternatively, boot swabs or socks may be autoclaved with diluents within autoclave bags or jars before use. Diluents may also be applied after boots are put on using a spray or wash bottle.

It shall be ensured that all sections in a house are represented in the sampling in a proportionate way. Each pair should cover about 50 % of the area of the house.

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 satisfy itself by conducting further tests as appropriate so that the results of examinations for *Salmonella* in flocks of broilers are not affected by the use of antimicrobials in those flocks.

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.

3. Examination of the samples

3.1. Transport and preparation of the samples

Samples shall be sent by express mail or courier to the laboratories referred to in Articles 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.
The pair of boot/sock 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.
The sample shall be swirled to fully saturate it and culture shall be continued by using the detection method in point 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 provisions on the preparation of samples set out in this point.

3.2. Detection method

The detection method recommended by the Community reference laboratory (CRL) for salmonella in Bilthoven, the Netherlands, shall be used.
That 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 that detection method, a semi-solid medium (modified semi-solid Rappaport-Vassiladis medium, MSRV) is used as the single selective enrichment medium.

3.3. Serotyping

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

3.4. Alternative methods

With regard to samples taken on the initiative of the food business operator, the methods of analysis provided for in Article 11 of Regulation (EC) No 882/2004 of the European Parliament and of the Council (1), may be used instead of the methods for the preparation of samples, detection methods and serotyping provided for in points 3.1, 3.2 and 3.3 of this Annex, if validated in accordance with EN/ISO 16140/2003.

3.5. Storage of strains

At least one isolated strain per house and per year shall be collected by the competent authority and stored for future phagetyping or antimicrobial susceptibility testing, using the normal methods for culture collection, which must ensure integrity of the strains for a minimum of two years.

4. Results and reporting

4.1. 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 of broilers 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.

4.2. Reporting

Reporting shall include:

(a) the total number of flocks of broilers sampled by the competent authority or by the food business operator;
(b) the total number of infected flocks of broilers;
(c) all serotypes of *Salmonella* isolated (including other than *Salmonella Enteritidis* and *Salmonella Typhimurium*);
(d) explanations of the results, in particular concerning exceptional cases.

The results and any additional relevant information 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.

4.3. Additional information

At least the following information shall be made available from each flock of broilers tested for analysis at national level or by the European Food Safety Authority at its request:
(a) sample taken by the competent authority or by the food business operator;
(b) holding reference, remaining unique in time;
(c) house reference, remaining unique in time;
(d) month of sampling.

7.3. Targets on vaccination or treatment

Vaccination is not compulsory in broiler flocks of Gallus gallus. The rules of using vaccination and treatment are laid down in Commission Regulation (EC) No 1177/2006 of 1 August 2006 implementing Regulation (EC) No 2160/2003 of the European Parliament and of the Council as regards requirements for the use of specific control methods in the framework of the national programmes for the control of salmonella in poultry.

8. Detailed analysis of the cost of the programme

Costs related to	Specification	Number of units	Unitary cost in €	Total amount in €	Community funding requested (yes/no)
1. Testing					
1.1. Cost of the analysis	Test: modified ISO 6579 (2002) using MSRV planned to be carried out in the framework of official sampling	15650	10	156500	yes
	+ official samles of verifying the efficiency of desinfection	100	10	1000	yes
	Test: serotyping (4440) planned to be carried out in the framework of official sampling	1000	40	40000	yes
1.2. Cost of sampling	costs of sampling of approx. 4500 flocks, 3 times during 2010	13500	50	675000	yes
1.3. Other costs					
2. Vaccination or treatment					
2.1. Purchase of vaccine/treatment					
2.2. Distribution costs					
2.3. Administering costs					
2.4. Control costs					
3. Slaughter and destruction					
3.1. Compensation of animals	Cost of the compensation of the positive animals, approx. 120,000,000 X 0.0045 = 540000 animals	540000	1.6	864000	yes
3.2. Transport costs	Slaughtering of infected flocks can only be authorised when meat from these flocks is treated according to specific food safety legislation. Therefore, slaughter is not likely to be performed at regular contracted slaughterhouses, which makes transport costs much higher than usual, approx. 540000 animals, 1.8 kg/animal	972000	0.04	38880	no
3.3. Destruction costs	Cost of the destruction approx. 120,000,000 X 0.0045 = 540000, 1.8 kg/animal	972000	0.2	194400	yes
3.4. Loss in case of slaughtering	This loss is estimated to be of a large extent.				

	However, losses due to the early slaughter of the flock is very hard to estimate.				
3. Slaughter and destruction					
4. Cleaning and desinfection	When taking into account the number of flocks (4500) and the infection rate (33%), an approximate number of 1200 flocks to be cleansed and disinfected can be estimated. Cleansing and desinfection of an average flock depends on several factors, however an approximate amount of costs is given.	1200	500	600000	no
5. Salaries (staff contracted for the programme only)					no
6. Consumables and specific equipment					no
7. Other costs					no
	TOTAL			2569780	
	Community funding requested			1930900	yes

Central Agricultural Office
Animal Health and Animal Welfare Directorate

HUNGARY

Application

for Community financing for the national control programme of Hungary for

Salmonella spp.
in breeding flocks of Gallus gallus

for the year 2011.

30th of April, 2010

Part A

General requirements for the national salmonella control programmes

(a) The main objective of the programme is to comply with existing Community legislation, to achieve Union prevalence target within the defined time period available as regards breeding flocks of Gallus gallus in the territory of Hungary. The target is to reduce the prevalence to 1 % or less of *Salmonella Enteritidis, Salmonella Infantis, Salmonella Hadar, Salmonella Typhimurium* and *Salmonella Virchow* (the relevant salmonella serotypes).

(b) Protection against salmonellosis is mandatory pursuant to the relevant EU provision as of 1 January 2007. A Decree was created and came into force on the 7th of January, 2008, (Decree 2/2008. (I. 4.) of the Minister of Agriculture and Rural Development on specific rules of protection against salmonellosis) This Decree was repealed and a new Decree came in force on the 6th on January 2010 (Decree 180/2009. (XII. 29.) of the Minister of Agriculture and Rural Development on specific rules of protection against salmonellosis (hereinafter: "Decree"). The aim of creating the first Decree was to ensure compliance with the changes in the Community legislation. The Decree sets the conditions of the obligatory control measures in breeding, laying flocks and voluntary (mandatory from 2009) measures in broiler flocks of Gallus gallus against specified Salmonella serotypes. The Decree complies with the minimum sampling requirements laid down in part B of Annex II to Regulation (EC) No 2160/2003 of the European Parliament and of the Council[1] indicating the relevant animal population and phases of production which sampling cover

rearing flocks day-old chicks

– four-week-old birds

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

adult breeding flocks — every second week during the laying period

The new Decree was issued, because sampling of turkey flock became mandatory. Also, the structure of the Decree is new and experiences regarding the implementations of the Programmes were built in.

More information about testing scheme: please see *Part B Chapter 7.2*

(c) The Decree compiles with the specific requirements laid down in Parts C, D and E of Annex II to Regulation (EC) No 2160/2003

(d) 1 General

1.1. The short summary referring to the occurrence of the salmonellosis [zoonotic salmonella] in Hungary with specific reference to the results obtained in the framework of monitoring in accordance with Article 4 of Directive 2003/99/EC of the European Parliament and of the Council[2], particularly highlighting the prevalence values of the salmonella serovars targeted in the salmonella control programmes: Please see Part B Chapter 6.

1.2. The structure and organization of the relevant competent authorities: Please see Annex I.

---

1 OJ L 325, 12.12.2003, p. 1.

2 OJ L 325, 12.12.2003, p. 31.

1.3. Laboratories involved in the programme must be accredited by the National Accreditation Body (NAT) and supervised by the National Salmonella Reference Laboratory (NRL) of the Republic of Hungary (Food and Feed Safety Directorate (formerly named: National Food Investigation Institute), Central Agricultural Office). The NRL is in charge of coordination of the laboratories, the use of appropriate laboratory methods as well as for co-operation with the Community Reference Laboratory in Bilthoven (NL).

1.4. Methods used in the examination of the samples in the framework of the programme: Please see Part B Chapter 7.3

1.5. Official controls (including sampling schemes) at feed, flock and/or herd level: Please see Part B Chapter 7.2.1.2.

1.6. Measures taken by the competent authorities with regard to animals or products in which the presence of *Salmonella spp.* have been detected, in particular to protect public health: Please see Part B Chapter 4.4.3. and Chapter 4.4.4.

1.7. National legislation relevant to the implementation of the programme, including national provisions concerning the activities set out in the programme: Please see Part B Chapter 4.4.7

1.8. Financial assistance provided to food and feed businesses in the context of the programme:
Costs and benefits are calculated based on the previous year's data of the Poultry Product Board of Hungary. In the case of breeding flocks costs will occur from the intensive sampling of the flocks as well as the tests performed on the samples (including both testing on the initiative of the operator and the veterinary authority), the measures to be applied in the case of infection (slaughter or killing of the flock, condemnation, transportation, cleansing and desinfection) as well as financial losses due to decreased income for the poultry industry.
Act No. XLVI. of 2008. on the food chain and its official control and Decree No. 45/2010. (IV.23.) Minister of Agriculture and Rural Development on the rules of financing the national programs for the eradication, control and monitoring of certain animal diseases and zoonoses and Decree No. 148/2007. (XII.7.) on the prevention of certain animal diseases and the order of claiming financial support and payment regarding their overcome in 2010 give the financial guarantee of the national programme.
In case of a positive flock, when compensation occurs, valuation of the birds is performed by the district chief veterinary officer according to a scale provided by the Poultry Product Board. It is based on a calculating system, where the day-old chicks' price is considered as 100%, and the value of a bird depends on its production cycle and age (given in percentage)

Valuation/valorisation of birds is calculated based on the previous year's data of the Poultry Product Board of Hungary. Table containing these data is sent to the central veterinary office.

2. Concerning food and feed businesses covered by the programme

2.1. The structure of the production

Breeding flocks of Gallus gallus in Hungary can be structured to elite, grandparent- and parent flocks, their production type (meat or egg production line), size, and the type of holdings.

2.2. The structure of the production of feed.

Feeding of poultry, including breeding flocks of Gallus gallus is based on cereal products, mainly on corn, barley and wheat. Soybean and fishmeal is used as a source of protein.
Commercial feed producers are operating according to GMP standards. Breeding flocks mainly use commercial pelleted feed, the technology of production of which includes heat treatment.
In Hungary, control of feedingstuffs is performed according to three main pieces of legislation:
Act No. XLVI. of 2008 on the food chain and its official control, Governmental Decree 274/2006 (XII. 23) on the establishment and operation of the Central Agricultural Office and Decree of the Ministry of Agriculture and Rural Development No. 43/2003. (IV. 26.) on the implementation of the above Act.
In the Act general principles of the control of feed are laid down general principles of the control of feed, sets the competent authorities and allocates the tasks to these services.
feed production plant may be authorized by the competent regional organ (County Directorate of Food Chain Safety and Animal Health) of the Central Agricultural Office. The authorization must be renewed at periods of a maximum of 5 years. Other authorities are also involved in the authorization process.
The registration of the feed production units is done by the Directorate of Food Chain Safety and Animal Health of County Agricultural Office.
The Act states that the feedingstuffs produced may neither pose a direct health risk to live flock, nor an indirect risk to public health.
Therefore, the competent Directorate of Food Chain Safety and Animal Health of County Agricultural Office perform regular controls of the feed production plants, including the production, keeping, marketing, transport and use of feed produced. Controls also include compliance with feed hygiene rules, safety, composition, microbiological safety of feedingstuffs, as well as many other parameters such as the presence of prohibited substances, packaging, labelling etc.
In case of non-compliance with any of the parameters listed in the Act and the Decree, the competent County Directorate may prohibit the production, keeping, marketing, transport, export, import or transport of the relevant feed. If such feed was already used, the Directorate of Food Chain Safety and Animal Health of County Agricultural Office has a duty to notify the county level public health authority.
The Decree gives detailed instruction to authorities and stakeholders on how to implement the Act. Annex 20 to the Decree sets out the maximum tolerable amount of Salmonella spp. in food and the related ISO standards. According to ISO 6579:2002, feedingstuffs must show zero Salmonella spp. / 25 grams.
In addition, the same Annex states that feedingstuffs must be free of any pathogens which may pose a direct risk to animal health and/or an indirect risk to public health.

2.3. Relevant guidelines

Hungary has relevant guidelines for good animal husbandry practices or other guidelines (mandatory or voluntary) on biosecurity measures defining the hygiene management at farms, the measures preventing incoming infections carried by animals, feed, drinking water, people working at farms, and about hygiene in transporting animals to and from

farms. The guideline of Decree No. 2/2008. (I. 4.) of the Minister of Agriculture and Rural Development on specific rules of protection against salmonellosis, the guideline about feed control, the guideline of animal transports and the Hungarian Poultry Product Board's guideline for good practice. For the new decree the guideline is under procedure. All farms have to made an own biosecurity programme and all have to get checked by the Directorate of Food Chain Safety and Animal Health of County Agricultural Office.

2.4. Routine veterinary supervision of farms:

Controls are planned annually by the Food Chain Safety Deputy President of Central Agricultural Office. Number of controls depends on risk assessment.

An official veterinarian can also perform on-spot checks when taking samples, but it is not necessarily connected. Inspections are performed based on a national program.

2.5. Registration of farms:

All poultry farms have to be registered according to Decree no. 119/2007. (X.18) of MARD on keeping places, breeding farms and national registration system of their data if they meet the relevant criteria. For more information please see Part B Chapter 4.4.1.

All poultry farms have to registered according to Ministerial Decree no. 119/2007. (X.18) on keeping places, breeding farms and national registration system of their data, which meet one of these criteria:

- has to be registered due to a piece of legislation regarding animal health (such as the national Decree on Salmonella)
- the owner would like to apply for financial support

All commercial poultry farms have to be registered:

- which are considered as large-scale holdings according to a different piece of registration (that means: 2000 broilers or 500 other adult poultry)
- which sends poultry directly to the slaughterhouse
- which have a slaughtering permit for small producers.

2.6. Record-keeping at farms:

All documents concerning to the programme must be kept for 3 years. The documentation have to contain all data about animals, tests, transports, samples and medication.

2.7. Documents to accompany animals when dispatched.

Commercial poultry consignments are accompanied with animal health certificates according to Directive 90/539/EC. Consignments with national destinations are accompanied with animal health certificates according to Decree 41/1997. (V. 28.) FM appendices 8/a and 8/b.

In accordance with Paragraph 85. of Decree No 41/1997. of the Minister of Agriculture on the publication of the Animal Health Code, the official veterinarian carries out a flock examination within 12 hours before transportation, and on the basis of the financing/allowance plan, fills out the animal health certification in the appendices 8/a. and 8/b., certifies the place of origin of the day-old animals, their circumstances free from

epidemic, the name of the vaccine used, the time and method of the immunization. Because of the changes occurred since the publication of the legislation, this ordinance cannot be fulfilled in these days.

„Animals can only be transported when accompanied by a valid certification attested by the veterinarian responsible for treatment" in accordance with point 4.2.1. point (Starting of poultry consignments) of the guide which was prepared for poultry hatcheries that are obliged to TIR registration, in accordance with point d) of Paragraph 6. of Decree No 120/2007. (X.18.) of the Minister of Agriculture and Rural Development on establishing and operating of the Poultry Information System (hereinafter: BIR regulation). In pursuance with point 4.2.1., „The hatchery starting the consignment has to fill in the Poultry movement form 2740, on the upper part of which the data of starting has to be given".

The poultry animal health certificate laid down in the BIR regulation is not to replace the certificate 8/b., as the authority responsible for animal health takes part in issuing the latter only.

At the same time, even the certification 8/a. can not be replaced by the introduction of the BIR regulation, as certain data that have to be certified by the veterinarian in the certificate 8/a are not placed on the latter, for example immunizations carried out in the flock, diagnostic examinations and the results thereof.

In pursuance of the abovementioned regulations, all three certifications are required for the transport of the day-old poultry. The BIR certification is drawn up by the veterinarian responsible for treatment, while certifications 8/a. and 8/b. are filled in by the approved veterinarian, in accordance with the Governmental Decree No 113/2006. (V.12.) on the competence and detailed rules of the activity of the approved veterinarian, with the exception of the case when the approved veterinarian is not the treating veterinarian, because in those cases the certification 8/a. has to be filled in by the veterinarian of the hatchery.

As it can be seen from above, the current legislation of movement documentations doesn't seem to be unambiguous as regards several points.

For solving the problem, a working group was established. The working group is predestined for revising the form and content of certificates for inland live animal transportation and as far as possible, for the harmonisation thereof.

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

Please see Part A 2.7. and Part B Chapter 4.2. and Chapter 4.4.1.

At central level three persons are responsible for the TRACES, of which one is responsible for the technical part (for example: giving access to the system). The two other colleagues (one at MRD and one at CAO) are the trade contact points of Hungary and are keeping the contact wit the counterparts of the member states.

Part B

1. Identification of the programme

Member State: **Hungary**

Disease: **Infection of animals with zoonotic *Salmonella spp.***

Animal population covered by the programme: **Breeding flocks of Gallus gallus**

Year of implementation: **2011**

Reference of this document: **02.3/897/5/2010.**

Contact (name, phone, fax, e-mail): **Dr. Imre Nemes**
Director
Animal Health and Animal Welfare Directorate
Central Agricultural Office
Tel: +36-1-460-6300 ext. 112
Fax: +36-1-222-6064
e-mail: nemesi@oai.hu

Date sent to the Commission: **30th of April, 2010**

2. Historical data on the epidemiological evolution of zoonotic *salmonellosis* specified in point 1

Monitoring and control programmes for Salmonella spp. (S. Enteritidis and S. Typhimurium) started in Hungary in 1997 by issuing official guidelines for the poultry sector. The goal of the project was to achieve similar targets as which were set by Council Directive 92/117/EEC. The collection of guidelines were ordered by the Ministry of Agriculture and were prepared by an expert group consisting of both Hungarian experts of various backgrounds (Hungarian Academy of Science, National Food Investigation Institute, Central Veterinary Institute and numerous practicing veterinarians) and experts of the Agri-Livestock Consultant Ltd (W. Edel and C. Wray). The work was financed by the PHARE programme of the European Union under project No. HU 9304-05-02. The programme covered the whole poultry sector in relation of Gallus gallus, breeding flocks, hatcheries, broiler flocks, table egg producing layer flocks, egg packaging and distribution establishments, poultry slaughterhouses, cutting plants as well as feed mills. The guidelines stated clearly that there is an urgent need for centralised official administrative measures in the form of a ministerial decree by the Minister of Agriculture.

The first decree was created in the year 2002: Decree 49/2002. (V. 24.) of the Minister of Agriculture and Rural Development on protection against salmonellosis and poultry typhus and on retaining officially free status, and was modified by the Decree 97/2003. (VIII. 19) Minister of Agriculture and Rural Development. A new Decree was created and came into force on the 7th of January, 2008, and can be referred to as Decree 2/2008. (I. 4.) of the Minister of Agriculture and Rural Development on specific rules of protection against salmonellosis The

aim of creating the new Decree was to ensure compliance with the changes in the Community legislation.

Decree 2/2008 of MARD set the conditions of the obligatory control measures in breeding, laying flocks and voluntary (mandatory from 2009) measures in broiler flocks of Gallus gallus against specified Salmonella serotypes. As a prerequisite, there is an obligation of the holdings keeping breeding flocks of Gallus gallus to be registered by the State Veterinary Service. Results of testing required by the Decree are also to be notified to the Directorate of Food Chain Safety and Animal Health of County Agricultural Office (formerly named: County Animal Health and Food Control Service). Decree 2/2008 of MARD had been amended 5 times till it was repealed and replaced by Decree 180/2009 of MARD (hereinafter referred as 'Decree') as of 6th of January, 2010. The new Decree covers the same area, but the structure of it was modified and enhanced based on experience.

As a result of the above mentioned mandatory control in breeding flocks of Gallus gallus, latest data show that infection amongst these flocks is below 6%. However, the Community target which is set by Commission Regulation (EC) of 30 June 2005 implementing Regulation (EC) No 2160/2003 as regards a Community target for the reduction of the prevalence of certain Salmonella serotypes in breeding flocks of Gallus gallus and amending Regulation (EC) No 2160/2003 is a maximum of 1%. This goal can only be achieved by a rigorous control programme using extensive professional and financial resources.

3. Description of the submitted programme

The main objective of the programme is to comply with existing Community legislation, to achieve Community prevalence targets within the defined time period available as regards breeding flocks of Gallus gallus in the territory of Hungary. The programme covers the five zoonotic Salmonella serotypes most relevant in relation to public health (S. Enteritidis, S. Typhimurium, S. Infantis, S. Virchow and S. Hadar).

Included in the programme are all breeding flocks of Gallus gallus registered in the territory of Hungary.

Laboratories involved in the programme must be accredited by the National Accreditation Body (NAT) and supervised by the National Salmonella Reference Laboratory (NRL) of the Republic of Hungary (Food and Feed Safety Directorate (formerly named: National Food Investigation Institute), Central Agricultural Office). The NRL will be in charge of coordination of the laboratories, the use of appropriate laboratory methods as well as for co-operation with the Community Reference Laboratory in Bilthoven (NL).

4. Measures of the submitted programme

4.1. Summary of measures under the programme

Duration of the programme:

First year: 2010	Last year: 2012
☒ Control	☐ Eradication

☒ Testing
☒ Slaughter of positive animals
☒ Killing of positive animals
☒ Vaccination
☐ Treatment
☒ Disposal of products

☐ Testing
☐ Slaughter of positive animals
☐ Killing of positive animals
☐ Extended slaughter or killing
☐ Disposal of products

☒ Monitoring or surveillance

☒ Other measures *(specify)*:

- Flocks positive for S. Typhimurium or S. Enteritidis will be subject to movement control. As soon as the NRL confirms the infection, the flock shall be sent to isolated slaughter. Meat originating from such flocks may only be authorised for human consumption after meeting all relevant food safety requirements as regards of the Regulation (EC) No. 2160/2003. Annex II. Point E.

- Hatching eggs originating from such flocks may only be marketed according to the Regulation (EC) No. 2160/2003. Annex II. Point C.5.

- After emptying the relevant holding operators are required to implement proper cleansing and desinfection. Effectiveness of the procedure is controlled by the competent regional animal health authority. Restocking is only authorised, when cleansing and desinfection is deemed to be satisfactory.

4.2. Designation of the central authority charged with supervising and coordinating the departments responsible for implementing the programme:

All holdings must be registered at the district veterinary office. The official senior veterinary officer keeps and updates the record of holdings participating the programme. The official senior veterinary officer also declares the status of the holdings according to their actual serological status.

The 19 Directorates of Food Chain Safety and Animal Health of County Agricultural Offices coordinate and supervise the programme in their territory. They are required to annually report the actual status of the programme to the Animal Health and Animal Welfare Directorate of the Central Agricultural Office.

Name:	Central Agricultural Office Animal Health and Animal Welfare Directorate
Name in Hungarian:	Mezőgazdasági Szakigazgatási Hivatal Központ Állategészségügyi és Állatvédelmi Igazgatóság
Address:	1149 Budapest, Tábornok u. 2., Hungary
Tel.:	+36-1-460-6300
Fax:	+36-1-222-6065

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

The programme will be implemented on the whole territory of Hungary. The programme is compulsory as from the 1st January, 2007.

4.4. Measures implemented under the programme

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

All poultry farms have to registered according to Ministerial Decree no. 119/2007. (X.18) on keeping places, breeding farms and national registration system of their data, which meet one of these criteria:

- has to be registered due to a piece of legislation regarding animal health (such as the national Decree on Salmonella)
- the owner would like to apply for financial support

All commercial poultry farms have to be registered:

- which are considered as large-scale holdings according to a different piece of registration (that means: 2000 broilers or 500 other adult poultry)
- which sends poultry directly to the slaughterhouse
- which have a slaughtering permit for small producers.

According to Paragraph 5. of the Decree the operator is obliged to register for the national control programmes, pursuant to Article 8 (3). Article 8 (3) states that:

A business operator obliged to or voluntarily undergoing control pursuant to paragraph (1) shall apply for participation in the national control programme by submitting an epidemiological action plan approved by the private veterinarian responsible for the supervision of the poultry flock or hatchery at the competent district office by virtue of the location of the holding site, which shall register the business operator in accordance with Article 3(4) (a).

4.4.2. Measures and terms of legislation as regards the identification of animals: --

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

According to point 7 of paragraph 9 of the Decree:

The laboratory shall immediately notify the district office and the veterinarian taking the sample of the test results and - in the event of positive results - the business operator and the regional organ of the CAO as well. In the event of positive results the laboratory shall send the isolated strain for confirmatory testing and serotyping together with one original copy of the sampling form to the NRL. The testing laboratory must retain the copy of the sampling form for three years.

4.4.4. Measures and terms of legislation as regards the measures in case of a positive result:

Whenever a positive flock is found by own-check sampling in the frame of the programmes in breeding flocks and laying hens, than this flock should be considered as a **suspect flock** and **movement restrictions are imposed** on this **flock.**

In the frame of the *Salmonella* control programme in **breeding flocks** of *Gallus gallus* the provisions of paragraph 1 and 2 (frequency of sampling) 4 (results and reporting) of Annex of Commission Regulation (EC) No 213/2009 **particularly provisions on exceptional cases)** are implemented.

According to the Decree:

Procedure in the event of positive test results

Article 11

(1) If the sample taken from a flock of breeding hens, a flock of laying hens or a flock of breeding turkeys results positive the operator shall revise the epidemiological action plan within 22 working days and shall resubmit it to the District Office for approval. The revised plan shall contain the review of the hygiene conditions, especially the efficiency of the desinfection and pest control procedures, the results of the test to find possible reasons for infection and the list of measures considered necessary. The District Office shall evaluate the plan within 22 working days and may ask the operator to amend it if they find it unsatisfactory.

(2) If a sample taken at a flock of broilers and fattening turkeys results positive the business operator shall revise the epidemiological action plan within 11 working days of receiving the result and shall resubmit it to the District Office for approval. The action plan shall contain the review of the hygiene conditions; especially the efficiency of the desinfection procedures and of pest control (insect and rodent extermination), the results of the test to identify possible reasons for infection and the list of measures considered necessary. The District Office shall evaluate the plan within 11 working days and may ask a business operator to amend it if they find it unsatisfactory.

(3) If the results of salmonella testing of broiler and fattening turkey flocks results positive, there is a rapid method – available on the business operator's request – of excluding infection by Salmonella Enteritidis and Salmonella Typhimurium serotypes at a certified laboratory designated by the CAO using group-specific 'O' antibody. In this case the laboratory which performs the 'O' group typing will send the isolated strain to the NRL for serotyping.

(4) If, using the group specific 'O' antibody, infection by Salmonella Enteritidis and Salmonella Typhimurium serotypes can be excluded, then the given flock of broilers or fattening turkeys may be slaughtered by decision of the District Office. Measures pursuant to paragraph (2) and (5) shall be applied at the same time.

(5) When, during serotyping, the NRL detects infection with a serotype other than Salmonella Enteritidis or Salmonella Typhimurium, the District Office shall immediately withdraw the official certificate of infection-free status of the flock, if the operator has one, in respect of the given serotype. The operator shall clean the site after the production cycle (building, equipment and machinery, connecting rooms and paths) and - in accordance with specific piece of legislation on issuing the Animal Health Code – for stringent desinfection, rodent extermination and desinsectisation.

(6) Operators may restock the airspace concerned only if they verify the efficiency of desinfection when an environmental swab sample tests negative in a laboratory. The business operator shall bear the costs of taking and testing environmental swabs.

(7) If in the case of a flock of breeding hens the NRL detects infection by a salmonella serotype that is considered a Community target under Regulation (EC) No 1003/2005, Article 12 (9) shall apply in respect of feed and Article 12(8) in respect of restocking of the air space.

Procedure in the event of Salmonella Enteritidis or Salmonella Typhimurium infection

Article 12

(1) If during serotyping the NRL detects infection with Salmonella Enteritidis or Salmonella Typhimurium the District Office shall order restriction of movement of the flock concerned and the products originating therefrom and shall withdraw the official certificate of infection-free status without delay. The official certificate of infection-free status in respect of other

flock from the holding shall also be withdrawn at the same time unless the infected flock has been appropriately isolated.

(2) Testing may only be repeated by official sampling ordered by the regional organ of the CAO pursuant to Article 9(10). Sampling for the official test may only be carried out by official or approved veterinarians within the shortest time possible. The NRL shall test the samples and at the same time conduct an examination to detect antimicrobial inhibitory effects. If the result from the repeated sampling is negative or it results in an infection with salmonella serotypes not covered by the national control programmes and no antimicrobial inhibitory effect can be detected, the District Office shall lift the restriction of movement in respect of the flock and the products thereof. If antimicrobial inhibitory effects can be detected the District Office shall investigate the circumstances of the use of antibiotics and maintain the restriction on movement until it is proven that antibiotics were used for purposes other than to treat the infection of salmonella.

(3) If repeated testing reveals infection by Salmonella Enteritidis or Salmonella Typhimurium or the regional organ of the CAO not orders a repeated test, the flock concerned may be slaughtered after preliminary consultation with the slaughterhouse and the official veterinarian supervising the slaughterhouse and in accordance with the specific veterinary health rules on separate slaughter.

(4) In the event of infection by Salmonella Enteritidis or Salmonella Typhimurium in a flock of breeding hens and turkeys Annex II/C to Regulation (EC) No 2160/2003 shall apply and Annex II/D to Regulation (EC) No 2160/2003 shall apply to flocks of laying hens.

(5) Meat from an infected flock may be placed on the domestic market without eliminating salmonella if the production processes following the slaughter of the infected flock are separated from the processing and treatment of other raw materials of animal origin and the official veterinarian supervising the slaughterhouse has been informed 48 hours before slaughter. Food materials originating from slaughtering and processing infected flock shall carry the text "for consumption only after heat treatment (thorough frying or cooking)" clearly and indelibly marked on every smallest packaging unit close to the identification label, close to the traceability marking; and on the accompanying commercial document.

(6) If meat from infected flock is processed after salmonella elimination (heat treatment, heat treatment as part of product manufacturing) the processes following slaughter of the infected flock shall be separated from the processing of other raw materials of animal origin until salmonella has been efficiently eliminated, this has been certified and the official veterinarian supervising the slaughterhouse has been informed 48 hours before slaughter. Food materials originating from infected flock shall carry the text "Originates from salmonella-infected flock" on every smallest packaging unit close to the identification label and the premises traceability marking and may only be used to produce food when the technological manufacturing processes guarantee that the product will be salmonella-free. Every such food item shall be verified by microbiology testing carried out in a laboratory before the are cleared for retail trade and the official veterinarian supervising the slaughterhouse shall be informed thereof. The production plant may place heat treated products certified as salmonella-free on the market on the basis of the results of own checks.

(7) After the keeping place of the infected flock has been emptied the operator shall provide for cleaning the building, equipment and machinery, connecting rooms and paths and - in accordance with specific piece of legislation on the issuing of Animal Health Code – for reinforced desinfection, rodent extermination and disinsectisation. The remaining litter shall be disposed of in accordance with special legislation on the treatment of waste of animal origin. After these tasks have been accomplished the business operator shall inform the District Office, which will verify the efficiency of the measures implemented.

(8) The District Office shall authorise the restocking of the airspace concerned only if the effectiveness of desinfection was verified by environmental swab samples test negative in the laboratory.

(9) The feed fed to infected flock shall be tested without delay in accordance with the special legislation on the manufacturing, placing on the market and use of feed, except when day-old birds test positive. Until testing yields negative results such feed may only be fed to infected flock. If feed tests positive it has to be disposed of in accordance with the special legislation on the manufacturing, placing on the market and use of feed, and the equipment used for its storage and transportation shall be disinfected. If infection has been detected, specific testing shall be carried out to detect salmonella at the feed operator from which the feed originates.

(10) Hatcheries to which infected hatching eggs have been transported shall act in accordance with Annex II/C(3) and (5) of Regulation (EC) No 2160/2003 and shall apply the provisions of paragraph (7) and (8). If a hatchery has a certificate of infection-free status the district office shall immediately withdraw this. The hatchery must cooperate in tracing the origins of infection on the basis of its records and shall bear the costs.

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

See point 4.4.4.!

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

See point 4.4.4.!

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

- Regulation (EC) No. 2160/2003. of the European Parliament and of the Council on the control of Salmonella and other food-borne zoonotic agents
- Commission Regulation (EU) No 200/2010 of 10 March 2010 implementing Regulation (EC) No 2160/2003 of the European Parliament and of the Council as regards a Union target for the reduction of the prevalence of Salmonella serotypes in adult breeding flocks of Gallus gallus
- Commission Regulation (EC) No 1177/2006 of 1 August 2006 implementing Regulation (EC) No 2160/2003 of the European Parliament and of the Council as regards requirements for the use of specific control methods in the framework of the national programmes for the control of Salmonella in poultry
- Commission Regulation (EC) No 213/2009 of 18 March 2009 amending Regulation (EC) No 2160/2003 of the European Parliament and of the Council and Regulation (EC) No 1003/2005 as regards the control and testing of *Salmonella* in breeding flocks of *Gallus gallus* and turkeys
- Act No. XLVI. of 2008. on the food chain and its official control
- Decree No. 180/2009. (XII. 29.) of the Minister of Agriculture and Rural Development on specific rules of protection against salmonellosis
- Decree No. 41/1997. (V. 28.) of the Minister of Agriculture on Code of Veterinary Rules

The vaccination protocol has to be enclosed in the epidemiological control plan (which the operator submits as an application for participation in the national control programme.)

Furthermore, according to Article 14 (3) of the Decree:

"Documentation and treatment log has to be kept on the use of vaccines, which is checked by the district office based on risk-based assessment. Checking shall cover the proper use of vaccines and that the application was performed as in the instructions of use. The operator shall verify that the appropriate amount of vaccines was used by invoices, and the veterinarian verifies the proper application by his stamp. (The assumption of the vaccine compensation claim is the common declaration made and signed by the animal owner and the veterinary practitioner on the vaccine usage.)

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

- Veterinary Act No. XLVI. of 2008. on the food chain and its official control
- Decree No. 45/2010. (IV.23.) Minister of Agriculture and Rural Development on the rules of financing the national programs for the eradication, control and monitoring of certain animal diseases and zoonoses

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

Hungary has relevant guidelines for good animal husbandry practices or other guidelines (mandatory or voluntary) on biosecurity measures defining the hygiene management at farms, the measures preventing incoming infections carried by animals, feed, drinking water, people working at farms, and about hygiene in transporting animals to and from farms. The guideline of Decree No. 2/2008. (I. 4.) of the Minister of Agriculture and Rural Development on specific rules of protection against salmonellosis, the guideline about feed control, the guideline of animal transports and the Hungarian Poultry Product Board's guideline for good practice. For the new decree the guideline is under procedure. All farms have to made an own biosecurity programme and all have to get checked by the Directorate of Food Chain Safety and Animal Health of County Agricultural Office.

5. General description of the costs and benefits:

Costs and benefits are calculated based on the previous year's data of the Poultry Product Board of Hungary. In the case of breeding flocks costs will occur from the intensive sampling of the flocks as well as the tests performed on the samples (including both testing on the initiative of the operator and the veterinary authority), the measures to be applied in the case of infection (slaughter or killing of the flock, condemnation, transportation, cleansing and desinfection) as well as financial losses due to decreased income for the poultry industry.

A detailed description of the costs is listed under point 8.

Benefits in case of the successful programme include improved food safety which largely contributes to the achievement of public health goals of the Community.

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

6.1. Evolution of zoonotic salmonellosis

6.1.1. Data on evolution of zoonotic salmonellosis

Year: 2007 **Situation on date: First year of the programme**

Animal species: breeding flocks of Gallus gallus **Disease/infection[a]:** Salmonellosis

Region (a1)	Type of flock[b]	Total number of flocks[c]	Total number of animals	Total number of flocks under the programme	Total number of animals under the programme	Number of flocks checked [c]	Number of positive[c] flocks[d]			Number of flocks depopulated[a]		Total number of animals slaughtered or destroyed [a]		Quantity of eggs destroyed (number or kg) [a]		Quantity of eggs channelled to egg products (number or kg) [a]	
							(a1)	(a2)	(a3)	(a3)	(a4)	(a4)	(a3)	(a4)	(a3)	(a4)	(a3)
Pest (including Budapest)	Breeding flock	113	323000	113	323000	9	0	0	0	0	0	0	0	0	0	0	0
Fejér	Breeding flock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Komárom-Esztergom	Breeding flock	257	1423558	257	1423558	223	6	0	18 (SI)	0	6	0	0				
Veszprém	Breeding flock	89	584600	89	584600	89	1	1	5 (SM)	0	2	0	0				
Győr-Moson-Sopron	Breeding flock	26	145627	26	145627	16	0	0	0	0	0	0	0	0	0	0	0
Vas	Breeding flock	70	378735	70	378735	45	0	0	1(SI)	1	0	0	0				
Zala	Breeding flock	24	226000	24	226000	22	0	0	0	0	0	0	0	0	0	0	0
Baranya	Breeding flock	51	190120	51	190120	12	0	0	0	0	0	0	0	0	0	0	0

Somogy	Breeding flock	4	10900	4	10900	3	0	0	0	0	0	0	0	0	0	0	0	0
Tolna	Breeding flock	1	600	1	600	0	0	0	0	0	0	0	0	0	0	0	0	0
Borsod-Abaúj-Zemplén	Breeding flock	14	71500	14	71500	3	0	0	0	0	0	0	0	0	0	0	0	0
Heves	Breeding flock	9	19500	9	19500	3	0	0	0	0	0	0	0	0	0	0	0	0
Nógrád	Breeding flock	4	8200	4	8200	3	0	0	0	0	0	0	0	0	0	0	0	0
Hajdú-Bihar	Breeding flock	62	292530	62	292530	44	0	0	0	0	0	0	0	0	0	0	0	0
Jász-Nagykun-Szolnok	Breeding flock	12	38600	12	38600	10	0	0	0	0	0	0	0	0	0	0	0	0
Szabolcs-Szatmár-Bereg	Breeding flock	51	247100	51	247100	51	1	0	0	0	1	0	0					
Bács-Kiskun	Breeding flock	25	186041	25	186041	20	0	0	0	0	0	0	0	0	0	0	0	0
Békés	Breeding flock	4	16200	4	16200	4	0	0	0	0	0	0	0	0	0	0	0	0
Csongrád	Breeding flock	9	34400	9	34400	5	0	0	0	0	0	0	0	0	0	0	0	0
Total		**825**	**4197211**	**825**	**4197211**	**562**	**8**	**1**	**24**	**1**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

Year: 2008. 01.01.-05.30.

Situation on date: Second year of the programme

Animal species: breeding flocks of Gallus gallus

Disease/infection[a]: Salmonellosis

Region (a1)	Type of flock[b]	Total number of flocks[c]	Total number of animals	Total number of flocks under the programme	Total number of animals under the programme	Number of flocks checked [c]	Number of positive[c] flocks[d]			Number of flocks depopulated[a]		Total number of animals slaughtered or destroyed [a]		Quantity of eggs destroyed (number or kg) [a]		Quantity of eggs channelled to egg products (number or kg) [a]	
							(a1)	(a2)	(a3)	(a3)	(a4)	(a4)	(a3)	(a4)	(a3)	(a4)	(a3)
Pest (including Budapest)	Breeding flock	57	106590	57	106590	15	0	0	1S.I. 1 S.M. 1 S.O7 1 S.I.	0	0	0	0	0	0	0	0
Fejér	Breeding flock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Komárom-Esztergom	Breeding flock	283	613363	283	613363	184	0	0	0	0	0	0	0	0	0	0	0
Veszprém	Breeding flock	89	316400	89	316400	20	1	0	5 S.I. 4 S.M.	0	0	0	0	0	0	0	0
Győr-Moson-Sopron	Breeding flock	35	123200	35	123200	34	2	0	0	0	0	0	0	0	0	0	0
Vas	Breeding flock	83	261643	83	261643	13	0	0	0	0	0	0	0	0	0	0	0
Zala	Breeding flock	24	165723	24	165723	24	0	0	0	0	0	0	0	0	0	0	0
Baranya	Breeding flock	47	272676	47	272676	33	0	0	0	0	0	0	0	0	0	0	0

Somogy	Breeding flock	3	9500	3	9500	3	0	0	1 S.M.	0	0	0	0	0	0	0	0
Tolna	Breeding flock	1	460	1	460	1	0	0	0	0	0	0	0	0	0	0	0
Borsod-Abaúj-Zemplén	Breeding flock	14	69780	14	69780	12	0	0	0	0	0	0	0	0	0	0	0
Heves	Breeding flock	9	20900	9	20900	9	1	0	0	0	0	0	0	0	0	0	0
Nógrád	Breeding flock	2	550	2	550	2	0	0	0	0	0	0	0	0	0	0	0
Hajdú-Bihar	Breeding flock	71	240869	71	240869	52	1	2	0	1	0	900	0	0	0	0	0
Jász-Nagykun-Szolnok	Breeding flock	9	14360	9	14360	12	0	0	1 S.I.	0	0	0	0	0	0	0	0
Szabolcs-Szatmár-Bereg	Breeding flock	60	165334	60	165334	60	0	0	1 S.I.	0	0	0	0	0	0	0	0
Bács-Kiskun	Breeding flock	21	130667	21	130667	17	1	1	1 S.O7, 1 S.I. 1 other	0	0	0	0	0	0	0	0
Békés	Breeding flock	13	9694	13	9694	13	0	0	0	0	0	0	0	0	0	0	0
Csongrád	Breeding flock	10	3105	10	3105	10	0	0	1 S. Thom.	0	0	0	0	0	0	0	0
Total		**832**	**2524814**	**832**	**2524814**	**514**	**6**	**3**	**20**	**1**	**0**	**900**	**0**	**0**	**0**	**0**	**0**

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

Year: 2008. 05.30.-12.31.

Situation on date: Second year of the programme

Animal species: breeding flocks of Gallus gallus

Disease/infection[a]: Salmonellosis

Region (a1)	Type of flock[b]	Total number of flocks[c]	Total number of animals	Total number of flocks under the programme	Total number of animals under the programme	Number of flocks checked [d]	Number of positive[e] flocks[a]			Number of flocks depopulated[a]		Total number of animals slaughtered or destroyed [a]		Quantity of eggs destroyed (number or kg) [a]		Quantity of eggs channelled to egg products (number or kg) [a]	
							(a1)	(a2)	(a3)	(a3)	(a4)	(a4)	(a3)	(a4)	(a3)	(a4)	(a3)
Pest (including Budapest)	Breeding flock	57	106590	57	106590	57	0	0	8 S.Senft, S.Ten.	0	0	0	0	0	0	0	0
Fejér	Breeding flock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Komárom-Esztergom	Breeding flock	283	613363	283	613363	283	0	0	0	0	0	0	0	0	0	0	0
Veszprém	Breeding flock	89	316400	89	316400	89	0	0	1 S.I. 1S.M. 5 S.I.. 1 S.O.	0	0	0	0	0	0	0	0
Győr-Moson-Sopron	Breeding flock	35	123200	35	123200	35	0	0	1 S.I.	0	0	0	0	0	0	0	0
Vas	Breeding flock	83	261643	83	261643	83	0	0	1 S.Ch.	0	0	0	0	0	0	0	0
Zala	Breeding flock	24	165723	24	165723	24	0	0	0	0	0	0	0	0	0	0	0
Baranya	Breeding flock	47	272676	47	272676	47	2	0	0	0	2	5749	0	63816	0	46620	0

Somogy	Breeding flock	3	9500	3	9500	3	0	0	0	0	0	0	0	0	0	0	0
Tolna	Breeding flock	1	460	1	460	1	0	0	0	0	0	0	0	0	0	0	0
Borsod-Abaúj-Zemplén	Breeding flock	14	69780	14	69780	14	0	0	0	0	0	0	0	0	0	0	0
Heves	Breeding flock	9	20900	9	20900	9	0	0	3	3	0	0	12000	0	0	0	0
Nógrád	Breeding flock	2	550	2	550	2	0	0	0	0	0	0	0	0	0	0	0
Hajdú-Bihar	Breeding flock	71	240869	71	240869	71	1	0	0	0	0	0	0	0	0	0	0
Jász-Nagykun-Szolnok	Breeding flock	9	14360	9	14360	9	0	0	0	0	0	0	0	0	0	0	0
Szabolcs-Szatmár-Bereg	Breeding flock	60	165334	60	165334	60	0	0	0	0	0	0	0	0	0	0	0
Bács-Kiskun	Breeding flock	21	130667	21	130667	21	0	0	1 S.I.	0	0	0	0	0	0	0	0
Békés	Breeding flock	13	9694	13	9694	13	0	0	0	0	0	0	0	0	0	0	0
Csongrád	Breeding flock	10	3105	10	3105	10	0	0	2.	0	0	0	0	0	0	0	0
Total		**832**	**2524814**	**832**	**2524814**	**832**	**3**	**0**	**24**	**3**	**2**	**5749**	**12000**	**63816**	**0**	**46620**	**0**

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

Year: 2009.01.01.-12.31. **Situation on date: Third year of the programme**

Animal species: Gallus gallus, breeders **Disease/infection[b]: Salmonellosis**

Régió (a1)	Type of flock[b]	Total number of flocks[c]	Total number of animals	Total number of flocks under the programme	Total number of animals under the programme	Number of flocks checked[d]	Number of positive[e] flocks[e]			Number of flocks depopulated[a]		Total number of animals slaughtered or destroyed [a]		Quantity of eggs destroyed (number or kg) [a]		Quantity of eggs channelled to egg products (number or kg) [a]	
							(a1)	(a2)	(a3)	(a3)	(a4)	(a4)	(a3)	(a4)	(a3)	(a4)	(a3)
Bács-Kiskun	Breeding flock	49	238515	49	238515	49	0	0	2(S.I.)	0	0	0	0	0	0	0	0
Baranya	Breeding flock	72	464250	72	464250	72	0	0	2(S.I.)	0	0	0	0	0	0	0	0
Borsod-Abaúj-Zemplén	Breeding flock	30	119100	30	119100	30	0	0	0	0	0	0	0	0	0	0	0
Békés	Breeding flock	11	18200	11	18200	11	0	0	0	0	0	0	0	0	0	0	0
Csongrád	Breeding flock	6	3536	6	3536	6	0	0	0	0	0	0	0	0	0	0	0
Fejér	Breeding flock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Győr-Moson-Sopron	Breeding flock	42	268571	42	268571	42	0	0	0	0	0	0	0	0	0	0	0
Hajdú-Bihar	Breeding flock	130	648937	130	589037	130	0	0	1(S.I.)	1	0	0	500	0	0	0	0
Heves	Breeding flock	8	6003	8	6003	8	0	0	1(S.K.)	0	0	0	0	0	0	0	0
Jász-Nagykun-Szolnok	Breeding flock	18	65000	18	65000	18	0	0	1	0	0	0	0	0	0	0	0
Komárom-Esztergom	Breeding flock	236	883517	236	1726467	236	0	0	13(1 S.I.,12 S.other)	0	0	0	0	0	0	0	0

Nógrád	Breeding flock	2	2460	2	2460	2	0	0	0	0	0	0	0	0	0	0	0
Főváros-Pest	Breeding flock	32	397151	32	397151	32	0	0	3(2S.I., 1S. other)	0	0	0	0	0	0	0	0
Somogy	Breeding flock	6	21778	6	21778	6	0	0	0	0	0	0	0	0	0	0	0
Szabolcs-Szatmár-Bereg	Breeding flock	94	603076	94	603076	94	0	0	1(S.I.)	0	0	0	0	0	0	0	0
Tolna	Breeding flock	2	960	2	960	2	0	0	0	0	0	0	0	0	0	0	0
Vas	Breeding flock	84	435100	84	435100	84	0	0	2(S.Senfi)	0	0	0	0	0	0	0	0
Veszprém	Breeding flock	144	489159	144	758507	144	4	0	6(3S.I., 3 S.other)	3	4	15088	21900	0	0	0	0
Zala	Breeding flock	25	332270	25	332270	25	0	0	0	0	0	0	0	0	0	0	0
Summ.		991	4997583	991	6109881	991	4	0	30	4	4	15088	22400	0	0	0	0

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

6.2. Stratified data on surveillance and laboratory tests -

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

Year: 2009.01.01.-13.31. **Animal species[a]: Gallus gallus** **Category[b]: breeding**

Description of the used serological tests: following the Kaufmann-White scheme

Description of the used microbiological or virological tests: ISO 6579/2002

Description of the other used tests:

Region[c]	Serological tests		Microbiological or virological tests		Other tests	
	Number of samples tested[d]	Number of positive samples[e]	Number of samples tested[d]	Number of positive samples[e]	Number of samples tested[d]	Number of positive samples[e]
Total	88	88	2967	88		
Total						

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

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

Year: **Animal species[a]::**

Region[b]	Number of herds infected[c]	Number of animals infected
Total	36	221009

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

6.4. Data on vaccination programmes -

7. Targets

7.1. Targets related to testing

7.1.1. Targets on diagnostic tests

Number and specification of tests

Mandatory testing will be performed in all breeding flocks of Gallus gallus during their whole life span. A preliminary calculation was made on the approximate number of tests to be performed in the flocks. The number of tests calculated is based on breeding flocks containing more than 250 hens (what is 991at the moment) and the testing scheme as provided for in the Annex to Commission Regulation No. 200/2010/EC of 9 March 2010 implementing Regulation (EC) No 2160/2003 of the European Parliament and of the Council as regards a Union target for the reduction of the prevalence of Salmonella serotypes in adult breeding flocks of Gallus gallus

The Annex of the above mentioned Regulation requires all relevant breeding flocks to be tested three times during the rearing period and further testing every second week during the whole production period.

Breeding flocks are kept usually until the age of one year (52 weeks). The production period begins when the flock is 26 weeks of age.

In Hungary, breeding flocks are typically kept in barns which makes the taking of boot swabs the most effective way of detecting possible infection.

Using the above numbers and the testing scheme specified in the Regulation, each breeding flock will be sampled and tested approximately 17 times during a year. During each sampling five pairs of boot swabs will be taken and sent into the laboratory. This means that during a one-year period, 85 pairs of boot swabs will be taken in one flock.

Given that in Hungary there are 991 breeding flocks (719 production flocks and 272 rearing flocks) (~5000000nimals), the total number of samples to be taken in the frame of routine (business) and official sampling is (272 x 5 x 2)+(719*5*15) = 56645 pairs of boot swabs.

In addition, when a flock is tested positive, confirmatory sampling will take place using 5 pairs of boot swabs and additional birds selected from the flock. Based on latest data from 2009, approximately 0,4% of the flocks infected Salmonella Enteritidis or Salmonella Typhimurium, 1,6% of the flocks are infected with one or more of the 5 most relevant Salmonella serotypes, and 3,41% of the flocks are infected any serotype of Salmonella. This means that in 3,41% of the 991 flock (in 34flocks) positive isolates will need to serotype. In the year 2009 there were nearly 60 positive samples which needed to serotype. Confirmatory tests number will be nearly 20% of the infected flocks and will be required with the testing of 5 pairs of boot swabs, faeces material, birds, etc. each. That gives another 10sampling, with nearly 10 isolates to serotype. Summary nearly 70-80 isolates will be needed to serotype.

As a summary, 56645 pairs of boot swabs will take into 28348 isolate (laboratory sample, from them there will be 719X3X5=10785*official boot swabs*) expected to be tested for the detection of Salmonella spp. Official's samples number will be ~ 10785/2−10=5402.

Serotyping will be performed from each positive isolate. Positivity is expected to be detected in 1% of flocks, about 7 flocks.

However, an exact number of tests which will be performed is not possible, because the time when the flock becomes infected can not predicted.

7.1.2. Targets on testing of flocks[3]

Year: **2011 Situation on date:**

Animal species: Gallus gallus, breeding **Disease:**[a]**: zoonotic salmonella**

Region (a1)	Type of flock[b]	Total number of flocks[c]	Total number of animals	Total number of flocks under the programme	Total number of animals under the programme	Number of flocks checked[d]	Number of positive[e] flocks[a]			Number of flocks depopulated[a]		Total number of animals slaughtered or destroyed [a]		Quantity of eggs destroyed (number) [a]		Quantity of eggs channelled to egg products (number)	
							(a1)	(a2)	(a3)	(a3)	(a4)	(a4)	(a3)	(a4)	(a3)	(a4)	(a 3)
Total	Breeding flocks	991	5000000	991	6109881	991	4	3	0	4	4	25000	25000	0	0	0	0

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

7.2. Testing scheme

Testing scheme as provided for in the Annex to Commission Regulation No. 200/2010/EC of 9 March 2010 and Regulation (EC) No 2160/2003.

Details of the testing scheme are the following:

1. Sampling frame

The sampling frame shall cover all adult breeding flocks of Gallus gallus comprising at least 250 birds.

[3] Specify types of flocks if appropriate(breeders, layers, broilers).

2. Monitoring in breeding flocks

2.1. Location, frequency and status of sampling

Breeding flocks shall be sampled at the initiative of the operator and as part of official controls.

2.1.1. Sampling at the initiative of the operator

Sampling shall take place every two weeks at the holding. The detection of relevant salmonella serotypes during the sampling at the initiative of the operator has to be notified without delay to the County Agricultural Office, Directorate of Food Chain Safety and Animal Health by the operator, the sampler or the laboratory performing the analyses.

2.1.2. Official control sampling

Official sampling shall be carried out on three occasions during the production cycle:

(a) within four weeks following moving to laying phase or laying unit;

(b) towards the end of the laying phase, not earlier than eight weeks before the end of the production cycle;

(c) during the production, at any time sufficiently distant from the samples referred to in points (a) and (b).

2.2. Sampling protocol

2.2.1. Routine sampling at the initiative of the operator

Sampling shall primarily consist of faecal samples and shall aim to detect a 1 % within flock prevalence, with 95 % confidence limit. To that effect, the samples shall comprise one of the following:

(a) Pooled faeces made up of separate samples of fresh faeces each weighing not less than 1 g taken at random from a number of sites in the building in which the birds are kept, or where the birds have free access to more than one building on a particular holding, from each group of buildings on the holding in which the birds are kept. Faeces may be pooled for analysis up to a minimum of two pools.
The number of sites from which separate faeces samples are to be taken in order to make a pooled sample shall be as follows:

Number of birds kept in a building	Number of faeces samples to be taken in the building or group of buildings on the holding
250-349	200
350-449	220
450-799	250
800-999	260
1 000 or more	300

(b) Five pairs of boot swabs:

Boot swabs used shall be sufficiently absorptive to soak up moisture. Tubegauze 'socks' are also acceptable.
The surface of the boot swab shall be moistened using appropriate diluent (such as 0,8 % sodium chloride, 0,1 % peptone in sterile deionised water, or sterile water).
Walking around shall be done in a manner which will sample representatively all parts of the sector, including littered and slatted areas when slats are safe to walk on. All separate pens within a house shall be included in the sampling. On completion of sampling in the chosen sector, boot swabs must be removed carefully so as not to dislodge adherent material.
The boot swabs may be pooled for analysis into a minimum of two pools.

(c) 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 150 g shall be collected to be tested individually:
(i) droppings belts beneath each tier of cages which are run regularly and discharged into an auger or conveyor system;
(ii) droppings pit system in which deflectors beneath the cages are scraped into a deep pit beneath the house;
(iii) droppings pit system in a step cage house when cages are offset and faeces fall directly into the pit.

There are normally several stacks of cages within a house. Pooled faeces from each stack shall be represented in the overall pooled sample. Two pooled samples shall be taken from each flock as described below.
In systems where there are belts or scrapers, these shall be run on the day of the sampling before sampling is carried out.
In systems where there are deflectors beneath cages and scrapers, pooled faeces which has lodged on the scraper after it has been run, shall be collected.
In step-cage systems where there is no belt or scraper system it is necessary to collect pooled faeces from the deep pit.
Droppings belt systems: pooled faecal material from the discharge ends of the belts shall be collected.

2.2.2. Official sampling

(a) Routine sampling shall be as described in point 2.2.1.

(b) Confirmatory sampling following detection of relevant salmonella from sampling at the hatchery shall be carried out as follows.
In addition to the sampling as described in point 2.2.1, the sampling may include a sample of birds taken at random from within each house of birds on the farm, normally up to five birds per house, unless the County Agricultural Office, Directorate of Food Chain Safety and Animal Health deems necessary to sample a higher number of birds. The examination shall consist in a test for research of anti-microbial or of bacterial growth inhibitory effect in samples. A test is considered failed if a positive is found in any of the birds.
In case the presence of relevant salmonella is not detected but anti-microbial or bacterial growth inhibitory effect are, sampling of the flock for relevant salmonella and bacterial growth inhibitory effect shall be repeated until no bacterial growth inhibitory effect is detected, or the breeding flock is destroyed. In the latter case, the breeding flock shall be accounted for as an infected breeding flock for the purpose of the Community target.

(c) Suspect cases
In exceptional cases where the Central Agricultural Office, Food and Feed Safety Directorate has reasons to suspect false negative results at the first official sampling at the holding, a secondary official confirmatory sampling may be performed, composed of faeces or birds (for the detection of salmonella in organs).
In exceptional cases where the National Food Investigation Institute has reasons to suspect false positive sampling performed at the initiative of the operator at the holding, follow-up official sampling may be performed.

3. Examination of the samples

3.1. Preparation of the samples

3.1.1. Boot swabs samples

(a) carefully unpack the pair of boot swabs (or 'socks') to avoid dislodging adherent faecal material and place in 225 ml BPW which has been prewarmed to room temperature;

(b) where five pairs of boot swabs are pooled into two samples, place five individual samples into a minimum of 225 ml BPW and ensure that all the samples are totally immersed in the BPW;

(c) swirl to fully saturate the sample and continue culture by using the detection method in 3.2.

3.1.2. Other faecal material samples

(a) at the laboratory place each sample (or pooled sample as appropriate) into an equal weight of Buffered Peptone Water 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.

3.2. Detection method

The method recommended by the Community Reference Laboratory for Salmonella in Bilthoven, Netherlands, shall be used: the method is a modification of ISO 6579 (2002), where a semi solid medium (MSRV) is used as the single selective enrichment medium. The semi-solid medium should be incubated at 41,5 +/– 1 °C for 2 × (24 –/– 3) hours.

As regards the boot swabs samples and other faecal material samples referred to in paragraph 3.1., it is possible to pool incubated BPW enrichment broth for future culture. To do that, incubate both samples in BPW as normal. Take 1 ml of incubated broth from each sample and mix thoroughly then take 0,1 ml of the mixture and inoculate the MSRV plates in the usual way.

3.3. Serotyping

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

4. Results and reporting

A breeding flock shall be considered positive for the purpose of verifying the achievement of the Community target, when presence of relevant salmonella (other than vaccine strains) was detected in one or more faecal samples (or if there is a secondary official confirmation, in the relevant faecal samples or birds organ samples), taken at the holding. This shall not apply in exceptional cases of suspect breeding flocks where salmonella detection at the holding at the initiative of the operator was not confirmed by official sampling.

The cumulative results from sampling and testing in breeding flocks at holding level shall be accounted for, i.e. each breeding flock shall be counted only once irrespective of the number of sampling and testing operations. Positive breeding flocks shall be counted only once, irrespective of the number of sampling and testing operations.

Reporting shall include:

(a) detailed description of the options implemented for the sampling scheme and the type of samples taken, as appropriate;

(b) number of existing breeding flocks and those tested;

(c) results of the testing;

(d) explanations on the results, in particular concerning exceptional cases.

7.3. Targets on vaccination or treatment

Vaccination is not compulsory in breeding flocks of Gallus gallus. The rules of using vaccination and treatment are laid down in Commission Regulation (EC) No 1177/2006 of 1 August 2006 implementing Regulation (EC) No 2160/2003 of the European Parliament and of the Council as regards requirements for the use of specific control methods in the framework of the national programmes for the control of salmonella in poultry.

8. Detailed analysis of the cost of the programme

Costs related to	Specification	Number of units	Unitary cost in EUR	Total amount in EUR	Community funding requested (yes/no)
1. Testing					
1.1. Cost of the analysis	Test: modified ISO 6579 (2002) using MSRV planned to be carried out in the framework of official sampling	5640	10	56400	yes
	official sampling of verifying the efficiency of disinfection	100	10	1000	yes
	Test: serotyping planned to be carried out in the framework of official sampling(991*3*2*0,0341)	204	40	8160	yes
1.2. Cost of sampling	costs of sampling of approx. 719flocks 15 times and 272*2 times during 2011 + confirmatory testing 10 sampling sessions (one session consists the taking of 5 pairs of swabs)	11300	50	565000	yes
1.3. Other costs					
2. Vaccination or treatment of animal products					
2.1. Purchase of vaccine/treatment of animal products	Cost of vaccine of approx. 5000000 animals two times	10000000	0.1	1000000	yes
	Cost of treatment of approx. 60,000 animals according to Art 2 Of Reg 1177/2006	60000	0.2	12000	no
2.2. Distribution costs	Cost of the distribution (approx. 5000000 animals)	5000000	0.05	250000	no
2.3. Administering costs	Cost of the administration (approx. 5000000	5000000	0.1	500000	no

	animals)				
2.4. Control costs					
3. Slaughter and destruction					
3.1. Compensation of animals	Cost of compensation of the positive animals approx. 5000000x0.0,01=50000 animals (SE/ST/SI/SV/SH infected animals)	50000	8	400000	yes
3.2. Transport costs	Slaughtering of infected flocks can only be authorised when meat from these flocks is treated according to specific food safety legislation. Therefore, slaughter is not likely to be performed at regular contracted slaughterhouses, which makes transport costs much higher than usual, approx. 50000animals, 2 kg/animal	10000	0.04	400	no
3.3. Destruction costs	Cost of destruction of approx. 50000 animals, 2 kg/animal	50000	0.2	10000	no
3.4. Loss in case of slaughtering	This loss is estimated to be of a large extent. However, losses due to the early slaughter of the flock and the decreased income due to hatching eggs which could not be produced is very hard to estimate.				
3.5 Costs from treatment of products (milk, eggs, hatching eggs, etc)		840000	0,2	168000	yes
4. Cleansing and disinfection	When taking into account the number of flocks (991) and the infection rate (with the five relevant serotype) (1%), an approximate number of 10 flocks to be cleansed and disinfected can be estimated. Cleansing and desinfection of an average flock depends on several factors, however an approximate amount of costs is given.	10	500	5000	no
5. Salaries (staff contracted for the programme only)					

6. Consumables and specific equipment					
7. Other costs					
TOTAL				*2979960*	
Community funding requested				*2198560*	*yes*

Central Agricultural Office
Animal Health and Animal Welfare Directorate

HUNGARY

Application

for Community financing for the national control programme of Hungary for

Salmonella spp.
in laying flocks of Gallus gallus

for the year 2011.

30th of April, 2010

Part A

General requirements for the national salmonella control programmes

(a) The main objective of the programme is to comply with existing Community legislation, to achieve Union prevalence target within the defined time period available as regards laying flocks of Gallus gallus in the territory of Hungary. The target is an annual reduction of 10% of the positive flocks regarding the two zoonotic Salmonella serotypes most relevant in relation to public health (S. Enteritidis, S. Typhimurium).

(b) Protection against salmonellosis is mandatory pursuant to the relevant EU provision as of 1 January 2008. A Decree was created and came into force on the 7th of January, 2008, (Decree 2/2008. (I. 4.) of the Minister of Agriculture and Rural Development on specific rules of protection against salmonellosis) This Decree was repealed and a new Decree came in force on the 6th on January 2010 (Decree 180/2009. (XII. 29.) of the Minister of Agriculture and Rural Development on specific rules of protection against salmonellosis (hereinafter: "Decree"). The aim of creating the first Decree was to ensure compliance with the changes in the Community legislation. The Decree sets the conditions of the obligatory control measures in breeding, laying flocks and voluntary (mandatory from 2009) measures in broiler flocks of Gallus gallus against specified Salmonella serotypes. The Decree complies with the minimum sampling requirements laid down in part B of Annex II to Regulation (EC) No 2160/2003 of the European Parliament and of the Council[1] indicating the relevant animal population and phases of production which sampling cover

rearing flocks — day-old chicks

— four-week-old birds

— two weeks before moving to laying phase or laying unit

adult breeding flocks — every second week during the laying period

The new Decree was issued, because sampling of turkey flock became mandatory. Also, the structure of the Decree is new and experiences regarding the implementations of the Programmes were built in.

More information about testing scheme: please see *Part B Chapter 7.2*

(c) The Decree compiles with the specific requirements laid down in Parts C, D and E of Annex II to Regulation (EC) No 2160/2003

(d) 1 General

1.1. The short summary referring to the occurrence of the salmonellosis [zoonotic salmonella] in Hungary with specific reference to the results obtained in the framework of monitoring in accordance with Article 4 of Directive 2003/99/EC of the European Parliament and of the Council[2], particularly highlighting the prevalence values of the salmonella serovars targeted in the salmonella control programmes: Please see Part B Chapter 6.

---

1 OJ L 325, 12.12.2003, p. 1.

2 OJ L 325, 12.12.2003, p. 31.

1.2. The structure and organization of the relevant competent authorities: Please see Annex I.

1.3. Laboratories involved in the programme must be accredited by the National Accreditation Body (NAT) and supervised by the National Salmonella Reference Laboratory (NRL) of the Republic of Hungary (Food and Feed Safety Directorate (formerly named: National Food Investigation Institute), Central Agricultural Office). The NRL is in charge of coordination of the laboratories, the use of appropriate laboratory methods as well as for co-operation with the Community Reference Laboratory in Bilthoven (NL).

1.4. Methods used in the examination of the samples in the framework of the programme: Please see Part B Chapter 7.3

1.5. Official controls (including sampling schemes) at feed, flock and/or herd level: Please see Part B Chapter 7.2.1.2.

1.6. Measures taken by the competent authorities with regard to animals or products in which the presence of *Salmonella spp.* have been detected, in particular to protect public health: Please see Part B Chapter 4.4.3. and Chapter 4.4.4.

1.7. National legislation relevant to the implementation of the programme, including national provisions concerning the activities set out in the programme: Please see Part B Chapter 4.4.7

1.8. Financial assistance provided to food and feed businesses in the context of the programme:
Costs and benefits are calculated based on the previous year's data of the Poultry Product Board of Hungary. In the case of laying flocks costs will occur from the intensive sampling of the flocks as well as the tests performed on the samples (including both testing on the initiative of the operator and the veterinary authority), the measures to be applied in the case of infection (slaughter or killing of the flock, condemnation, transportation, cleansing and desinfection) as well as financial losses due to decreased income for the poultry industry.
Act No. XLVI. of 2008. on the food chain and its official control and Decree No. 45/2010. (IV.23.) Minister of Agriculture and Rural Development on the rules of financing the national programs for the eradication, control and monitoring of certain animal diseases and zoonoses and Decree No. 148/2007. (XII.7.) on the prevention of certain animal diseases and the order of claiming financial support and payment regarding their overcome in 2010 give the financial guarantee of the national programme.
In case of a positive flock, when compensation occurs, valuation of the birds is performed by the district chief veterinary officer according to a scale provided by the Poultry Product Board. It is based on a calculating system, where the day-old chicks' price is considered as 100%, and the value of a bird depends on its production cycle and age (given in percentage)

2. Concerning food and feed businesses covered by the programme

2.1. The structure of the production

Laying flocks of Gallus gallus in Hungary can be structured to rearing and production flocks, size, and the type of holdings.

2.2. The structure of the production of feed.

Feeding of poultry, including laying flocks of Gallus gallus is based on cereal products, mainly on corn, barley and wheat. Soybean and fishmeal is used as a source of protein.
Commercial feed producers are operating according to GMP standards. Laying flocks mainly use commercial pelleted feed, the technology of production of which includes heat treatment.
In Hungary, control of feedingstuffs is performed according to three main pieces of legislation:
Act No. XLVI. of 2008 on the food chain and its official control, Governmental Decree 274/2006 (XII. 23) on the establishment and operation of the Central Agricultural Office and Decree of the Ministry of Agriculture and Rural Development No. 43/2003. (IV. 26.) on the implementation of the above Act.
In the Act general principles of the control of feed are laid down general principles of the control of feed, sets the competent authorities and allocates the tasks to these services.
Ffeed production plant may be authorised by the competent regional organization (County Directorate of Food Chain Safety and Animal Health) of the Central Agricultural Office. The authorisation must be renewed at periods of a maximum of 5 years. Other authorities are also involved in the authorisation process.
The registration of the feed production units is done by the Directorate of Food Chain Safety and Animal Health of County Agricultural Office.
The Act states that the feedingstuffs produced may neither pose a direct health risk to liveflock, nor an indirect risk to public health.
Therefore, the competent Directorate of Food Chain Safety and Animal Health of County Agricultural Office perform regular controls of the feed production plants, including the production, keeping, marketing, transport and use of feed produced. Controls also include compliance with feed hygiene rules, safety, composition, microbiological safety of feedingstuffs, as well as many other parameters such as the presence of prohibited substances, packaging, labelling etc.
In case of non-compliance with any of the parameters listed in the Act and the Decree, the competent County Directorate may prohibit the production, keeping, marketing, transport, export, import or transport of the relevant feed. If such feed was already used, the Directorate of Food Chain Safety and Animal Health of County Agricultural Office has a duty to notify the county level public health authority.
The Decree gives detailed instruction to authorities and stakeholders on how to implement the Act. Annex 20 to the Decree sets out the maximum tolerable amount of Salmonella spp. in food and the related ISO standards. According to ISO 6579:2002, feedingstuffs must show zero Salmonella spp. / 25 grams.
In addition, the same Annex states that feedingstuffs must be free of any pathogens which may pose a direct risk to animal health and/or an indirect risk to public health.

2.3. Relevant guidelines

Hungary has relevant guidelines for good animal husbandry practices or other guidelines (mandatory or voluntary) on biosecurity measures defining the hygiene management at farms, the measures preventing incoming infections carried by animals, feed, drinking water, people working at farms, and about hygiene in transporting animals to and from farms. The guideline of Decree No. 2/2008. (I. 4.) of the Minister of Agriculture and Rural

Development on specific rules of protection against salmonellosis, the guideline about feed control, the guideline of animal transports and the Hungarian Poultry Product Board's guideline for good practice. The new guideline of Decree No 180/2009. is under procedure. All farms have to made an own biosecurity programme and all have to get checked by the Directorate of Food Chain Safety and Animal Health of County Agricultural Office.

2.4. Routine veterinary supervision of farms:

Controls are planned annually by the Food Chain Safety Deputy President of Central Agricultural Office. Number of controls depends on risk assessment.

An official veterinarian can also perform on-spot checks when taking samples, but it is not necessarily connected. Inspections are performed based on the national program.

2.5. Registration of farms:

All poultry farms have to be registered according to Decree no. 119/2007. (X.18) of MARD on keeping places, breeding farms and national registration system of their data if they meet the relevant criteria. For more information please see Part B Chapter 4.4.1.

All poultry farms have to registered according to Ministerial Decree no. 119/2007. (X.18) on keeping places, breeding farms and national registration system of their data, which meet one of these criteria:

- has to be registered due to a piece of legislation regarding animal health (such as the national Decree on Salmonella)
- the owner would like to apply for financial support

All commercial poultry farms have to be registered:

- which are considered as large-scale holdings according to a different piece of registration (that means: 2000 broilers or 500 other adult poultry)
- which sends poultry directly to the slaughterhouse
- which have a slaughtering permit for small producers.

2.6. Record-keeping at farms:

All documents concerning to the programme must be kept for 3 years. The documentation has to contain all data about animals, tests, transports, samples and medication.

2.7. Documents to accompany animals when dispatched.

Commercial poultry consignments are accompanied with animal health certificates according to Directive 90/539/EC. Consignments with national destinations are accompanied with animal health certificates according to Decree 41/1997. (V. 28.) FM appendices 8/a and 8/b.

In accordance with Paragraph 85. of Decree No 41/1997. of the Minister of Agriculture on the publication of the Animal Health Code, the official veterinarian carries out a flock examination within 12 hours before transportation, and on the basis of the financing/allowance plan, fills out the animal health certification in the appendices 8/a. and

8/b., certifies the place of origin of the day-old animals, their circumstances free from epidemic, the name of the vaccine used, the time and method of the immunization. Because of the changes occurred since the publication of the legislation, this ordinance cannot be fulfilled in these days.

„Animals can only be transported when accompanied by a valid certification attested by the veterinarian responsible for treatment" in accordance with point 4.2.1. point (Starting of poultry consignments) of the guide which was prepared for poultry hatcheries that are obliged to TIR registration, in accordance with point d) of Paragraph 6. of Decree No 120/2007. (X. 18.) of the Minister of Agriculture and Rural Development on establishing and operating of the Poultry Information System (hereinafter: BIR regulation). In pursuance with point 4.2.1., „The hatchery starting the consignment has to fill in the Poultry movement form 2740, on the upper part of which the data of starting has to be given".

The poultry animal health certificate laid down in the BIR regulation is not to replace the certificate 8/b., as the authority responsible for animal health takes part in issuing the latter only.

At the same time, even the certification 8/a. can not be replaced by the introduction of the BIR regulation, as certain data that have to be certified by the veterinarian in the certificate 8/a are not placed on the latter, for example immunizations carried out in the flock, diagnostic examinations and the results thereof.

In pursuance of the abovementioned regulations, all three certifications are required for the transport of the day-old poultry. The BIR certification is drawn up by the veterinarian responsible for treatment, while certifications 8/a. and 8/b. are filled in by the approved veterinarian, in accordance with the Governmental Decree No 113/2006. (V. 12.) on the competence and detailed rules of the activity of the approved veterinarian, with the exception of the case when the approved veterinarian is not the treating veterinarian, because in those cases the certification 8/a. has to be filled in by the veterinarian of the hatchery.

As it can be seen from above, the current legislation of movement documentations doesn't seem to be unambiguous as regards several points.

For solving the problem, a working group was established. The working group is predestinated for revising the form and content of certificates for inland live animal transportation and as far as possible, for the harmonisation thereof.

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

At central level three persons are responsible for the TRACES, of which one is responsible for the technical part (for example: giving access to the system). The two other colleagues (one at MRD and one at CAO) are the trade contact points of Hungary and are keeping the contact wit the counterparts of the member states.

Please see Part A 2.7. and Part B Chapter 4.2. and Chapter 4.4.1.

1. Identification of the programme

Member State: **Hungary**

Disease: **Infection of animals with zoonotic *Salmonella spp.***

Animal population covered by the programme: **Laying flocks of Gallus gallus**

Year of implementation: **2011**

Reference of this document: **02.3/897/5/2010.**

Contact (name, phone, fax, e-mail): **Dr. Imre Nemes**
Director
Animal Health and Animal Welfare Directorate
Central Agricultural Office
Tel: +36-1-460-6300 ext. 112
Fax: +36-1-222-6064
e-mail: nemesi@oai.hu

Date sent to the Commission: **30th of April, 2010**

2. Historical data on the epidemiological evolution of zoonotic *salmonellosis* specified in point 1

Monitoring and control programmes for Salmonella spp. (S. Enteritidis and S. Typhimurium) started in Hungary in 1997 by issuing official guidelines for the poultry sector. The goal of the project was to achieve similar targets as which were set by Council Directive 92/117/EEC. The collection of guidelines were ordered by the Ministry of Agriculture and were prepared by an expert group consisting of both Hungarian experts of various backgrounds (Hungarian Academy of Science, National Food Investigation Institute, Central Veterinary Institute and numerous practicing veterinarians) and experts of the Agri-Livestock Consultant Ltd (W. Edel and C. Wray). The work was financed by the PHARE programme of the European Union under project No. HU 9304-05-02. The programme covered the whole poultry sector in relation of Gallus gallus, breeding flocks, hatcheries, broiler flocks, table egg producing layer flocks, egg packaging and distribution establishments, poultry slaughterhouses, cutting plants as well as feed mills. The guidelines stated clearly that there is an urgent need for centralised official administrative measures in the form of a ministerial decree by the Minister of Agriculture.

The first decree was created in the year 2002: Decree 49/2002. (V. 24.) of the Minister of Agriculture and Rural Development on protection against salmonellosis and poultry typhus and on retaining officially free status, and was modified by the Decree 97/2003. (VIII. 19) Minister of Agriculture and Rural Development. A new Decree was created and came into force on the 7th of January, 2008, and can be referred to as Decree 2/2008. (I. 4.) of the Minister of Agriculture and Rural Development on specific rules of protection against salmonellosis. The

aim of creating the new Decree was to ensure compliance with the changes in the Community legislation.

Decree 2/2008 of MARD set the conditions of the obligatory control measures in breeding, laying flocks and voluntary (mandatory from 2009) measures in broiler flocks of Gallus gallus against specified Salmonella serotypes. As a prerequisite, there is an obligation of the holdings keeping breeding flocks of Gallus gallus to be registered by the State Veterinary Service. Results of testing required by the Decree are also to be notified to the Directorate of Food Chain Safety and Animal Health of County Agricultural Office (formerly named: County Animal Health and Food Control Service). Decree 2/2008 of MARD had been amended 5 times till it was repealed and replaced by Decree 180/2009 of MARD (hereinafter referred as 'Decree') as of 6th of January, 2010. The new Decree covers the same area, but the structure of it was modified and enhanced based on experience.

The baseline study of the prevalence of Salmonella spp. in laying flocks of Gallus gallus carried out according to Commission Decision 2004/665/EC showed that infection of laying flocks for Salmonella Enteritidis and Salmonella Typhimurium was 33,54%, at the beginning of the program. The Community target which is set by Commission Regulation (EC) No 1168/2006 Art. 1 a) iii for this prevalence is 30% reduction per year in the infected flocks. This goal can only be achieved by a rigorous control programme using extensive professional and financial resources. At the beginning of the second year of the program, the infection of laying flocks for Salmonella Enteritidis and Salmonella Typhimurium was 8,65%. At the beginning of the third year of the program, the infection of laying flocks for Salmonella Enteritidis and Salmonella Typhimurium was 2,83 %.

3. Description of the submitted programme

The main objective of the programme is to comply with existing Community legislation, to achieve Community prevalence targets within the defined time period available as regards laying flocks of Gallus gallus in the territory of Hungary. The programme covers the two zoonotic Salmonella serotypes most relevant in relation to public health (S. Enteritidis, S. Typhimurium).

Included in the programme are all laying flocks of Gallus gallus registered in the territory of Hungary.

Laboratories involved in the programme must be accredited by the National Accreditation Body (NAT) and supervised by the National Salmonella Reference Laboratory (NRL) of the Republic of Hungary (Food and Feed Safety Directorate, Central Agricultural Office). The NRL will be in charge of coordination of the laboratories, the use of appropriate laboratory methods as well as for co-operation with the Community Reference Laboratory in Bilthoven (NL).

4. Measures of the submitted programme

4.1. Summary of measures under the programme

Duration of the programme:

First year: 2008 Last year: 2010

☒ Control

- ☒ Testing
- ☒ Slaughter of positive animals
- ☒ Killing of positive animals
- ☒ Vaccination
- ☐ Treatment
- ☒ Disposal of products

☐ Eradication

- ☐ Testing
- ☐ Slaughter of positive animals
- ☐ Killing of positive animals
- ☐ Extended slaughter or killing
- ☐ Disposal of products

☒ Monitoring or surveillance

☒ Other measures *(specify)*:

Flocks positive for S. Typhimurium or S. Enteritidis will be subject to movement control. As soon as the NRL confirms the infection, the flock shall be sent to isolated slaughter, latest at the end of the production period. Meat originating from such flocks may only be authorised for human consumption after meeting all relevant food safety requirements as regards of the Regulation (EC) No. 2160/2003. Annex II. Point E.

- Eggs originating from such flocks do not be marketed according to the Regulation (EC) No. 1237/2008. of 23 October 2007 amending Regulation (EC) No 2160/2003 of the European Parliament and of the Council and Decision 2006/696/EC as regards the placing on the market of eggs from *Salmonella* infected flocks of laying hens.

- After emptying the relevant holding operators are required to implement proper cleansing and desinfection. Effectiveness of the procedure is controlled by the competent regional animal health authority. Restocking is only authorised, when cleansing and desinfection is deemed to be satisfactory.

4.2. Designation of the central authority charged with supervising and coordinating the departments responsible for implementing the programme:

All holdings must be registered at the district veterinary office. The official senior veterinary officer keeps and updates the record of holdings participating the programme. The official senior veterinary officer also declares the status of the holdings according to their actual serological status.

The 19 Directorates of Food Chain Safety and Animal Health of County Agricultural Offices coordinate and supervise the programme in their territory. They are required to annually report the actual status of the programme to the Animal Health and Animal Welfare Directorate of the Central Agricultural Office.

Name:	Central Agricultural Office Animal Health and Animal Welfare Directorate
Name in Hungarian:	Mezőgazdasági Szakigazgatási Hivatal Központ Állategészségügyi és Állatvédelmi Igazgatóság
Address:	1149 Budapest, Tábornok u. 2., Hungary
Tel.:	+36-1-460-6300
Fax:	+36-1-222-6065

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

The programme will be implemented on the whole territory of Hungary. The programme is compulsory as from the 1st January, 2008

4.4. Measures implemented under the programme

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

According to Paragraph 5. of the Decree the operator is obliged to register for the national control programmes, pursuant to Article 8 (3). Article 8 (3) states that:

A business operator obliged to or voluntarily undergoing control pursuant to paragraph (1) shall apply for participation in the national control programme by submitting an epidemiological action plan approved by the private veterinarian responsible for the supervision of the poultry flock or hatchery at the competent district office by virtue of the location of the holding site, which shall register the business operator in accordance with Article 3(4) (a).

.

4.4.2. Measures and terms of legislation as regards the identification of animals: –

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

7 of paragraph 9 of the Decree:
The laboratory shall immediately notify the district office and the veterinarian taking the sample of the test results and - in the event of positive results - the business operator and the regional organization of the CAO as well. In the event of positive results the laboratory shall send the isolated strain for confirmatory testing and serotyping together with one original copy of the sampling form to the NRL. The testing laboratory must retain the copy of the sampling form for three years.

4.4.4. Measures and terms of legislation as regards the measures in case of a positive result:

Whenever a positive flock is found by own-check sampling in the frame of the programmes in breeding flocks and laying hens, than this flock should be considered as a **suspect flock** and **movement restrictions are imposed** on this **flock.**

Procedure in the event of positive test results

Article 11

(1) If the sample taken from a flock of breeding hens, a flock of laying hens or a flock of breeding turkeys results positive the operator shall revise the epidemiological action plan within 22 working days and shall resubmit it to the District Office for approval. The revised plan shall contain the review of the hygiene conditions, especially the efficiency of the desinfection and pest control procedures, the results of the test to find possible reasons for infection and the list of measures considered necessary. The District Office shall evaluate the plan within 22 working days and may ask the operator to amend it if they find it unsatisfactory.

(2) If a sample taken at a flock of broilers and fattening turkeys results positive the business operator shall revise the epidemiological action plan within 11 working days of receiving the result and shall resubmit it to the District Office for approval. The action plan shall contain the review of the hygiene conditions; especially the efficiency of the desinfection procedures and of pest control (insect and rodent extermination), the results of the test to identify possible reasons for infection and the list of measures considered necessary. The District Office shall evaluate the plan within 11 working days and may ask a business operator to amend it if they find it unsatisfactory.

(3) If the results of salmonella testing of broiler and fattening turkey flocks results positive, there is a rapid method – available on the business operator's request - of excluding infection by Salmonella Enteritidis and Salmonella Typhimurium serotypes at a certified laboratory designated by the CAO using group-specific 'O' antibody. In this case the laboratory which performs the 'O' group typing will send the isolated strain to the NRL for serotyping.

(4) If, using the group specific 'O' antibody, infection by Salmonella Enteritidis and Salmonella Typhimurium serotypes can be excluded, then the given flock of broilers or fattening turkeys may be slaughtered by decision of the District Office. Measures pursuant to paragraph (2) and (5) shall be applied at the same time.

(5) When, during serotyping, the NRL detects infection with a serotype other than Salmonella Enteritidis or Salmonella Typhimurium, the District Office shall immediately withdraw the official certificate of infection-free status of the flock, if the operator has one, in respect of the given serotype. The operator shall clean the site after the production cycle (building, equipment and machinery, connecting rooms and paths) and - in accordance with specific piece of legislation on issuing the Animal Health Code – for stringent desinfection, rodent extermination and desinsectisation.

(6) Operators may restock the airspace concerned only if they verify the efficiency of desinfection when an environmental swab sample tests negative in a laboratory. The business operator shall bear the costs of taking and testing environmental swabs.

(7) If in the case of a flock of breeding hens the NRL detects infection by a salmonella serotype that is considered a Community target under Regulation (EC) No 1003/2005, Article 12 (9) shall apply in respect of feed and Article 12(8) in respect of restocking of the air space.

Procedure in the event of Salmonella Enteritidis or Salmonella Typhimurium infection

Article 12

(1) If during serotyping the NRL detects infection with Salmonella Enteritidis or Salmonella Typhimurium the District Office shall order restriction of movement of the flock concerned and the products originating therefrom and shall withdraw the official certificate of infection-free status without delay. The official certificate of infection-free status in respect of other flock from the holding shall also be withdrawn at the same time unless the infected flock have been appropriately isolated.

(2) Testing may only be repeated by official sampling ordered by the regional organization of the CAO pursuant to Article 9(10). Sampling for the official test may only be carried out by official or approved veterinarians within the shortest time possible. The NRL shall test the samples and at the same time conduct an examination to detect antimicrobial inhibitory effects. If the result from the repeated sampling is negative or it results in an infection with salmonella serotypes not covered by the national control programmes and no antimicrobial inhibitory effect can be detected, the District Office shall lift the restriction of movement in respect of the flock and the products thereof. If antimicrobial inhibitory effects can be detected the District Office shall investigate the circumstances of the use of antibiotics and maintain the restriction on movement until it is proven that antibiotics were used for purposes other than to treat the infection of salmonella.

(3) If repeated testing reveals infection by Salmonella Enteritidis or Salmonella Typhimurium or the regional organization of the CAO not orders a repeated test, the flock concerned may be slaughtered after preliminary consultation with the slaughterhouse and the official veterinarian supervising the slaughterhouse and in accordance with the specific veterinary health rules on separate slaughter.

(4) In the event of infection by Salmonella Enteritidis or Salmonella Typhimurium in a flock of breeding hens and turkeys Annex II/C to Regulation (EC) No 2160/2003 shall apply and Annex II/D to Regulation (EC) No 2160/2003 shall apply to flocks of laying hens.

(5) Meat from an infected flock may be placed on the domestic market without eliminating salmonella if the production processes following the slaughter of the infected flock are separated from the processing and treatment of other raw materials of animal origin and the official veterinarian supervising the slaughterhouse has been informed 48 hours before slaughter. Food materials originating from slaughtering and processing infected flock shall carry the text "for consumption only after heat treatment (thorough frying or cooking)" clearly and indelibly marked on every smallest packaging unit close to the identification label, close to the traceability marking; and on the accompanying commercial document.

(6) If meat from infected flock is processed after salmonella elimination (heat treatment, heat treatment as part of product manufacturing) the processes following slaughter of the infected flock shall be separated from the processing of other raw materials of animal origin until salmonella has been efficiently eliminated, this has been certified and the official veterinarian supervising the slaughterhouse has been informed 48 hours before slaughter. Food materials originating from infected flock shall carry the text "Originates from salmonella-infected flock" on every smallest packaging unit close to the identification label and the premises traceability marking and may only be used to produce food when the technological manufacturing processes guarantee that the product will be salmonella-free. Every such food item shall be verified by microbiology testing carried out in a laboratory before the are cleared for retail trade and the official veterinarian supervising the slaughterhouse shall be informed thereof. The production plant may place heat treated products certified as salmonella-free on the market on the basis of the results of own checks.

(7) After the keeping place of the infected flock has been emptied the operator shall provide for cleaning the building, equipment and machinery, connecting rooms and paths and - in accordance with specific piece of legislation on the issuing of Animal Health Code – for reinforced desinfection, rodent extermination and disinsectisation. The remaining litter shall be disposed of in accordance with special legislation on the treatment of waste of animal origin. After these tasks have been accomplished the business operator shall inform the District Office, which will verify the efficiency of the measures implemented.

(8) The District Office shall authorise the restocking of the airspace concerned only if the effectiveness of desinfection was verified by environmental swab samples test negative in the laboratory.

(9) The feed fed to infected flock shall be tested without delay in accordance with the special legislation on the manufacturing, placing on the market and use of feed, except when day-old birds test positive. Until testing yields negative results such feed may only be fed to infected flock. If feed tests positive it has to be disposed of in accordance with the special legislation on the manufacturing, placing on the market and use of feed, and the equipment used for its storage and transportation shall be disinfected. If infection has been detected, specific testing shall be carried out to detect salmonella at the feed operator from which the feed originates.

(10) Hatcheries to which infected hatching eggs have been transported shall act in accordance with Annex II/C(3) and (5) of Regulation (EC) No 2160/2003 and shall apply the provisions of paragraph (7) and (8). If a hatchery has a certificate of infection-free status the district office

shall immediately withdraw this. The hatchery must cooperate in tracing the origins of infection on the basis of its records and shall bear the costs.

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

See point 4.4.4.!

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

See point 4.4.4.!

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

- Regulation (EC) No. 2160/2003. of the European Parliament and of the Council on the control of Salmonella and other food-borne zoonotic agents
- Commission Regulation No. 1168/2006 of 31. July 2006 implementing Regulation No. 2160/2003 as regards a Community target for reduction of prevalence of certain salmonella serotypes in laying flocks of Gallus gallus and amending Regulation (EC) No 1003/2005
- --
- Commission Regulation (EC) No 1177/2006 of 1 August 2006 implementing Regulation (EC) No 2160/2003 of the European Parliament and of the Council as regards requirements for the use of specific control methods in the framework of the national programmes for the control of salmonella in poultry
- Commission Regulation (EC) No. 1237/2007. of 23 October 2007 amending Regulation (EC) No 2160/2003 of the European Parliament and of the Council and Decision 2006/696/EC as regards the placing on the market of eggs from *Salmonella* infected flocks of laying hens.
- Act No. XLVI. of 2008. on the food chain and its official control
- Decree No. 180/2009. (XII.29.) of the Minister of Agriculture and Rural Development on specific rules of protection against salmonellosis
- Decree No. 41/1997. (V. 28.) of the Minister of Agriculture on Code of Veterinary Rules

The vaccination protocol has to be enclosed in the epidemiological control plan (which the operator submits as an application for participation in the national control programme.)

Furthermore, according to Article 14 (3) of the Decree:

"Documentation and treatment log has to be kept on the use of vaccines, which is checked by the district office based on risk-based assessment. Checking shall cover the proper use of vaccines and that the application was performed as in the instructions of use. The operator shall verify that the appropriate amount of vaccines was used by invoices, and the veterinarian verifies the proper application by his stamp.

(The assumption of the vaccine compensation claim is the common declaration made and signed by the animal owner and the veterinary practitioner on the vaccine usage.)

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

– Veterinary Act No. XLVI. of 2008. on the food chain and its official control
- Decree No. 45/2010. (IV.23.) Minister of Agriculture and Rural Development on the rules of financing the national programs for the eradication, control and monitoring of certain animal diseases and zoonoses

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

Hungary has relevant guidelines for good animal husbandry practices or other guidelines (mandatory or voluntary) on biosecurity measures defining the hygiene management at farms, the measures preventing incoming infections carried by animals, feed, drinking water, people working at farms, and about hygiene in transporting animals to and from farms. The guideline of Decree No. 2/2008. (I. 4.) of the Minister of Agriculture and Rural Development on specific rules of protection against salmonellosis, the guideline about feed control, the guideline of animal transports and the Hungarian Poultry Product Board's guideline for good practice. The new guideline of Decree No 180/2009. is under procedure. All farms have to made an own biosecurity programme and all have to get checked by the Directorate of Food Chain Safety and Animal Health of County Agricultural Office.

5. General description of the costs and benefits:

Costs and benefits are calculated based on estimation and previous year's data and information. In the case of laying flocks costs will occur from the intensive sampling of the flocks as well as the tests performed on the samples (including both testing on the initiative of the operator and the veterinary authority), the measures to be applied in the case of infection (slaughter or killing of the flock, condemnation, transportation, cleaning and desinfection) as well as financial losses due to decreased income for the poultry industry.

A detailed description of the costs is listed under point 8.

Benefits in case of the successful programme include improved food safety which contributes largely to the achievement of public health goals of the Community.

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

As the control programme started by the 1st of January, 2008, evolution data are available only from the end of 2008.

6.1. Evolution of zoonotic salmonellosis

6.1.1. Data on evolution of zoonotic salmonellosis

Year: 1 January 2008 - 30 May 2008 -

Situation on date: First year of the programme

Animal species: laying flocks of Gallus gallus

Disease/infection[6]: Salmonellosis

Region (a1)	Type of flock[5]	Total number of flocks[a2]	Total number of animals	Total number of flocks under the programme	Total number of animals under the programme	Number of flocks checked [a1]	Number of positive[6] flocks[a2]			Number of flocks depopulated[a3]		Total number of animals slaughtered or destroyed [a4]		Quantity of eggs destroyed (number or kg) [a4]		Quantity of eggs channelled to egg products (number)	
							(a1)	(a2)	(a3)	(a3)	(a4)	(a4)	(a3)	(a4)	(a3)	(a4)	(a3)
Pest (including Budapest)	Laying hen flocks	110	352340	110	352340	10	1	0	0	0	0	0	0	0	0	0	0
Fejér	Laying hen flocks	61	289460	61	289460	32	0	0	1 S.Sent	0	0	0	0	0	0	0	0
Komárom-Esztergom	Laying hen flocks	71	698117	71	698117	26	1	9	0	1	0	36200	0	0	0	1200000	0
Veszprém	Laying hen flocks	36	162086	36	162086	12	0	0	0	0	0	0	0	0	0	0	0
Győr-Moson-Sopron	Laying hen flocks	26	229250	26	229250	13	0	0	1S.Bl.	0	0	0	0	0	0	0	0
Vas	Laying hen flocks	43	299014	43	299014	16	0	0	0	0	0	0	0	0	0	0	0
Zala	Laying hen flocks	32	61788	32	61788	9	0	0	1	0	0	0	0	0	0	0	0

Baranya	Laying hen flocks	22	19611	22	19611	18	0	0	0	0	0	0	0	0	0	0	0
Somogy	Laying hen flocks	8	2747	8	2747	5	0	0	0	0	0	0	0	0	0	0	0
Tolna	Laying hen flocks	11	11550	11	11550	3	0	0	0	0	0	0	0	0	0	0	0
Borsod-Abaúj-Zemplén	Laying hen flocks	100	557114	100	557114	15	4	0	0	0	0	0	0	0	0	0	0
Heves	Laying hen flocks	30	82990	30	82990	2	0	0	0	0	0	0	0	0	0	0	0
Nógrád	Laying hen flocks	8	16190	8	16190	5	1	0	0	0	0	0	0	0	0	0	0
Hajdú-Bihar	Laying hen flocks	47	313364	47	313364	15	2	0	1	0	0	0	0	0	0	0	0
Jász-Nagykun-Szolnok	Laying hen flocks	34	283970	34	283970	6	0	0	0	0	0	0	0	0	0	0	0
Szabolcs-Szatmár-Bereg	Laying hen flocks	30	168068	30	168068	12	0	0	0	0	0	0	0	0	0	0	0
Bács-Kiskun	Laying hen flocks	152	1162054	152	1162054	69	4	0	0	1	0	5000	0	0	0	0	0
Békés	Laying hen flocks	25	289047	25	289047	19	0	0	0	0	0	0	0	0	0	0	0
Csongrád	Laying hen flocks	20	37200	20	37200	2	1	0	0	0	0	0	0	0	0	15000	0
Total		**866**	**5035960**	**866**	**5035960**	**289**	**14**	**9**	**4**	**2**	**0**	**41200**	**0**	**0**	**0**	**12015000**	**0**

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

SI	Salmonella infantis
SM	Salmonella Mbandaka
S.L.	Salmonella Livingstone
S.Thom.	Salmonella Thomson
S.O7	Salmonella O7 serov.
S.Bl.	Salmonella Blockley
S. Senf.	Salmonella Senftenberger

Year: 30 March 2008 – 31 December 2008 - **Situation on date: First year of the programme**

Animal species: laying flocks of Gallus gallus **Disease/infection[b]:** Salmonellosis

Region (a1)	Type of flock[c]	Total number of flocks[d]	Total number of animals	Total number of flocks under the programme	Total number of animals under the programme	Number of flocks checked [d]	Number of positive[e] flocks[a]			Number of flocks depopulated[f] [a]		Total number of animals slaughtered or destroyed [a]		Quantity of eggs destroyed (number or kg) [a]		Quantity of eggs channelled to egg products (number)	
							(a1)	(a2)	(a3)	(a3)	(a4)	(a4)	(a3)	(a4)	(a3)	(a4)	(a3)
Pest (including Budapest)	Laying hen flocks	110	352340	110	352340	110	2	0	5	0	1	24190	0	0	0	324 554	0
Fejér	Laying hen flocks	61	289460	61	289460	61	7	0	0	0	2	29486	0	0	0	0	0
Komárom-Esztergom	Laying hen flocks	71	698117	71	698117	71	1	3	0	0	0	0	0	0	0	0	0
Veszprém	Laying hen flocks	36	162086	36	162086	36	4	0	0	0	0	0	0	0	0	0	0
Győr-Moson-Sopron	Laying hen flocks	26	229250	26	229250	26	1	0	0	0	0	0	0	0	0	0	0
Vas	Laying hen flocks	43	299014	43	299014	43	3	1	1	0	1	27043	0	0	0	0	0
Zala	Laying hen flocks	32	61788	32	61788	32	0	0	0	0	0	0	0	0	0	0	0
Baranya	Laying hen flocks	22	19611	22	19611	22	1	0	1 S.I.	0	0	0	0	0	0	0	0

Somogy	Laying hen flocks	8	2747	8	2747	8	0	1	0	0	1	209	0	0	0	0	0
Tolna	Laying hen flocks	11	11550	11	11550	11	0	0	1 S.I.	0	0	0	0	0	0	0	0
Borsod-Abaúj-Zemplén	Laying hen flocks	100	557114	100	557114	100	7	1	1 S.Pl 1 S.Ri	0	0	0	0	0	0	0	0
Heves	Laying hen flocks	30	82990	30	82990	30	1	0	2 S.I.	0	0	0	0	0	0	0	0
Nógrád	Laying hen flocks	8	16190	8	16190	8	2	0	0	0	1	3500	0	400	0	0	0
Hajdú-Bihar	Laying hen flocks	47	313364	47	313364	47	1	0	0	0	1	370	0	0	0	0	0
Jász-Nagykun-Szolnok	Laying hen flocks	34	283970	34	283970	34	1	0	2 S.I.	0	0	0	0	0	0	0	0
Szabolcs-Szatmár-Bereg	Laying hen flocks	30	168068	30	168068	30	0	0	0	0	0	0	0	0	0	0	0
Bács-Kiskun	Laying hen flocks	152	1162054	152	1162054	152	11	2	8 S.I.	0	1	249	0	0	0	137 635 6	0
Békés	Laying hen flocks	25	289047	25	289047	25	0	0	0	0	0	0	0	0	0	0	0
Csongrád	Laying hen flocks	20	37200	20	37200	20	2	0	0	0	0	0	0	30000	0	0	0
Total		**866**	**5035960**	**866**	**5035960**	**866**	**44**	**8**	**22**	**0**	**8**	**85047**	**0**	**30400**	**0**	**170 091 0**	**0**

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

SI Salmonella infantis
SM Salmonella Mbandaka
S.L. Salmonella Livingstone
S.Thom. Salmonella Thomson
S.O7 Salmonella O7 serov.
S.Bl. Salmonella Blockley
S. Senf. Salmonella Senftenberger

Year: 2009.01.01.-13.31. **Second year of the programme**

Animal species: Gallus gallus, layer **Disease:[a]: zoonotic salmonella**

Region (a1)	Type of flock[b]	Total number of flocks[c]	Total number of animals	Total number of flocks under the programme	Total number of animals under the programme	Number of flocks checked[d]	Number of positive[e] flocks[f]			Number of flocks depopulated[g]		Total number of animals slaughtered or destroyed [g]		Quantity of eggs destroyed (number) [g]		Quantity of eggs channelled to egg products (number)	
							(a1)	(a2)	(a3)	(a3)	(a4)	(a4)	(a3)	(a4)	(a3)	(a4)	(a3)
Bács-Kiskun	Laying hen flocks	262	2785486	262	2785486	262	3	0	8	0	3	16287	0	0	0	84580	0
Baranya	Laying hen flocks	14	38120	14	38120	14	1	0	0	0	1	7000	0	748	0	0	0
Borsod-Abaúj-Zemplén	Laying hen flocks	147	932878	147	932878	139	3	0	1	0	3	30085	0	600	0	0	0
Békés	Laying hen flocks	80	771342	80	771342	80	3	0	1	0	3	21032	0	11500	0	50000	0
Csongrád	Laying hen flocks	17	87330	17	87330	17	0	0	0	0	0	0	0	0	0	0	0
Fejér	Laying hen flocks	77	620803	77	620803	77	3	0	0	0	3	21149	0	7020	0	2766800	0
Győr-Moson-Sopron	Laying hen flocks	11	364844	11	364844	11	3	1	2	0	4	14027	0	0	0	594600	0
Hajdú-Bihar	Laying hen flocks	71	831595	81	831595	81	0	0	2	0	0	0	0	0	0	0	0
Heves	Laying hen flocks	60	131060	56	131060	56	3	0	12	0	2	4363	0	930	0	262800	0
Jász-Nagykun-Szolnok	Laying hen flocks	46	396138	46	396138	46	3	0	0	0	2	11030	0	1000	0	0	0
Komárom-Esztergom	Laying hen flocks	37	1380748	37	1683091	37	4	0	5	0	0	0	0	0	0	230000	0
Nógrád	Laying hen flocks	15	9160	15	9160	15	1	0	3	0	1	3500	0	0	0	0	0

Főváros-Pest	Laying hen flocks	94	556485	94	556485	92	2	0	4	0	2	6805	0	3400	0	0	0
Somogy	Laying hen flocks	10	7909	10	7909	9	0	1	3	0	1	30	0	0	0	0	0
Szabolcs-Szatmár-Bereg	Laying hen flocks	51	252355	51	252355	39	0	0	1	0	0	0	0	0	0	0	0
Tolna	Laying hen flocks	5	28200	5	28200	5	2	0	0	0	0	0	0	0	0	0	0
Vas	Laying hen flocks	8	415820	8	415820	8	0	1	1	0	1	0	0	0	0	0	0
Veszprém	Laying hen flocks	51	147651	51	194926	51	0	0	2	0	0	0	0	0	0	0	0
Zala	Laying hen flocks	12	111422	12	111422	12	0	0	0	0	0	0	0	0	0	0	0
Total		1068	9869346	1074	10218964	1051	31	3	45	0	26	135308	0	25198	0	3988780	0

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

SI Salmonella infantis
SM Salmonella Mbandaka
S.L. Salmonella Livingstone
S.Thom. Salmonella Thomson
S.O7 Salmonella O7 serov.
S.Bl. Salmonella Blockley
S. Senf. Salmonella Senftenberger

Stratified data on surveillance and laboratory tests

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

Year: 2009.01.01.-13.31. **Animal species [a]: Gallus gallus** **Category[b]: layer**

Description of the used serological tests: following the Kaufmann-White scheme

Description of the used microbiological or virological tests: ISO 6579/2002

Description of the other used tests:

Region[c]	Serological tests		Microbiological or virological tests		Other tests	
	Number of samples tested[d]	Number of positive samples[d]	Number of samples tested[d]	Number of positive samples[d]	Number of samples tested[d]	Number of positive samples[d]
Total	126	126	2039	126		
Total						

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

(e) Number of positive samples.

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

Year: 2009 **Animal species[a]::**

Region[b]	Number of herds infected[c]	Number of animals infected
Total	79	710515

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

7. Targets

7.1. Targets related to testing

7.1.1. Targets on diagnostic tests

Number and specification of tests

Mandatory testing will be performed in all laying flocks of Gallus gallus during their whole life span. A preliminary calculation was made on the approximate number of tests to be performed in the flocks. The number of tests calculated is based on the total of flocks containing more than 1000 hens (what is 886 at the moment according to the register) and the testing scheme as provided for in the Annex to Commission Regulation No. 1168/2006 of 31. July 2006 implementing Regulation No. 2160/2003 as regards a Community target for reduction of prevalence of certain salmonella serotypes in laying flocks of Gallus gallus and amending Regulation (EC) No 1003/2005.

The Annex of the above mentioned Regulation requires all relevant laying flocks to be tested two times during the rearing period and further testing on every fifteenth week during the whole production period.

Laying flocks are kept usually until the age of 72 weeks. The production period begins when the flock is 22 weeks of age. In some cases the production lasts then until the end of the 84th weeks of the life, however when calculating the number of tests to be performed in this programme, this possibility could not be taken into account.

In Hungary, laying flocks are typically kept in cages which makes the taking samples form the houses the most effective way of detecting possible infection (see sampling protocol below).

Using the above numbers and the testing scheme specified in the Regulation, each laying flock will be sampled and tested approximately 7 times during the year. During each sampling time two boot swab samples will be taken and sent into the laboratory, and polled into one sample.

Given that in Hungary there are 1074 laying flocks under the programme (896 production flocks and 178 rearing flocks) (~ 7000000 animals), and the free range and alternative flocks number about 225. The total number of samples to be taken in the frame of routine and official sampling is 896*5+178*2 x 2 – 5192 *2 samples, in cage flocks, 2 × 150 grams of naturally pooled faeces shall be taken, and 225x7=1575, because the two boot swabs will pooled into one laboratory sample. Summary there will be 6767laboratory isolates are expected to be tested for the detection of Salmonella spp. The number of official laboratory isolates will be nearly 2242 ((896x2)+(225x2)).

In addition, when a flock is tested positive, some cases confirmatory sampling will take place and additional birds selected from the flock. Based on the latest data, approximately 3,16 % of the flocks are infected with one or more of the 2 most relevant Salmonella serotypes and summary there were 7,35% positive flocks, confirmatory test numbers will be nearly 60 (2 isolates/samples- boot swabs, birds, faeces materials, etc.). The positive samples number was ~ 90, in 2009. Summary nearly 6830 (6767+60) laboratory isolates are expected to be tested for the detection of Salmonella spp.

Serotyping will be performed from each positive isolate. Positivity is expected to be detected in 7,35% of the flocks, we expected nearly 90 positive sample/year.
However, an exact number of tests which will be performed is not possible, because the time when the flock becomes infected can not predicted.

7.1.2. Targets on testing of flocks[3]

Year: **2011** **Situation on date:**

Animal species: Gallus gallus, layer **Disease:[a]: zoonotic salmonella**

Region (a1)	Type of flock[b]	Total number of flocks[c]	Total number of animals	Total number of flocks under the programme	Total number of animals under the programme	Number of flocks checked[d]	Number of positive[e] flocks[a]			Number of flocks depopulated[a]		Total number of animals slaughtered or destroyed [a]		Quantity of eggs destroyed (number) [a]		Quantity of eggs channelled to egg products (number)	
							(a1)	(a2)	(a3)	(a3)	(a4)	(a4)	(a3)	(a4)	(a2)	(a4)	(a3)
Total	Laying hen flocks	1074	10218964	1074	10218961	1074	31	3	45	0	26	221200	0	25198	0	3988780	0

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

[3] Specify types of flocks if appropriate(breeders, layers, broilers).

7.2. Testing scheme

Testing scheme as provided for in the Annex to Commission Regulation No. 1168/2006 of 31. July 2006 implementing Regulation No. 2160/2003 as regards a Community target for reduction of prevalence of certain salmonella serotypes in laying flocks of Gallus gallus and amending Regulation (EC) No 200/2010 will be used.

Details of the testing scheme are the following:

1. Sampling frame

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.

2. Monitoring in laying flocks

2.1. Frequency and status of sampling

Laying flocks shall be sampled at the initiative of the food business operator (operator) and by the competent Directorate of Food Chain Safety and Animal Health of County Agricultural Office.

Sampling at the initiative of the operator shall take place at least every fifteen weeks. The first sampling shall take place at the age of 24 ± 2 weeks.

Sampling by the competent authority shall take place at least:

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

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

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

(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 Directorate of Food Chain Safety and Animal Health of County Agricultural Office considers it appropriate.

A sampling carried out by the competent authority may replace one sampling at the initiative of the operator.

2.2. Sampling protocol

In order to maximise sensitivity of sampling, both faecal material and the environment shall be sampled at least as provided for in (a) and (b):

(a) In cage flocks, 2 × 150 grams of naturally pooled faeces shall be taken from all belts or scrapers in the house after running the manure removal system; however, in the case of step cage houses without scrapers or belts 2 × 150 grams of mixed fresh faeces must be collected from 60 different places beneath the cages in the dropping pits.

(b) In barn or free-range houses, two pairs of boot swabs or socks be taken, without changing overboots between boot swabs.

In the case of sampling by the competent authority, 250 ml containing at least 100 gram of dust shall be collected from prolific sources of dust throughout the house. If there is not sufficient dust, an additional sample of 150 grams naturally pooled faeces or an additional pair of boot swabs or socks shall be taken.

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 referred to in Article 1 (2) of Commission Regulation 1168/2006/EC.

3. Examination of the samples

3.1. 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) No 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.

3.1.1. 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 in 3.2.

3.1.2. 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.

3.2. 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.

3.3. Serotyping

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

3.4. 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 (1), 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.

3.5. 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. 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.

Reporting shall include:

(a) the total number of flocks of laying hens tested and the number of laying flocks tested for each status of sampling referred to in point 2.1;

(b) the total number of infected flocks and the results of the testing for each status of sampling referred to in point 2.1;

(c) explanations on the results, in particular concerning exceptional cases.

The results referred to in this point and any additional relevant information shall be reported as part of the report on trends and sources provided for in Article 9(1) of Directive 2003/99/EC.

7.3. Targets on vaccination or treatment

According to Commission Regulation (EC) No 1177/2006 vaccination is not compulsory in laying flocks of Gallus gallus. The rules on using vaccination and treatment are laid down in Commission Regulation (EC) No 1177/2006 of 1 August 2006 implementing Regulation (EC) No 2160/2003 of the European Parliament and of the Council as regards requirements for the use of specific control methods in the framework of the national programmes for the control of salmonella in poultry.

8. Detailed analysis of the cost of the programme

Costs related to	Specification	Number of units	Unitary cost in €	Total amount in €	Community funding requested (yes/no)
1. Testing					
1.1. Cost of the analysis	Test: modified ISO 6579 (2002) using MSRV planned to be carried out in the framework of official sampling	13560	10	67300	yes
	official samples of verifying the efficiency of desinfection	100	10	1000	yes
	Test: serotyping planned to be carried out in the framework of official sampling	100	40	4000	yes
1.2. Cost of sampling	costs of sampling of approx. 178 flocks, 2 times 896 flocks 5 times, 225 flocks 7 times during 2010 = sample	6411	50	320550	yes
1.3. Other costs					
2. Vaccination or treatment of animal products					
2.1. Purchase of vaccine/treatment of animal products	Cost of the vaccine of approx. 7000000 animals two times	14,000,000	0.1	140000	yes
2.2. Distribution costs	Cost of the distribution (approx. 5000000 animals)	7000000	0.05	350000	no
2.3. Administering costs	Cost of the administration (approx. 5000000 animals)	7000000	0.1	700000	no
2.4. Control costs					

3. Slaughter and destruction					
3.1. Compensation of animals	*Cost of the compensation of the positive animals, approx. 7000000x0.0283=198100 animals*	*221200*	*4,4*	*973280*	*yes*
3.2. Transport costs	*Slaughtering of infected flocks can only be authorised when meat from these flocks is treated according to specific food safety legislation. Therefore, slaughter is not likely to be performed at regular contracted slaughterhouses, which makes transport costs much higher than usual. approx. 7000000x0.0,0316=198100 animals, 2 kg/animal*	*442400*	*0.04*	*17696*	*no*
3.3. Destruction costs	*Cost of the destruction approx. 7000000x0.0283=198100 animals animals, 2 kg/animal*	*442400*	*0.2*	*88480*	*yes*
3.4. Loss in case of slaughtering	*This loss is estimated to be of a large extent. However, the losses due to the early slaughter of the flock and the decreased income due to eggs, which could not be produced, are very hard to estimate.*				
3.5 Costs from treatment of products (milk, eggs, hatching eggs, etc)	*In 2009 nearly 4 million eggs were heattreatened or destroyed*	*4000000*	*0,08*	*320000*	*yes*
4. Cleaning and disinfection	*When taking into account the number of flocks (1074) and the infection rate (7,35%), an approximate number of ~ 100 flocks to be cleansed and disinfected can be estimated.* *Cleansing and disinfection of an average flock depends on several factors, however an approximate amount of costs is given.*	*100*	*500*	*50000*	*no*
Cost of official samples after disinfection	*Test: modified ISO 6579 (2002) using MSRV planned to be carried out in the framework of official sampling after disinfection(in the case of SE/ST infection)*	**100**	**10**	**1000**	**yes**
5. Salaries (staff contracted for the programme only)					

6. Consumables and specific equipment					
7. Other costs					
			Total	*3033306*	
			TOTAL REQUESTED	*1915610*	*yes*

Annex

In the frame of the *Salmonella* control programme in laying flocks of *Gallus gallus* the provisions of paragraph 1 and 2 (frequency of sampling) 4 (results and reporting) of Annex of Commission Regulation (EC) No 1168/2006 (particularly provisions on exceptional cases) are implemented.

Central Agricultural Office
Animal Health and Animal Welfare Directorate

HUNGARY

Application

for Community financing for the national control programme of Hungary for

Salmonella spp.
in broiler flocks of Meleagris gallopavo

for the year 2011.

30th of April, 2010

Part A

General requirements for the national salmonella control programmes

(a) The main objective of the programme is to comply with existing Community legislation, to achieve Community prevalence targets within the defined time period available as regards broiler flocks of Meleagris gallopavo in the territory of Hungary. The target is to reduce the prevalence to 1 % or less of *Salmonella Enteritidis and Salmonella Typhimurium* (the relevant salmonella serotypes).

(b) Protection against salmonellosis is mandatory pursuant to the relevant EU provision as of 1 January 2010. A Decree was created and came into force on the 7th of January, 2008, Decree 2/2008. (I. 4.) of the Minister of Agriculture and Rural Development on specific rules of protection against salmonellosis. This Decree was repealed and a new Decree came in force on the 6th on January 2010 (Decree 180/2009. (XII. 29.) of the Minister of Agriculture and Rural Development on specific rules of protection against salmonellosis (hereinafter: "Decree"). The aim of creating the first Decree was to ensure compliance with the changes in the Community legislation. The Decree sets the conditions of the obligatory control measures in breeding, laying and broiler flocks of Gallus gallus and voluntary (mandatory from 2010) measures in breeding and broiler flocks of Meleagris gallopavo against specified Salmonella serotypes. The Decree complies with the minimum sampling requirements laid down in part B of Annex II to Regulation (EC) No 2160/2003 of the European Parliament and of the Council[1] indicating the relevant animal population and phases of production which sampling cover

rearing flocks – – day-old chicks (national legislation)

adult broiler flocks — birds leaving for slaughter

The new Decree was issued, because sampling of turkey flock became mandatory. Also, the structure of the Decree is new and experiences regarding the implementations of the Programmes were built in.

More information about testing scheme: please see *Part B Chapter 7.2*

(c) The Decree compiles with the specific requirements laid down in Parts C, D and E of Annex II to Regulation (EC) No 2160/2003

(d) 1 General

1.1. The short summary referring to the occurrence of the salmonellosis [zoonotic salmonella] in Hungary with specific reference to the results obtained in the framework of monitoring in accordance with Article 4 of Directive 2003/99/EC of the European Parliament and of the Council[2], particularly highlighting the prevalence values of the salmonella serovars targeted in the salmonella control programmes: Please see Part B Chapter 2.

1.2. The structure and organization of the relevant competent authorities: Please see Annex I.

1.3. Laboratories involved in the programme must be accredited by the National Accreditation Body (NAT) and supervised by the National Salmonella Reference Laboratory (NRL) of the Republic of Hungary (Food and Feed Safety Directorate (formerly named: National Food Investigation Institute), Central Agricultural Office). The NRL is in charge of coordination of the laboratories, the use of appropriate laboratory methods as well as for co-operation with the Community Reference Laboratory in Bilthoven (NL).

1.4. Methods used in the examination of the samples in the framework of the programme: Please see Part B Chapter 7.3

---

1 OJ L 325, 12.12.2003, p. 1.

2 OJ L 325, 12.12.2003, p. 31.

1.5. Official controls (including sampling schemes) at feed, flock and/or herd level: Please see Part B Chapter 7.2.1.

1.6. Measures taken by the competent authorities with regard to animals or products in which the presence of *Salmonella spp.* have been detected, in particular to protect public health: Please see Part B Chapter 4.4.3. and Chapter 4.4.4.

1.7. National legislation relevant to the implementation of the programme, including national provisions concerning the activities set out in the programme: Please see Part B Chapter 4.4.7

1.8. Financial assistance provided to food and feed businesses in the context of the programme:
Costs and benefits are calculated based on the previous year's data of the Poultry Product Board of Hungary. In the case of broiler flocks of Meleagris gallopavo costs will occur from the intensive sampling of the flocks as well as the tests performed on the samples (including both testing on the initiative of the operator and the veterinary authority), the measures to be applied in the case of infection (slaughter or killing of the flock, condemnation, transportation, cleansing and desinfection) as well as financial losses due to decreased income for the poultry industry.
Act No. XLVI. of 2008. on the food chain and its official control and Decree No. 45/2010 (IV.23.) Minister of Agriculture and Rural Development on the rules of financing the national programs for the eradication, control and monitoring of certain animal diseases and zoonoses and Decree No. 148/2007. (XII.7.) on the prevention of certain animal diseases and the order of claiming financial support and payment regarding their overcome in 2010 give the financial guarantee of the national programme.
In case of a positive flock, when compensation occurs, valuation of the birds is performed by the district chief veterinary officer according to a scale provided by the Poultry Product Board. It is based on a calculating system, where the day-old chicks' price is considered as 100%, and the value of a bird depends on its production cycle and age (given in percentage)

Valuation/valorisation of birds is calculated based on the previous year's data of the Poultry Product Board of Hungary. Table containing these data is sent to the central veterinary office.

2. Concerning food and feed businesses covered by the programme

2.1. The structure of the production

Broiler flocks are kept usually until the age of 112-154 days (depending on the technology and the sexual status). As cleansing take place after every flock, each year 2,5 flocks can be reared in a certain airspace in average.

2.2. The structure of the production of feed.

Feeding of poultry, including broiler flocks of Meleagris gallopavo is based on cereal products, mainly on corn, barley and wheat. Soybean and fishmeal is used as a source of protein.
Commercial feed producers are operating according to GMP standards. Broiler flocks mainly use commercial pelleted feed, the technology of production of which includes heat treatment.
In Hungary, control of feedingstuffs is performed according to two main piece of legislation: Act No. XLVI. of 2008 on the food chain and its official control, Governmental Decree 274/2006 (XII. 23) on the establishment and operation of the Central Agricultural Office and Decree of the Ministry of Agriculture and Rural Development No. 43/2003. (IV. 26.) on the implementation of the above Act.
In the Act general principles of the control of feed are laid down general principles of the control of feed, sets the competent authorities and allocates the tasks to these services.
Feed production plant may be authorised by the competent regional organization (County Directorate of Food Chain Safety and Animal Health) of the Central Agricultural Office. The authorisation must be renewed at periods of a maximum of 5 years. Other authorities are also involved in the authorisation process.
The registration of the feed production units is done by the Directorate of Food Chain Safety and Animal Health of County Agricultural Office.
The Act states that the feedingstuffs produced may neither pose a direct health risk to live flock, nor an indirect risk to public health.
Therefore, the competent Directorate of Food Chain Safety and Animal Health of County Agricultural Office perform regular controls of the feed production plants, including the production, keeping, marketing, transport and use of feed produced. Controls also include compliance with feed hygiene rules, safety, composition, microbiological safety of feedingstuffs, as well as many other parameters such as the presence of prohibited substances, packaging, labelling etc.
In case of non-compliance with any of the parameters listed in the Act and the Decree, the competent County Directorate may prohibit the production, keeping, marketing, transport, export, import or transport of the relevant feed. If such feed was already used, the Directorate of Food Chain Safety and Animal Health of County Agricultural Office has a duty to notify the county level public health authority.
The Decree gives detailed instruction to authorities and stakeholders on how to implement the Act. Annex 20 to the Decree sets out the maximum tolerable amount of Salmonella spp. in food and the related ISO standards. According to ISO 6579:2002, feedingstuffs must show zero Salmonella spp. / 25 grams.
In addition, the same Annex states that feedingstuffs must be free of any pathogens which may pose a direct risk to animal health and/or an indirect risk to public health.

2.3. Relevant guidelines

Hungary has relevant guidelines for good animal husbandry practices or other guidelines (mandatory or voluntary) on biosecurity measures defining the hygiene management at farms, the measures preventing incoming infections carried by animals, feed, drinking water, people working at farms, and about hygiene in transporting animals to and from farms. The

guideline of Decree No. 2/2008. (I. 4.) of the Minister of Agriculture and Rural Development on specific rules of protection against salmonellosis, the guideline about feed control, the guideline of animal transports and the Hungarian Poultry Product Board's guideline for good practice. The guideline for the new decree is under procedure. All farms have to made an own biosecurity programme and all have to get checked by the Directorate of Food Chain Safety and Animal Health of County Agricultural Office.

2.4. Routine veterinary supervision of farms:

Controls are planned annually by the Food Chain Safety Deputy President of Central Agricultural Office. Number of controls depends on risk assessment.

An official veterinarian can also perform on-spot checks when taking samples, but it is not necessarily connected. Inspections are performed based on a national program.

2.5. Registration of farms:

All poultry farms have to registered according to Decree no. 119/2007. (X.18) of MARD on keeping places, breeding farms and national registration system of their data if they meet the relevant criteria. For more information please see Part B Chapter 4.4.1.

All poultry farms have to registered according to Ministerial Decree no. 119/2007. (X.18) on keeping places, breeding farms and national registration system of their data, which meet one of these criteria:

- has to be registered due to a piece of legislation regarding animal health (such as the national Decree on Salmonella)
- the owner would like to apply for financial support

All commercial poultry farms have to be registered:

- which are considered as large-scale holdings according to a different piece of registration (that means: 2000 broilers or 500 other adult poultry)
- which sends poultry directly to the slaughterhouse
- which have a slaughtering permit for small producers.

2.6. Record-keeping at farms: All documents concerning to the programme must be kept for 3 years. The documentation has to contain all data about animals, tests, transports, samples and medication

2.7. Documents to accompany animals when dispatched.

Commercial poultry consignments are accompanied with animal health certificates according to Directive 90/539/EC. Consignments with national destinations are accompanied with animal health certificates according to Decree 41/1997. (V. 28.) FM appendices 8/a and 8/b.

In accordance with Paragraph 85. of Decree No 41/1997. of the Minister of Agriculture on the publication of the Animal Health Code, the official veterinarian carries out a flock examination within 12 hours before transportation, and on the basis of the

financing/allowance plan, fills out the animal health certification in the appendices 8/a. and 8/b., certifies the place of origin of the day-old animals, their circumstances free from epidemic, the name of the vaccine used, the time and method of the immunization. Because of the changes occurred since the publication of the legislation, this ordinance cannot be fulfilled in these days.

„Animals can only be transported when accompanied by a valid certification attested by the veterinarian responsible for treatment" in accordance with point 4.2.1. point (Starting of poultry consignments) of the guide which was prepared for poultry hatcheries that are obliged to TIR registration, in accordance with point d) of Paragraph 6. of Decree No 120/2007. (X. 18.) of the Minister of Agriculture and Rural Development on establishing and operating of the Poultry Information System (hereinafter: BIR regulation). In pursuance with point 4.2.1., „The hatchery starting the consignment has to fill in the Poultry movement form 2740. on the upper part of which the data of starting has to be given".

The poultry animal health certificate laid down in the BIR regulation is not to replace the certificate 8/b., as the authority responsible for animal health takes part in issuing the latter only.

At the same time, even the certification 8/a. can not be replaced by the introduction of the BIR regulation, as certain data that have to be certified by the veterinarian in the certificate 8/a are not placed on the latter, for example immunizations carried out in the flock, diagnostic examinations and the results thereof.

In pursuance of the abovementioned regulations, all three certifications are required for the transport of the day-old poultry. The BIR certification is drawn up by the veterinarian responsible for treatment, while certifications 8/a. and 8/b. are filled in by the approved veterinarian, in accordance with the Governmental Decree No 113/2006. (V. 12.) on the competence and detailed rules of the activity of the approved veterinarian, with the exception of the case when the approved veterinarian is not the treating veterinarian, because in those cases the certification 8/a. has to be filled in by the veterinarian of the hatchery.

As it can be seen from above, the current legislation of movement documentations doesn't seem to be unambiguous as regards several points.

For solving the problem, a working group was established. The working group is predestined for revising the form and content of certificates for inland live animal transportation and as far as possible, for the harmonisation thereof.

2.8. Other relevant measures to ensure the traceability of animals. Please see Part A 2.7. and Part B Chapter 4.2. and Chapter 4.4.1.

At central level three persons are responsible for the TRACES, of which one is responsible for the technical part (for example: giving access to the system). The two other colleagues (one at MRD and one at CAO) are the trade contact points of Hungary and are keeping the contact wit the counterparts of the member states.

Part B

1. Identification of the programme

Member State: **Hungary**

Disease: **Infection of animals with zoonotic *Salmonella spp.***

Animal population covered by the programme: **Broiler flocks of Meleagris gallopavo**

Year of implementation: **2011**

Reference of this document: **02.3/982/5/2008.**

Contact (name, phone, fax, e-mail): **Dr. Imre Nemes**
Director
Animal Health and Animal Welfare Directorate
Central Agricultural Office
Tel: +36-1-460-6300 ext. 112
Fax: +36-1-222-6064
e-mail: nemesi@oai.hu

Date sent to the Commission: **30th of April, 2010**

2. Historical data on the epidemiological evolution of zoonotic *salmonellosis* specified in point 1

Monitoring and control programmes for Salmonella spp. (S. Enteritidis and S. Typhimurium) started in Hungary in 1997 by issuing official guidelines for the poultry sector. The goal of the project was to achieve similar targets as which were set by Council Directive 92/117/EEC. The collection of guidelines were ordered by the Ministry of Agriculture and were prepared by an expert group consisting of both Hungarian experts of various backgrounds (Hungarian Academy of Science, National Food Investigation Institute, Central Veterinary Institute and numerous practicing veterinarians) and experts of the Agri-Livestock Consultant Ltd (W. Edel and C. Wray). The work was financed by the PHARE programme of the European Union under project No. HU 9304-05-02. The programme covered the whole poultry sector in relation of Gallus gallus, breeding flocks, hatcheries, broiler flocks, table egg producing layer flocks, egg packaging and distribution establishments, poultry slaughterhouses, cutting plants as well as feed mills. Because of the similarities the statements of this study can be used for the turkeys as well The guidelines stated clearly that there is an urgent need for centralised official administrative measures in the form of a ministerial decree by the Minister of Agriculture.

The first decree was created in the year 2002: Decree 49/2002. (V. 24.) of the Minister of Agriculture and Rural Development on protection against salmonellosis and poultry typhus and on retaining officially free status, and was modified by the Decree 97/2003. (VIII. 19) Minister

of Agriculture and Rural Development. A new Decree was created and came into force on the 7th of January, 2008, and can be referred to as Decree 2/2008. (I. 4.) of the Minister of Agriculture and Rural Development on specific rules of protection against salmonellosis. The aim of creating the new Decree was to ensure compliance with the changes in the Community legislation.

Decree 2/2008 of MARD set the conditions of the obligatory control measures in breeding, laying and broiler flocks and voluntary (mandatory from 2010) measures in breeding and broiler flocks of Meleagris gallopavo against specified Salmonella serotypes. As a prerequisite, there is an obligation of the holdings keeping broiler flocks of Meleagris gallopavo to be registered by the State Veterinary Service. Results of testing required by the Decree are also to be notified to the Directorates of Food Chain Safety and Animal Health of County Agricultural Office (formerly named: County Animal Health and Food Control Service). Decree 2/2008 of MARD had been amended 5 times till it was repealed and replaced by Decree 180/2009 of MARD (hereinafter referred as 'Decree') as of 6th of January, 2010. The new Decree covers the same area, but the structure of it was modified and enhanced based on experience.

The baseline study of the prevalence of Salmonella spp. in broiler flocks of Meleagris gallopavo carried out according to Commission Decision 2006/662/EC shows that infection of broiler flocks for Salmonella Enteritidis and Salmonella Typhimurium is 3,4%. According to monitoring tests carried out infection with any Salmonella serotype is 81,2%. The Community target which is set by Commission Regulation No 584/2008 (EC) Art. (1) of flocks of broilers remaining positive of Salmonella Enteritidis and Salmonella Typhimurium is 1% or less by 31 December 2012. This goal can only be achieved by a rigorous control programme using extensive professional and financial resources.

3. Description of the submitted programme

The main objective of the programme is to comply with existing Community legislation to achieve Community prevalence targets within the defined time period available as regards broiler flocks of Meleagris gallopavo in the territory of Hungary. The European legislation set targets of Salmonella Enteritidis and Salmonella Typhimurium (according to Commission Regulation No 584/2008 (EC), with effect from 84 months after entry into force of Regulation (EC) No 2160/2003 of the European Parliament and of the Council, fresh poultry meat from broiler flocks of Gallus gallus may not be placed on the market for human consumption unless absence of Salmonella in 25 grams.
All broiler flocks of Gallus gallus included in the programme are registered in the territory of Hungary.

Laboratories involved in the programme must be accredited by the National Accreditation Body (NAT) and supervised by the National Salmonella Reference Laboratory (NRL) of the Republic of Hungary (Food and Feed Safety Directorate, Central Agricultural Office) The NRL will be in charge of coordination of the laboratories, the use of appropriate laboratory methods as well as for co-operation with the Community Reference Laboratory in Bilthoven (NL).

4. Measures of the submitted programme

4.1. Summary of measures under the programme of the broiler flocks

Duration of the programme:

First year: 2009 Last year: 2011

☒ Control . : Control/Eradication

☒ Testing	☐ Testing
☒ Slaughter of positive animals	: : Slaughter of positive animals
☒ Killing of positive animals	:.. Killing of positive animals
☐ Vaccination	: : Extended slaughter or killing
☐ Treatment	:.. Disposal of products
☒ Disposal of products	

☒ Monitoring or surveillance

☐ Other measures *(specify)*: Because many times we can not find any slaughterhouse for slaughter the positive flocks, in that cases we need to use the "killing of positive animals".

- After emptying the relevant holding (infected with SE/ST) operators are required to implement proper cleansing and desinfection. Effectiveness of the procedure is controlled by the competent regional animal health authority. Restocking is only authorised, when cleansing and desinfection is deemed to be satisfactory.

4.2. Designation of the central authority charged with supervising and coordinating the departments responsible for implementing the programme:

All holdings must be registered at the district veterinary office. The official senior veterinary officer keeps and updates the record of holdings participating the programme. The official senior veterinary officer also declares the status of the holdings according to their actual serological status.

The 19 Directorates of Food Chain Safety and Animal Health of County Agricultural Offices coordinate and supervise the programme in their territory. They are required to annually report the actual status of the programme to the Animal Health and Animal Welfare Directorate of the Central Agricultural Office.

Name:	Central Agricultural Office Animal Health and Animal Welfare Directorate
Name in Hungarian:	Mezőgazdasági Szakigazgatási Hivatal Központ Állategészségügyi és Állatvédelmi Igazgatóság
Address:	1149 Budapest, Tábornok u. 2., Hungary
Tel.:	+36-1-460-6300
Fax:	+36-1-222-6065

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

The programme will be implemented on the whole territory of Hungary, from the 1st January 2010.

4.4. Measures implemented under the programme

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

All poultry farms have to registered according to Ministerial Decree no. 119/2007. (X.18) on keeping places, breeding farms and national registration system of their data, which meet one of these criteria:

- has to be registered due to a piece of legislation regarding animal health (such as the national Decree on Salmonella)
- the owner would like to apply for financial support

All commercial poultry farms have to be registered:

- which are considered as large-scale holdings according to a different piece of registration (that means: 2000 broilers or 500 other adult poultry)
- which sends poultry directly to the slaughterhouse
- which have a slaughtering permit for small producers.

According to Paragraph 5. of the Decree the operator is obliged to register for the national control programmes. pursuant to Article 8 (3). Article 8 (3) states that:

A business operator obliged to or voluntarily undergoing control pursuant to paragraph (1) shall apply for participation in the national control programme by submitting an epidemiological action plan approved by the private veterinarian responsible for the supervision of the poultry flock or hatchery at the competent district office by virtue of the location of the holding site, which shall register the business operator in accordance with Article 3(4) (a).

.

4.4.2. Measures and terms of legislation as regards the identification of animals: –

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

According to point 7 of paragraph 9 of the Decree:

The laboratory shall immediately notify the district office and the veterinarian taking the sample of the test results and - in the event of positive results - the business operator and the regional organization of the CAO as well. In the event of positive results the laboratory shall send the isolated strain for confirmatory testing and serotyping together with one original copy of the sampling form to the NRL. The testing laboratory must retain the copy of the sampling form for three years.

4.4.4. Measures and terms of legislation as regards the measures in case of a positive result:

In the frame of the *Salmonella* control programme in **turkeys** the provisions of CR No 584/2008/EC paragraph 1/2/4 are implemented.

According to the Decree:

Procedure in the event of positive test results

Article 11

(1) If the sample taken from a flock of breeding hens, a flock of laying hens or a flock of breeding turkeys results positive the operator shall revise the epidemiological action plan within 22 working days and shall resubmit it to the District Office for approval. The revised plan shall contain the review of the hygiene conditions, especially the efficiency of the desinfection and pest control procedures, the results of the test to find possible reasons for infection and the list of measures considered necessary. The District Office shall evaluate the plan within 22 working days and may ask the operator to amend it if they find it unsatisfactory.

(2) If a sample taken at a flock of broilers and fattening turkeys results positive the business operator shall revise the epidemiological action plan within 11 working days of receiving the result and shall resubmit it to the District Office for approval. The action plan shall contain the review of the hygiene conditions; especially the efficiency of the desinfection procedures and of pest control (insect and rodent extermination), the results of the test to identify possible reasons for infection and the list of measures considered necessary. The District Office shall evaluate the plan within 11 working days and may ask a business operator to amend it if they find it unsatisfactory.

(3) If the results of salmonella testing of broiler and fattening turkey flocks results positive, there is a rapid method – available on the business operator's request – of excluding infection by Salmonella Enteritidis and Salmonella Typhimurium serotypes at a certified laboratory designated by the CAO using group-specific 'O' antibody. In this case the laboratory which performs the 'O' group typing will send the isolated strain to the NRL for serotyping.

(4) If, using the group specific 'O' antibody, infection by Salmonella Enteritidis and Salmonella Typhimurium serotypes can be excluded, then the given flock of broilers or fattening turkeys may be slaughtered by decision of the District Office. Measures pursuant to paragraph (2) and (5) shall be applied at the same time.

(5) When, during serotyping, the NRL detects infection with a serotype other than Salmonella Enteritidis or Salmonella Typhimurium, the District Office shall immediately withdraw the official certificate of infection-free status of the flock, if the operator has one, in respect of the given serotype. The operator shall clean the site after the production cycle (building, equipment and machinery, connecting rooms and paths) and - in accordance with specific piece of legislation on issuing the Animal Health Code – for stringent desinfection, rodent extermination and desinsectisation.

(6) Operators may restock the airspace concerned only if they verify the efficiency of desinfection when an environmental swab sample tests negative in a laboratory. The business operator shall bear the costs of taking and testing environmental swabs.

(7) If in the case of a flock of breeding hens the NRL detects infection by a salmonella serotype that is considered a Community target under Regulation (EC) No 1003/2005, Article 12 (9) shall apply in respect of feed and Article 12(8) in respect of restocking of the air space.

Procedure in the event of Salmonella enteritidis or Salmonella typhimurium infection

Article 12

(1) If during serotyping the NRL detects infection with Salmonella Enteritidis or Salmonella typhimurium the District Office shall order restriction of movement of the flock concerned and the products originating therefrom and shall withdraw the official certificate of infection-free status without delay. The official certificate of infection-free status in respect of other flock

from the holding shall also be withdrawn at the same time unless the infected flock has been appropriately isolated.

(2) Testing may only be repeated by official sampling ordered by the regional organization of the CAO pursuant to Article 9(1). Sampling for the official test may only be carried out by official or approved veterinarians within the shortest time possible. The NRL shall test the samples and at the same time conduct an examination to detect antimicrobial inhibitory effects. If the result from the repeated sampling is negative or it results in an infection with salmonella serotypes not covered by the national control programmes and no antimicrobial inhibitory effect can be detected, the District Office shall lift the restriction of movement in respect of the flock and the products thereof. If antimicrobial inhibitory effects can be detected the District Office shall investigate the circumstances of the use of antibiotics and maintain the restriction on movement until it is proven that antibiotics were used for purposes other than to treat the infection of salmonella.

(3) If repeated testing reveals infection by Salmonella Enteritidis or Salmonella Typhimurium or the regional organization of the CAO not orders a repeated test, the flock concerned may be slaughtered after preliminary consultation with the slaughterhouse and the official veterinarian supervising the slaughterhouse and in accordance with the specific veterinary health rules on separate slaughter.

(4) In the event of infection by Salmonella Enteritidis or Salmonella Typhimurium in a flock of breeding hens and turkeys Annex II/C to Regulation (EC) No 2160/2003 shall apply and Annex II/D to Regulation (EC) No 2160/2003 shall apply to flocks of laying hens.

(5) Meat from an infected flock may be placed on the domestic market without eliminating salmonella if the production processes following the slaughter of the infected flock are separated from the processing and treatment of other raw materials of animal origin and the official veterinarian supervising the slaughterhouse has been informed 48 hours before slaughter. Food materials originating from slaughtering and processing infected flock shall carry the text "for consumption only after heat treatment (thorough frying or cooking)" clearly and indelibly marked on every smallest packaging unit close to the identification label, close to the traceability marking; and on the accompanying commercial document.

(6) If meat from infected flock is processed after salmonella elimination (heat treatment, heat treatment as part of product manufacturing) the processes following slaughter of the infected flock shall be separated from the processing of other raw materials of animal origin until salmonella has been efficiently eliminated, this has been certified and the official veterinarian supervising the slaughterhouse has been informed 48 hours before slaughter. Food materials originating from infected flock shall carry the text "Originates from salmonella-infected flock" on every smallest packaging unit close to the identification label and the premises traceability marking and may only be used to produce food when the technological manufacturing processes guarantee that the product will be salmonella-free. Every such food item shall be verified by microbiology testing carried out in a laboratory before the are cleared for retail trade and the official veterinarian supervising the slaughterhouse shall be informed thereof. The production plant may place heat treated products certified as salmonella-free on the market on the basis of the results of own checks.

(7) After the keeping place of the infected flock has been emptied the operator shall provide for cleaning the building, equipment and machinery, connecting rooms and paths and - in accordance with specific piece of legislation on the issuing of Animal Health Code – for reinforced desinfection, rodent extermination and disinsectisation. The remaining litter shall be disposed of in accordance with special legislation on the treatment of waste of animal origin. After these tasks have been accomplished the business operator shall inform the District Office, which will verify the efficiency of the measures implemented.

(8) The District Office shall authorise the restocking of the airspace concerned only if the effectiveness of desinfection was verified by environmental swab samples test negative in the laboratory.

(9) The feed fed to infected flock shall be tested without delay in accordance with the special legislation on the manufacturing, placing on the market and use of feed, except when day-old birds test positive. Until testing yields negative results such feed may only be fed to infected flock. If feed tests positive it has to be disposed of in accordance with the special legislation on the manufacturing, placing on the market and use of feed, and the equipment used for its storage and transportation shall be disinfected. If infection has been detected, specific testing shall be carried out to detect salmonella at the feed operator from which the feed originates.

(10) Hatcheries to which infected hatching eggs have been transported shall act in accordance with Annex II/C(3) and (5) of Regulation (EC) No 2160/2003 and shall apply the provisions of paragraph (7) and (8). If a hatchery has a certificate of infection-free status the district office shall immediately withdraw this. The hatchery must cooperate in tracing the origins of infection on the basis of its records and shall bear the costs

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

See point 4.4.4.!

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

See point 4.4.4.!

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

- Regulation (EC) No. 2160/2003. of the European Parliament and of the Council on the control of Salmonella and other food-borne zoonotic agents
- Commission Regulation (EC) No 584/2008 of 20 June 2008 implementing Regulation (EC) No 2160/2003 of the European Parliament and of the Council as regards a Community target for the reduction of the prevalence of Salmonella Enteritidis and Salmonella Typhimurium in turkeys
- Commission Regulation (EC) No 1177/2006 of 1 August 2006 implementing Regulation (EC) No 2160/2003 of the European Parliament and of the Council as regards requirements for the use of specific control methods in the framework of the national programmes for the control of salmonella in poultry
- Act No. XLVI. of 2008. on the food chain and its official control
- Decree No. 180/2009. (XII. 29.)of Minister of Agriculture and Rural Development
- Decree No. 41/1997. (V. 28.) of Minister of Agriculture (Code of veterinary rules)

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

- Act No. XLVI. of 2008. on the food chain and its official control

- Decree No. 45/2010. (IV.23.) Minister of Agriculture and Rural Development on the rules of financing the national programs for the eradication, control and monitoring of certain animal diseases and zoonoses

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

Hungary has relevant guidelines for good animal husbandry practices or other guidelines (mandatory or voluntary) on biosecurity measures defining the hygiene management at farms, the measures preventing incoming infections carried by animals, feed, drinking water, people working at farms, and about hygiene in transporting animals to and from farms. The guideline of Decree No. 2/2008. (I. 4.) of the Minister of Agriculture and Rural Development on specific rules of protection against salmonellosis, the guideline about feed control, the guideline of animal transports and the Hungarian Poultry Product Board's guideline for good practice. The guideline for the new decree is under procedure. All farms have to made an own biosecurity programme and all have to get checked by the Directorate of Food Chain Safety and Animal Health of County Agricultural Office.

5. General description of the costs and benefits:

Costs are calculated based on estimation and information of the Central Agricultural Office and Poultry Product Board of Hungary. In case of broiler flocks, costs will occur from the intensive sampling of the flocks as well as the tests performed on the samples (including testing on initiative of both the operator and the veterinary authority), the measures to be applied in the case of infection with S. Enteritidis and S. Typhimurium (slaughter or killing of the flock, condemnation, transportation, cleaning and desinfection) as well as financial losses due to decreased income for the poultry industry.

A detailed description of the costs is listed under point 8.

Benefits in case of the successful programme include improved food safety which contributes largely to the achievement of public health goals of the Community.

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

As the control programme started by 1st of January, 2010, evolution data are not yet available.

7. Targets

7.1. Targets related to testing

7.1.1. Targets on diagnostic tests

Number and specification of tests

Mandatory testing will be performed in all registered broiler flocks of turkeys. A preliminary calculation was made on the approximate number of tests to be performed in the flocks. The number of tests calculated is based on the total of flocks containing more than 500 hens (1279 flocks at the moment according to the national register) and the testing scheme as provided for in Commission Regulation No 584/2008 of 20 June 2008 implementing Regulation (EC) No 2160/2003 of the European Parliament and of the Council as regards a Community target for the reduction of the prevalence of Salmonella enteritidis and Salmonella typhimurium in turkeys.

Broiler flocks are kept usually until the age of 112-154 days (depending on the technology and the sexual status). As cleansing take place after every flock, each year 2,5 flocks can be reared in a certain airspace in average. Sampling of flocks of fattening and breeding turkeys on the initiative of the food business 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. The results remain only valid until maximum six weeks after sampling and therefore repeated sampling of the same flock might be required.

Given that in Hungary are 1279 broiler turkey flocks (~13000000 animals) the total number of samples to be taken is (1279x2,5)+(1279x2,5x3)= 12790 samples (1279x2,5x2=6395 sampling) are expected to be tested for the detection of Salmonella spp. As according to Commission Regulation (EC) No 584/2008 at least two pairs of boot/sock swabs shall be taken and all

boot/sock swabs must be pooled into one sample.) Official samples number will be ~ 1300 (~10% of the relevant flocks/year).

Based on the baseline study data, 3,4% of the flocks are infected with Salmonella Enteritidis or Salmonella Typhimurium, 81,2% of the flocks are infected with any Salmonella serotypes.

Serotyping will be performed from each positive isolate. Positivity is expected to be detected in 81,2% of flocks (1279 x 0.812 = 1038,5), summary 1038,5x2=2077 positive isolate will need serotyping in one production cycle, 2077x2=4154 per year.

However, an exact number of tests, which will be performed, is not possible, because not every operator rears the same amount of flocks every year and we have not got any data about the reinfection of the flocks.

Approximately 13000000 broilers are slaughtered in Hungary a year. Meat originated from Salmonella infected flocks will not be purchased by meat processing plants, therefore compensation is required (13000000 x 0.034 x 2.3 €; about 2,3 € is the price of a broiler to be slaughtered).

7.2. Testing scheme

1. Frequency and status of sampling

(a) The sampling frame shall cover all flocks of fattening and breeding turkeys covered by the scope of Regulation
(EC) No 2160/2003.
(b) Flocks of turkeys shall be sampled on the initiative of the food business operator and by the competent authority.
Sampling of flocks of fattening and breeding turkeys on the initiative of the food business 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. The results remain only valid until maximum six weeks after sampling and therefore repeated sampling of the same flock might be required.

Sampling by the competent authority shall include at least:
once a year, all flocks on 10 % of the holdings with at least 500 fattening turkeys, but in any case:
— all flocks on the holding when one flock tested positive for *Salmonella enteritidis* or *Salmonella typhimurium* in 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 salmonella, and
— all flocks on the holding when one flock tested positive for *Salmonella enteritidis* or *Salmonella typhimurium* during the previous round in samples taken by the food business operator, and
— 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.

2. Sampling protocol

At least two pairs of boot/sock swabs shall be taken. For free range flocks of turkeys, samples shall only be collected in the area inside the house. All boot/sock swabs must be pooled into one sample.

In flocks with less than 100 turkeys, where it is not possible to use boot/sock swabs as access to the houses 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, or if not feasible, by other sampling techniques for faeces fit for the intended purpose.

Before putting on the boot/sock swabs, their surface shall be moistened with maximum recovery diluents (MRD: 0,8 % sodium chloride, 0,1 % peptone in sterile deionised water), or sterile water or any other diluent approved by the national reference laboratory referred to in Article 11 of Regulation (EC) No 2160/2003.
The use of farm water containing antimicrobials or additional disinfectants shall be prohibited.
The recommended way to moisten boot swabs shall be to pour the liquid inside before putting them on. Alternatively, boot swabs or socks may be autoclaved with diluents within autoclave bags or jars before use. Diluents may also be applied after boots are put on using a spray or wash bottle.

It shall be ensured that all sections in a house are represented in the sampling in a proportionate way. Each pair should cover about 50 % of the area of the house.

Alternatively, the competent authority may decide that one pair of boot swabs shall be taken, covering 100 % of the area of the house if combined with a dust sample, collected from multiple places throughout the house from surfaces with visible presence of dust.
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 salmonella infection in a flock on that holding and in any other case considered appropriate, the competent authority shall satisfy itself by conducting further tests as appropriate so that the results of examinations for salmonella in flocks of turkeys are not affected by the use of antimicrobials in those flocks.
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 turkeys for the purpose of the Community target referred to in Article 1(2).

3. Examination of the samples

3.1. Transport and preparation of the samples

Samples shall be sent by express mail or courier to the laboratories referred to in Articles 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.
The pair of boot/sock 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.
The sample shall be swirled to fully saturate it and culture shall be continued by using the detection method in point 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 provisions on the preparation of samples set out in this point.

3.2. Detection method

The detection method recommended by the Community reference laboratory (CRL) for salmonella in Bilthoven, the Netherlands, shall be used.
That 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 that detection method, a semi-solid medium (modified semi-solid Rappaport-Vassiladis medium, MSRV) is used as the single selective enrichment medium.

3.3. Serotyping

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

3.4. Alternative methods

With regard to samples taken on the initiative of the food business operator, the methods of analysis provided for in Article 11 of Regulation (EC) No 882/2004 of the European Parliament and of the Council (1), may be used instead of the methods for the preparation of samples, detection methods and serotyping provided for in points 3.1, 3.2 and 3.3 of this Annex, if validated in accordance with EN/ISO 16140/2003.

3.5. Storage of strains

At least one isolated strain per house and per year shall be collected by the competent authority and 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. Results and reporting

4.1. Calculation of prevalence for the verification of the Community target

A flock of broiler turkeys 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 of broilers 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.

4.2. Reporting

Reporting shall include:

(a) the total number of flocks of broiler turkeys sampled by the competent authority or by the food business operator;
(b) the total number of infected flocks of broilers;
(c) all serotypes of *Salmonella* isolated (including other than *Salmonella Enteritidis* and *Salmonella Typhimurium*);
(d) explanations of the results, in particular concerning exceptional cases.

The results and any additional relevant information 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.

4.3. Additional information

At least the following information shall be made available from each flock of broilers tested for analysis at national level or by the European Food Safety Authority at its request:
(a) sample taken by the competent authority or by the food business operator;
(b) holding reference, remaining unique in time;
(c) house reference, remaining unique in time;
(d) month of sampling.

7.3. Targets on vaccination or treatment

Vaccination is not compulsory in broiler flocks of Meleagris gallopavo. The rules of using vaccination and treatment are laid down in Commission Regulation (EC) No 1177/2006 of 1 August 2006 implementing Regulation (EC) No 2160/2003 of the European Parliament and of the Council as regards requirements for the use of specific control methods in the framework of the national programmes for the control of salmonella in poultry.

8. Detailed analysis of the cost of the programme

Costs related to	Specification	Number of units	Unitary cost in €	Total amount in €	Community funding requested (yes/no)
1. Testing					
1.1. Cost of the analysis	Test: modified ISO 6579 (2002) using MSRV planned to be carried out in the framework of official sampling (1279*0,1*2)+official samples of verifying the efficiency of desinfection (1279*0,034*2)	347	10	3470	yes
	Test: serotyping (1279*0,1*2*0,81) planned to be carried out in the framework of official sampling	210	40	8400	yes
1.2. Cost of sampling	costs of sampling of approx. 1279 flocks, 2,5x2 times during 2010 = 6395 sampling sessions	6395	50	319750	yes
1.3. Other costs					
2. Vaccination or treatment of animal products					
2.1. Purchase of vaccine/treatment of animal products					
2.2. Distribution costs					
2.3. Administering costs					
2.4. Control costs					
3. Slaughter and destruction					
3.1. Compensation of animals	Cost of the compensation of the positive animals, approx. 13000000 X 0.034 = 442000 animals	442000	2,3	1016600	yes
3.2. Transport costs	Slaughtering of infected flocks can only be authorised when meat from these flocks is treated according to specific food safety legislation. Therefore, slaughter is not likely to be performed at regular contracted slaughterhouses, which makes transport costs much higher than usual. approx. 13000000 X 0.034 = 442000 animals, 12,5 kg/animal	5525000	0.04	221000	no
3.3. Destruction costs	Cost of the destruction approx. 13000000 X 0.034 = 442000 animals, 12,5 kg/animal	5525000	0.2	1105000	yes

3.4. Loss in case of slaughtering	*This loss is estimated to be of a large extent. However, losses due to the early slaughter of the flock is very hard to estimate.*				
3. Slaughter and destruction					
4. Cleaning and disinfection	*When taking into account the number of flocks (1279) and the infection rate (81,2%), an approximate number of 1040 flocks to be cleansed and disinfected can be estimated. Cleansing and desinfection of an average flock depends on several factors, however an approximate amount of costs is given.*	*1040*	*500*	*520000*	*no*
5. Salaries (staff contracted for the programme only)					*no*
6. Consumables and specific equipment					*no*
7. Other costs					*no*
	TOTAL			***3194220***	
	Community funding requested			***2453320***	***yes***

Central Agricultural Office
Animal Health and Animal Welfare Directorate

HUNGARY

Application

for Community financing for the national control programme of Hungary for

Salmonella spp.
in breeding flocks of Meleagris gallopavo
for the year 2011.

30th of April, 2010

Part A

General requirements for the national salmonella control programmes

(a) The main objective of the programme is to comply with existing Community legislation, to achieve Community prevalence targets within the defined time period available as regards breeding flocks of Meleagris gallopavo in the territory of Hungary. The target is to reduce the prevalence to 1 % or less of *Salmonella Enteritidis and Salmonella Typhimurium* (the relevant salmonella serotypes).

(b) Protection against salmonellosis is mandatory pursuant to the relevant EU provision as of 1 January 2010. A Decree was created and came into force on the 7th of January, 2008, and can be referred to as Decree 2/2008. (I. 4.) of the Minister of Agriculture and Rural Development on specific rules of protection against salmonellosis. This Decree was repealed and a new Decree came in force on the 6th on January 2010 (Decree 180/2009. (XII. 29.) of the Minister of Agriculture and Rural Development on specific rules of protection against salmonellosis (hereinafter: "Decree"). The aim of creating the first Decree was to ensure compliance with the changes in the Community legislation. The Decree sets the conditions of the obligatory control measures in breeding, laying and broiler flocks of Gallus gallus and voluntary (mandatory from 2010) measures in breeding and broiler flocks of Meleagris gallopavo against specified Salmonella serotypes. The Decree complies with the minimum sampling requirements laid down in part B of Annex II to Regulation (EC) No 2160/2003 of the European Parliament and of the Council[1] indicating the relevant animal population and phases of production which sampling cover

rearing flocks — day-old chicks

- four-week-old birds

- two weeks before moving to laying phase or laying unit

adult breeding flocks — every second week during the laying period

The new Decree was issued, because sampling of turkey flock became mandatory. Also, the structure of the Decree is new and experiences regarding the implementations of the Programmes were built in.

More information about testing scheme: please see *Part B Chapter 7.2*

(c) The Decree compiles with the specific requirements laid down in Parts C, D and E of Annex II to Regulation (EC) No 2160/2003

I General

1.1. The short summary referring to the occurrence of the salmonellosis [zoonotic salmonella] in Hungary with specific reference to the results obtained in the framework of monitoring in accordance with Article 4 of Directive 2003/99/EC of the European Parliament and of the Council[2], particularly highlighting the prevalence values of the salmonella serovars targeted in the salmonella control programmes: Please see Part B Chapter 2.

1.2. The structure and organization of the relevant competent authorities: Please see Annex I.

1.3. Laboratories involved in the programme must be accredited by the National Accreditation Body (NAT) and supervised by the National Salmonella Reference Laboratory (NRL) of the

---

1 OJ L 325, 12.12.2003, p. 1.

2 OJ L 325, 12.12.2003, p. 31.

Republic of Hungary (Food and Feed Safety Directorate (formerly named: National Food Investigation Institute), Central Agricultural Office). The NRL will be in charge of coordination of the laboratories, the use of appropriate laboratory methods as well as for co-operation with the Community Reference Laboratory in Bilthoven (NL).

1.4. Methods used in the examination of the samples in the framework of the programme: Please see Part B Chapter 7.3

1.5. Official controls (including sampling schemes) at feed, flock and/or herd level: Please see Part B Chapter 7.2.1.2.

1.6. Measures taken by the competent authorities with regard to animals or products in which the presence of *Salmonella spp.* have been detected, in particular to protect public health: Please see Part B Chapter 4.4.3. and Chapter 4.4.4.

1.7. National legislation relevant to the implementation of the programme, including national provisions concerning the activities set out in the programme: Please see Part B Chapter 4.4.7

1.8. Financial assistance provided to food and feed businesses in the context of the programme:
Costs and benefits are calculated based on the previous year's data of the Poultry Product Board of Hungary. In the case of breeding flocks of Meleagris gallopavo costs will occur from the intensive sampling of the flocks as well as the tests performed on the samples (including both testing on the initiative of the operator and the veterinary authority), the measures to be applied in the case of infection (slaughter or killing of the flock, condemnation, transportation, cleansing and desinfection) as well as financial losses due to decreased income for the poultry industry.
Act No. XLVI. of 2008. on the food chain and its official control and Decree No. 45/2010. (IV.23.) Minister of Agriculture and Rural Development on the rules of financing the national programs for the eradication, control and monitoring of certain animal diseases and zoonoses and Decree No. 148/2007. (XII.7.) on the prevention of certain animal diseases and the order of claiming financial support and payment regarding their overcome in 2010 give the financial guarantee of the national programme.
In case of a positive flock, when compensation occurs, valuation of the birds is performed by the district chief veterinary officer according to a scale provided by the Poultry Product Board. It is based on a calculating system, where the day-old chicks' price is considered as 100%, and the value of a bird depends on its production cycle and age (given in percentage)

Valuation/valorisation of birds is calculated based on the previous year's data of the Poultry Product Board of Hungary. Table containing these data is sent to the central veterinary office.

2. Concerning food and feed businesses covered by the programme

2.1. The structure of the production

Breeding flocks are kept usually until the age of one year (57 weeks). The production period begins when the flock is 33-34 weeks of age. In Hungary, breeding flocks are typically kept in barns and can be structured according to elite, grandparent- and parent flocks, size, and the type of holdings.

2.2. The structure of the production of feed.

Feeding of poultry, including breeding flocks of Meleagris gallopavo is based on cereal products, mainly on corn, barley and wheat. Soybean and fishmeal is used as a source of protein.
Commercial feed producers are operating according to GMP standards. Breeding flocks mainly use commercial pelleted feed, the technology of production of which includes heat treatment.
In Hungary, control of feedingstuffs is performed according to two main piece of legislation:
Act No. XLVI. of 2008 on the food chain and its official control, Govermental Decree 274/2006 (XII. 23) on the establishment and operation of the Central Agricultural Office and Decree of the Ministry of Agriculture and Rural Development No. 43/2003. (IV. 26.) on the implementation of the above Act.
In the Act general principles of the control of feed are laid down general principles of the control of feed, sets the competent authorities and allocates the tasks to these services.
feed production plant may be authorised by the competent regional organization (County Directorate of Food Chain Safety and Animal Health) of the Central Agricultural Office. The authorisation must be renewed at periods of a maximum of 5 years. Other authorities are also involved in the authorisation process.
The registration of the feed production units is done by the Directorate of Food Chain Safety and Animal Health of County Agricultural Office.
The Act states that the feedingstuffs produced may neither pose a direct health risk to live flock, nor an indirect risk to public health.
Therefore, the competent Directorate of Food Chain Safety and Animal Health of County Agricultural Office perform regular controls of the feed production plants, including the production, keeping, marketing, transport and use of feed produced. Controls also include compliance with feed hygiene rules, safety, composition, microbiological safety of feedingstuffs, as well as many other parameters such as the presence of prohibited substances, packaging, labelling etc.
In case of non-compliance with any of the parameters listed in the Act and the Decree, the competent County Directorate may prohibit the production, keeping, marketing, transport, export, import or transport of the relevant feed. If such feed was already used, the Directorate of Food Chain Safety and Animal Health of County Agricultural Office has a duty to notify the county level public health authority.
The Decree gives detailed instruction to authorities and stakeholders on how to implement the Act. Annex 20 to the Decree sets out the maximum tolerable amount of Salmonella spp. in food and the related ISO standards. According to ISO 6579:2002, feedingstuffs must show zero Salmonella spp. / 25 grams.
In addition, the same Annex states that feedingstuffs must be free of any pathogens which may pose a direct risk to animal health and/or an indirect risk to public health.

2.3. Relevant guidelines

Hungary has relevant guidelines for good animal husbandry practices or other guidelines (mandatory or voluntary) on biosecurity measures defining the hygiene management at

farms, the measures preventing incoming infections carried by animals, feed, drinking water, people working at farms, and about hygiene in transporting animals to and from farms. The guideline of Decree No. 2/2008. (I. 4.) of the Minister of Agriculture and Rural Development on specific rules of protection against salmonellosis, the guideline about feed control, the guideline of animal transports and the Hungarian Poultry Product Board's guideline for good practice. All farms have to made an own biosecurity programme and all have to get checked by the Directorate of Food Chain Safety and Animal Health of County Agricultural Office.

2.4. Routine veterinary supervision of farms:

Controls are planned annually by the Food Chain Safety Deputy President of Central Agricultural Office. Number of controls depends on risk assessment.

An official veterinarian can also perform on-spot checks when taking samples, but it is not necessarily connected. Inspections are performed based on a national program.

2.5. Registration of farms:

All poultry farms have to registered according to Decree no. 119/2007. (X.18) of MARD on keeping places, breeding farms and national registration system of their data if they meet the relevant criteria. For more information please see Part B Chapter 4.4.1.

All poultry farms have to registered according to Ministerial Decree no. 119/2007. (X.18) on keeping places, breeding farms and national registration system of their data, which meet one of these criteria:

- has to be registered due to a piece of legislation regarding animal health (such as the national Decree on Salmonella)
- the owner would like to apply for financial support

All commercial poultry farms have to be registered:

- which are considered as large-scale holdings according to a different piece of registration (that means: 2000 broilers or 500 other adult poultry)
- which sends poultry directly to the slaughterhouse
- which have a slaughtering permit for small producers.

2.6. Record-keeping at farms: All documents concerning to the programme must be kept for 3 years. The documentation has to contain all data about animals, tests, transports, samples and medication.

2.7. Documents to accompany animals when dispatched.

Commercial poultry consignments are accompanied with animal health certificates according to Directive 90/529/EC. Consignments with national destinations are accompanied with animal health certificates according to Decree 41/1997. (V. 28.) FM appendices 8/a and 8/b.

In accordance with Paragraph 85. of Decree No 41/1997. of the Minister of Agriculture on the publication of the Animal Health Code, the official veterinarian carries out a stock examination within 12 hours before transportation, and on the basis of the financing/allowance plan, fills out the animal health certification in the appendices 8/a. and 8/b., certifies the place of origin of the day-old animals, their circumstances free from epidemic, the name of the vaccine used, the time and method of the immunization. Because of the changes occurred since the publication of the legislation, this ordinance cannot be fulfilled in these days.

„Animals can only be transported when accompanied by a valid certification attested by the veterinarian responsible for treatment" in accordance with point 4.2.1. point (Starting of poultry consignments) of the guide which was prepared for poultry hatcheries that are obliged to TIR registration, in accordance with point d) of Paragraph 6. of Decree No 120/2007. (X. 18.) of the Minister of Agriculture and Rural Development on establishing and operating of the Poultry Information System (hereinafter: BIR regulation). In pursuance with point 4.2.1., „The hatchery starting the consignment has to fill in the Poultry movement form 2740, on the upper part of which the data of starting has to be given".

The poultry animal health certificate laid down in the BIR regulation is not to replace the certificate 8/b., as the authority responsible for animal health takes part in issuing the latter only.

At the same time, even the certification 8/a. can not be replaced by the introduction of the BIR regulation, as certain data that have to be certified by the veterinarian in the certificate 8/a are not placed on the latter, for example immunizations carried out in the flock, diagnostic examinations and the results thereof.

In pursuance of the abovementioned regulations, all three certifications are required for the transport of the day-old poultry. The BIR certification is drawn up by the veterinarian responsible for treatment, while certifications 8/a. and 8/b. are filled in by the approved veterinarian, in accordance with the Governmental Decree No 113/2006. (V. 12.) on the competence and detailed rules of the activity of the approved veterinarian, with the exception of the case when the approved veterinarian is not the treating veterinarian, because in those cases the certification 8/a. has to be filled in by the veterinarian of the hatchery.

As it can be seen from above, the current legislation of movement documentations doesn't seem to be unambiguous as regards several points.

For solving the problem, a working group was established. The working group is predestined for revising the form and content of certificates for inland live animal transportation and as far as possible, for the harmonisation thereof.

2.8. Other relevant measures to ensure the traceability of animals. Please see Part A 2.7. and Part B Chapter 4.2. and Chapter 4.4.1.

At central level three persons are responsible for the TRACES, of which one is responsible for the technical part (for example: giving access to the system). The two other colleagues (one at MRD and one at CAO) are the trade contact points of Hungary and are keeping the contact wit the counterparts of the member states.

Part B

1. Identification of the programme

Member State: **Hungary**

Disease: **Infection of animals with zoonotic *Salmonella spp.***

Animal population covered by the programme: **Breeding flocks of turkeys (*Meleagris gallopavo*)**

Year of implementation: **2011**

Reference of this document: **02.3/897/5/2010.**

Contact (name, phone, fax, e-mail): **Dr. Imre Nemes**
Director
Animal Health and Animal Welfare Directorate
Central Agricultural Office
Tel: +36-1-460-6300 ext. 112
Fax: +36-1-222-6064
e-mail: nemesi@oai.hu

Date sent to the Commission: **30th of April, 2010**

2. Historical data on the epidemiological evolution of zoonotic *salmonellosis* specified in point 1

Monitoring and control programmes for Salmonella spp. (S. Enteritidis and S. Typhimurium) started in Hungary in 1997 by issuing official guidelines for the poultry sector. The goal of the project was to achieve similar targets as which were set by Council Directive 92/117/EEC. The collection of guidelines were ordered by the Ministry of Agriculture and were prepared by an expert group consisting of both Hungarian experts of various backgrounds (Hungarian Academy of Science, National Food Investigation Institute, Central Veterinary Institute and numerous practicing veterinarians) and experts of the Agri-Livestock Consultant Ltd (W. Edel and C. Wray). The work was financed by the PHARE programme of the European Union under project No. HU 9304-05-02. The programme covered the whole poultry sector in relation of Gallus gallus, breeding flocks, hatcheries, broiler flocks, table egg producing layer flocks, egg packaging and distribution establishments, poultry slaughterhouses, cutting plants as well as feed mills. Because of the similarities the statements of this study can be used for the turkeys as well. The guidelines stated clearly that there is an urgent need for centralised official administrative measures in the form of a ministerial decree by the Minister of Agriculture.

The first decree was created in the year 2002: Decree 49/2002. (V. 24.) of the Minister of Agriculture and Rural Development on protection against salmonellosis and poultry typhus and on retaining officially free status, and was modified by the Decree 97/2003. (VIII. 19) Minister of Agriculture and Rural Development. A new Decree was created and came into force on the 7th of January, 2008, and can be referred to as Decree 2/2008. (I. 4.) of the Minister of Agriculture and Rural Development on specific rules of protection against salmonellosis. The aim of creating the new Decree was to ensure compliance with the changes in the Community legislation.

Decree 2/2008 of MARD set the conditions of the obligatory control measures in breeding and broiler flocks of turkeys (mandatory from 2010) measures against specified Salmonella serotypes. As a prerequisite, there is an obligation of the holdings keeping breeding and broiler flocks of turkeys, (*Meleagris gallopavo)* to be registered by the State Veterinary Service. Results of testing required by the Decree are also to be notified to the Directorate of Food Chain Safety and Animal Health of County Agricultural Office (formerly named: County Animal Health and Food Control Service). Decree 2/2008 of MARD had been amended 5 times till it was repealed and replaced by Decree 180/2009 of MARD (hereinafter referred as 'Decree') as of 6th of January, 2010. The new Decree covers the same area, but the structure of it was modified and enhanced based on experience.

As a result of the above mentioned mandatory control in breeding flocks of turkeys, latest data show that infection amongst these flocks is more or less 1%. However, the Community target which is set by Commission Regulation (EC) of 20 June 2008 implementing Regulation (EC) No 2160/2003 as regards a Community target for the reduction of the prevalence of certain Salmonella serotypes in breeding flocks of *Meleagris gallopavo* and amending Regulation (EC) No 2160/2003 is a maximum of 1% by 31 December 2012. This goal can be achieved by a rigorous control programme using extensive professional and financial resources.

3. Description of the submitted programme

The main objective of the programme is to comply with existing Community legislation, to achieve Community prevalence targets within the defined time period available as regards breeding flocks of Meleagris gallopavo in the territory of Hungary. The programme covers the two zoonotic Salmonella serotypes most relevant in relation to public health (S. Enteritidis, S. Typhimurium).

Included in the programme are all breeding flocks of Meleagris gallopavo registered in the territory of Hungary.

Laboratories involved in the programme must be accredited by the National Accreditation Body (NAT) and supervised by the National Salmonella Reference Laboratory (NRL) of the Republic of Hungary (Food and Feed Safety Directorate (formerly named: National Food Investigation Institute), Central Agricultural Office). The NRL will be in charge of coordination of the laboratories, the use of appropriate laboratory methods as well as for co-operation with the Community Reference Laboratory in Bilthoven (NL).

4. Measures of the submitted programme

4.1. Summary of measures under the programme

Duration of the programme:

First year: 2010 Last year: 2012

☒ Control ☐ Eradication

- ☒ Testing
- ☒ Slaughter of positive animals
- ☒ Killing of positive animals
- ☒ Vaccination
- ☐ Treatment
- ☒ Disposal of products

- ☐ Testing
- ☐ Slaughter of positive animals
- ☐ Killing of positive animals
- ☐ Extended slaughter or killing
- ☐ Disposal of products

☒ Monitoring or surveillance

☒ Other measures *(specify)*:

- Flocks positive for S. Typhimurium or S. Enteritidis will be subject to movement control. As soon as the NRL confirms the infection, the flock shall be sent to isolated slaughter. Meat originating from such flocks may only be authorised for human consumption after meeting all relevant food safety requirements as regards of the Regulation (EC) No. 2160/2003. Annex II. Point E.

- Hatching eggs originating from such flocks may only be marketed according to the Regulation (EC) No. 2160/2003. Annex II. Point C.5.

- After emptying the relevant holding operators are required to implement proper cleansing and desinfection. Effectiveness of the procedure is controlled by the competent regional animal health authority. Restocking is only authorised, when cleansing and desinfection is deemed to be satisfactory.

4.2. Designation of the central authority charged with supervising and coordinating the departments responsible for implementing the programme:

All holdings must be registered at the district veterinary office. The official senior veterinary officer keeps and updates the record of holdings participating the programme. The official senior veterinary officer also declares the status of the holdings according to their actual serological status.

The 19 Directorates of Food Chain Safety and Animal Health of County Agricultural Offices coordinate and supervise the programme in their territory. They are required to annually report the actual status of the programme to the Animal Health and Animal Welfare Directorate of the Central Agricultural Office.

Name:	Central Agricultural Office Animal Health and Animal Welfare Directorate
Name in Hungarian:	Mezőgazdasági Szakigazgatási Hivatal Központ Állategészségügyi és Állatvédelmi Igazgatóság
Address:	1149 Budapest, Tábornok u. 2., Hungary
Tel.:	+36-1-460-6300
Fax:	+36-1-222-6065

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

The programme will be implemented on the whole territory of Hungary. The programme is compulsory as from the 1st January. 2010.

4.4. Measures implemented under the programme

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

All poultry farms have to registered according to Ministerial Decree no. 119/2007. (X.18) on keeping places, breeding farms and national registration system of their data, which meet one of these criteria:

- has to be registered due to a piece of legislation regarding animal health (such as the national Decree on Salmonella)
- the owner would like to apply for financial support

All commercial poultry farms have to be registered:

- which are considered as large-scale holdings according to a different piece of registration (that means: 2000 broilers or 500 other adult poultry)
- which sends poultry directly to the slaughterhouse
- which have a slaughtering permit for small producers.

According to Paragraph 5. of the Decree the operator is obliged to register for the national control programmes, pursuant to Article 8 (3). Article 8 (3) states that:

A business operator obliged to or voluntarily undergoing control pursuant to paragraph (1) shall apply for participation in the national control programme by submitting an epidemiological action plan approved by the private veterinarian responsible for the supervision of the poultry flock or hatchery at the competent district office by virtue of the location of the holding site, which shall register the business operator in accordance with Article 3(4) (a).

4.4.2. Measures and terms of legislation as regards the identification of animals: –

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

According to point 7 of paragraph 9 of the Decree:

The laboratory shall immediately notify the district office and the veterinarian taking the sample of the test results and - in the event of positive results - the business operator and the regional organization of the CAO as well. In the event of positive results the laboratory shall send the isolated strain for confirmatory testing and serotyping together with one original copy of the sampling form to the NRL. The testing laboratory must retain the copy of the sampling form for three years.

4.4.4. Measures and terms of legislation as regards the measures in case of a positive result:

In the frame of the *Salmonella* control programme in **turkeys** the provisions of CR No 584/2008/EC paragraph 1/2/4 are implemented.

According to the Decree:

Procedure in the event of positive test results

Article 11

(1) If the sample taken from a flock of breeding hens, a flock of laying hens or a flock of breeding turkeys results positive the operator shall revise the epidemiological action plan within 22 working days and shall resubmit it to the District Office for approval. The revised plan shall contain the review of the hygiene conditions, especially the efficiency of the desinfection and pest control procedures, the results of the test to find possible reasons for infection and the list of measures considered necessary. The District Office shall evaluate the plan within 22 working days and may ask the operator to amend it if they find it unsatisfactory.

(2) If a sample taken at a flock of broilers and fattening turkeys results positive the business operator shall revise the epidemiological action plan within 11 working days of receiving the result and shall resubmit it to the District Office for approval. The action plan shall contain the review of the hygiene conditions; especially the efficiency of the desinfection procedures and of pest control (insect and rodent extermination), the results of the test to identify possible reasons for infection and the list of measures considered necessary. The District Office shall evaluate the plan within 11 working days and may ask a business operator to amend it if they find it unsatisfactory.

(3) If the results of salmonella testing of broiler and fattening turkey flocks results positive, there is a rapid method - available on the business operator's request – of excluding infection by Salmonella Enteritidis and Salmonella Typhimurium serotypes at a certified laboratory designated by the CAO using group-specific 'O' antibody. In this case the laboratory which performs the 'O' group typing will send the isolated strain to the NRL for serotyping.

(4) If, using the group specific 'O' antibody, infection by Salmonella Enteritidis and Salmonella Typhimurium serotypes can be excluded, then the given flock of broilers or fattening turkeys may be slaughtered by decision of the District Office. Measures pursuant to paragraph (2) and (5) shall be applied at the same time.

(5) When, during serotyping, the NRL detects infection with a serotype other than Salmonella Enteritidis or Salmonella Typhimurium, the District Office shall immediately withdraw the official certificate of infection-free status of the flock, if the operator has one, in respect of the given serotype. The operator shall clean the site after the production cycle (building, equipment and machinery, connecting rooms and paths) and - in accordance with specific piece of legislation on issuing the Animal Health Code – for stringent desinfection, rodent extermination and desinsectisation.

(6) Operators may restock the airspace concerned only if they verify the efficiency of desinfection when an environmental swab sample tests negative in a laboratory. The business operator shall bear the costs of taking and testing environmental swabs.

(7) If in the case of a flock of breeding hens the NRL detects infection by a salmonella serotype that is considered a Community target under Regulation (EC) No 1003/2005, Article 12 (9) shall apply in respect of feed and Article 12(8) in respect of restocking of the air space.

Procedure in the event of Salmonella enteritidis or Salmonella typhimurium infection

Article 12

(1) If during serotyping the NRL detects infection with Salmonella Enteritidis or Salmonella typhimurium the District Office shall order restriction of movement of the flock concerned and the products originating therefrom and shall withdraw the official certificate of infection-free status without delay. The official certificate of infection-free status in respect of other flock from the holding shall also be withdrawn at the same time unless the infected flock have been appropriately isolated.

(2) Testing may only be repeated by official sampling ordered by the regional organization of the CAO pursuant to Article 9(10). Sampling for the official test may only be carried out by official or approved veterinarians within the shortest time possible. The NRL shall test the samples and at the same time conduct an examination to detect antimicrobial inhibitory effects. If the result from the repeated sampling is negative or it results in an infection with salmonella serotypes not covered by the national control programmes and no antimicrobial inhibitory effect can be detected, the District Office shall lift the restriction of movement in respect of the flock and the products thereof. If antimicrobial inhibitory effects can be detected the District Office shall investigate the circumstances of the use of antibiotics and maintain the restriction on movement until it is proven that antibiotics were used for purposes other than to treat the infection of salmonella.

(3) If repeated testing reveals infection by Salmonella Enteritidis or Salmonella Typhimurium or the regional organization of the CAO not orders a repeated test, the flock concerned may be slaughtered after preliminary consultation with the slaughterhouse and the official veterinarian supervising the slaughterhouse and in accordance with the specific veterinary health rules on separate slaughter.

(4) In the event of infection by Salmonella Enteritidis or Salmonella Typhimurium in a flock of breeding hens and turkeys Annex II/C to Regulation (EC) No 2160/2003 shall apply and Annex II/D to Regulation (EC) No 2160/2003 shall apply to flocks of laying hens.

(5) Meat from an infected flock may be placed on the domestic market without eliminating salmonella if the production processes following the slaughter of the infected flock are separated from the processing and treatment of other raw materials of animal origin and the official veterinarian supervising the slaughterhouse has been informed 48 hours before slaughter. Food materials originating from slaughtering and processing infected flock shall carry the text "for consumption only after heat treatment (thorough frying or cooking)" clearly and indelibly marked on every smallest packaging unit close to the identification label, close to the traceability marking; and on the accompanying commercial document.

(6) If meat from infected flock is processed after salmonella elimination (heat treatment, heat treatment as part of product manufacturing) the processes following slaughter of the infected flock shall be separated from the processing of other raw materials of animal origin until salmonella has been efficiently eliminated, this has been certified and the official veterinarian supervising the slaughterhouse has been informed 48 hours before slaughter. Food materials originating from infected flock shall carry the text "Originates from salmonella-infected flock" on every smallest packaging unit close to the identification label and the premises traceability marking and may only be used to produce food when the technological manufacturing processes guarantee that the product will be salmonella-free. Every such food item shall be verified by microbiology testing carried out in a laboratory before the are cleared for retail trade and the official veterinarian supervising the slaughterhouse shall be informed thereof. The production plant may place heat treated products certified as salmonella-free on the market on the basis of the results of own checks.

(7) After the keeping place of the infected flock has been emptied the operator shall provide for cleaning the building, equipment and machinery, connecting rooms and paths and - in accordance with specific piece of legislation on the issuing of Animal Health Code for reinforced desinfection, rodent extermination and disinsectisation. The remaining litter shall be disposed of in accordance with special legislation on the treatment of waste of animal origin. After these tasks have been accomplished the business operator shall inform the District Office, which will verify the efficiency of the measures implemented.

(8) The District Office shall authorise the restocking of the airspace concerned only if the effectiveness of desinfection was verified by environmental swab samples test negative in the laboratory.

(9) The feed fed to infected flock shall be tested without delay in accordance with the special legislation on the manufacturing, placing on the market and use of feed, except when day-old birds test positive. Until testing yields negative results such feed may only be fed to infected flock. If feed tests positive it has to be disposed of in accordance with the special legislation on the manufacturing, placing on the market and use of feed, and the equipment used for its storage and transportation shall be disinfected. If infection has been detected, specific testing shall be carried out to detect salmonella at the feed operator from which the feed originates.

(10) Hatcheries to which infected hatching eggs have been transported shall act in accordance with Annex II/C(3) and (5) of Regulation (EC) No 2160/2003 and shall apply the provisions of paragraph (7) and (8). If a hatchery has a certificate of infection-free status the district office shall immediately withdraw this. The hatchery must cooperate in tracing the origins of infection on the basis of its records and shall bear the costs.

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

See point 4.4.4.!

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

See point 4.4.4.!

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

- Regulation (EC) No. 2160/2003. of the European Parliament and of the Council on the control of Salmonella and other food-borne zoonotic agents
- Commission Regulation No. 584/2008 (EC) of 20 June 2008 implementing Regulation (EC) No 2160/2003 of the European Parliament and of the Council as regards a Community target for the reduction of the prevalence of Salmonella Enteritidis and Salmonella Typhimurium in turkeys
- Commission Regulation (EC) No 1177/2006 of 1 August 2006 implementing Regulation (EC) No 2160/2003 of the European Parliament and of the Council as regards requirements for the use of specific control methods in the framework of the national programmes for the control of Salmonella in poultry
- Commission Regulation (EC) No. 213/2009 Commission Regulation of 18 March 2009 amending Regulation (EC) No 2160/2003 of the European Parliament and of the Council and Regulation (EC) No 1003/2005 as regards the control and testing of *Salmonella* in breeding flocks of *Gallus gallus* and turkeys
- Act No. XLVI. of 2008. on the food chain and its official control
- Decree No. 180/2009. (XII. 29.) of the Minister of Agriculture and Rural Development on specific rules of protection against salmonellosis
- Decree No. 41/1997. (V. 28.) of the Minister of Agriculture on Code of Veterinary Rules

The vaccination protocol has to be enclosed in the epidemiological control plan (which the operator submits as an application for participation in the national control programme.)

Furthermore, according to Article 14 (3) of the Decree:

"Documentation and treatment log has to be kept on the use of vaccines, which is checked by the district office based on risk-based assessment. Checking shall cover the proper use of vaccines and that the application was performed as in the instructions of use. The operator shall verify that the appropriate amount of vaccines was used by invoices, and the veterinarian verifies the proper application by his stamp.

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

- Act No. XLVI. of 2008. on the food chain and its official control
- Decree No. 45/2010. (IV.23.) Minister of Agriculture and Rural Development on the rules of financing the national programs for the eradication, control and monitoring of certain animal diseases and zoonoses

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

Hungary has relevant guidelines for good animal husbandry practices or other guidelines (mandatory or voluntary) on biosecurity measures defining the hygiene management at farms, the measures preventing incoming infections carried by animals, feed, drinking water, people working at farms, and about hygiene in transporting animals to and from farms. The guideline of Decree No. 2/2008. (I. 4.) of the Minister of Agriculture and Rural Development on specific rules of protection against salmonellosis, the guideline about feed control, the guideline of animal transports and the Hungarian Poultry Product Board's guideline for good practice. All farms have to made an own biosecurity programme and all have to get checked by the Directorate of Food Chain Safety and Animal Health of County Agricultural Office.

5. General description of the costs and benefits:

Costs and benefits are calculated based on the base line study's data and the previous year's data of the Poultry Product Board of Hungary. In the case of breeding flocks costs will occur from the intensive sampling of the flocks as well as the tests performed on the samples (including both testing on the initiative of the operator and the veterinary authority), the measures to be applied in the case of infection (slaughter or killing of the flock, condemnation, transportation, cleansing and desinfection) as well as financial losses due to decreased income for the poultry industry.

A detailed description of the costs is listed under point 8.

Benefits in case of the successful programme include improved food safety which largely contributes to the achievement of public health goals of the Community.

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

As the control programme started by 1st of January, 2010, evolution data are not yet available.

6.1. Evolution of zoonotic salmonellosis

6.1.1. Data on evolution of zoonotic salmonellosis

Year: 2010 **Situation on date:** First half year of the programme

Animal species: breeding flocks of Meleagris gallopavo **Disease/infection[a]:** Salmonellosis

Region (a1)	Type of flock[b]	Total number of flocks[c]	Total number of animals	Total number of flocks under the programme	Total number of animals under the programme	Number of flocks checked[d]	Number of positive[e] flocks[a]			Number of flocks depopulated[a]		Total number of animals slaughtered or destroyed [a]		Quantity of eggs destroyed (number or kg) [a]		Quantity of eggs channelled to egg products (number or kg) [a]	
							(a1)	(a2)	(a3)	(a3)	(a4)	(a4)	(a3)	(a4)	(a3)	(a4)	(a3)
country Total	Breeding flock	124	193774	124	193774	124	0	0	17	0	0	0	0	0	0	0	0

(a) For zoonotic Salmonellosis indicate the serotypes covered by the control programmes: (a1) for *Salmonella* Enteritidis, (a2) for *Salmonella* Typhimurium, (a3) for other serotypes-specify as appropriate, (a4) for *Salmonella* Enteritidis or *Salmonella* Typhimurium.

(a1) Region as defined in the approved control and eradication programme of the Member State.

(b) For example, breeding flocks (rearing, adult flocks), production flocks, laying hen flocks, breeding turkeys, broiler turkeys, breeding pigs, slaughter pigs, etc. Flocks or herds or as appropriate.

(c) Total number of flocks existing in the region including eligible flocks and non-eligible flocks for the programme.

(d) Check means to perform a flock level test under the programme for the presence of salmonella. In this column a flock must not be counted twice even if it has been checked more than once.

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

7. Targets

7.1. Targets related to testing

7.1.1. Targets on diagnostic tests

Number and specification of tests

Mandatory testing will be performed in all breeding flocks of turkeys during their whole life span. A preliminary calculation was made on the approximate number of tests to be performed in the flocks. The number of tests calculated is based on breeding flocks containing more than 250 hens (what is 136 at the moment) and the testing scheme as provided for in the Annex to Commission Regulation No. 213/2009/EC of 18 March implementing Regulation (EC) No 2160/2003 as regards a Community target for the reduction of the prevalence of certain salmonella serotypes in breeding flocks of Gallus gallus and Meleagris gallopavo and amending Regulation (EC) No 2160/2003.

The Annex of the above mentioned Regulation requires all relevant breeding flocks to be tested three times during the rearing period and further testing every second week during the whole production period.

Breeding flocks are kept usually until the age of one year (57 weeks). The production period begins when the flock is 33-34 weeks of age.

In Hungary, breeding flocks are typically kept in barns which makes the taking of boot swabs the most effective way of detecting possible infection.

Using the above numbers and the testing scheme specified in the Regulation, each breeding flock will be sampled and tested approximately 11 times during a year. During each sampling five pairs of boot swabs will be taken and sent into the laboratory. This means that during a one-year period, 11x5=55 pairs of boot swabs will be taken in one flock.

Given that in Hungary there are 136 breeding flocks (~400000 animals), the total number of samples to be taken in the frame of routine business sampling is (136 x 5 x 11) + (136 x 0,1 x 5) = 7548 pairs of boot swabs, 3774 isolates and official samples (10%).

In addition, when a flock is tested positive, confirmatory sampling might made, it will take place using 5 pairs of boot swabs and additional birds selected from the flock. Based on base line study approximately less than 1 % of the flocks are infected with one or more of the 2 most relevant Salmonella serotypes, and 6,7% of the flocks are infected any serotype of Salmonella. This means that in 6,7% of the 136 flock (in 10 flocks) positive isolates will need to serotype. Confirmatory tests number will be nearly 20% of the infected flocks and will be required with the testing of 5 pairs of boot swabs, faeces material, birds, etc. each. That gives another 136x0,067x0,2=1,82 sampling, with nearly 6 isolates to serotype. Summary nearly (3774x0,067=252 + 6) ~ 260 isolates will be needed to serotype.

However, an exact number of tests which will be performed is not possible, because the time when the flock becomes infected can not predicted.

Additional programme to Application for Community financing for the national control programme of Hungary for Salmonella spp. in breeding flocks of Meleagris gallopavo for the year 2011.

7.1.1. Targets on diagnostic tests

Animal species: [a]: Breeding flocks of Melegaris Gallopavo

Region[b]	Type of the test[c]	Target population[d]	Type of sample[e]	Objective[f]	Number of planned tests
Total	Detection of Salmonella spp. (EN/ISO 6579-2002/Amd1:2007)	Breeding flocks of Melegaris gallopavo	boot swabs/dust	monitoring	3774
	Serotyping (Kauffman-White scheme)	Breeding flocks of Melegaris gallopavo	bacteria isolates	monitoring	260
	Verifying the efficiency of disinfection	Breeding flocks of Melegaris gallopavo	swab	monitoring	100
		Total			4134

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

7.1.2. *Targets on testing of flocks*[1]

Year:2011 **Situation on date:**

Animal species: Meleagris gallopavo, breeding **Disease:[a]: zoonotic salmonella**

Region (a1)	Type of flock[b]	Total number of flocks[c]	Total number of animals	Total number of flocks under the programme	Total number of animals under the programme	Number of flocks checked[d]	Number of positive[e] flocks[a]			Number of flocks depopulated[a]		Total number of animals slaughtered or destroyed [a]		Quantity of eggs destroyed (number) [a]		Quantity of eggs channelled to egg products (number)	
							(a1)	(a2)	(a3)	(a3)	(a4)	(a4)	(a3)	(a4)	(a3)	(a4)	
Total	Breeding flocks	136	400000	136	400000	136	1	0	10	1	0	0	3000	0	0	0	0

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

[1] Specify types of flocks if appropriate(breeders, layers, broilers).

7.2. Testing scheme

Testing scheme as provided for in the Annex to Commission Regulation No. 584/2008/EC of 30 June 2008 and Commission Regulation No 213/2009 of 18. March 2009 implementing Regulation (EC) No 2160/2003 as regards a Community target for the reduction of the prevalence of certain salmonella serotypes in breeding flocks of Gallus gallus and breeding turkeys amending Regulation (EC) No 2160/2003 will be used.

Details of the testing scheme are the following:

1. Sampling frame

The sampling frame shall cover all adult breeding flocks of Meleagris gallopavo comprising at least 250 birds.

2. Monitoring in breeding flocks

2.1. Location, frequency and status of sampling

Breeding flocks shall be sampled at the initiative of the operator and as part of official controls.

2.1.1. Sampling at the initiative of the operator

Sampling shall take place every third weeks at the holding. The detection of relevant salmonella serotypes during the sampling at the initiative of the operator has to be notified without delay to the County Agricultural Office, Directorate of Food Chain Safety and Animal Health by the operator, the sampler or the laboratory performing the analyses.

2.1.2. Official control sampling

Official sampling shall be carried out on three occasions during the production cycle:

(a) within four weeks following moving to laying phase or laying unit;

(b) towards the end of the laying phase, not earlier than eight weeks before the end of the production cycle;

(c) during the production, at any time sufficiently distant from the samples referred to in points (a) and (b).

2.2. Sampling protocol

2.2.1. Routine sampling at the initiative of the operator

Sampling shall primarily consist of faecal samples and shall aim to detect a 1 % within flock prevalence, with 95 % confidence limit. To that effect, the samples shall comprise one of the following:

(a) Pooled faeces made up of separate samples of fresh faeces each weighing not less than 1 g taken at random from a number of sites in the building in which the birds are kept, or where the birds have free access to more than one building on a particular holding, from each group of buildings on the holding in which the birds are kept. Faeces may be pooled for analysis up to a minimum of two pools.
The number of sites from which separate faeces samples are to be taken in order to make a pooled sample shall be as follows:

Number of birds kept in a building	Number of faeces samples to be taken in the building or group of buildings on the holding
250-349	200
350-449	220
450-799	250
800-999	260
1 000 or more	300

(b) Five pairs of boot swabs:

Boot swabs used shall be sufficiently absorptive to soak up moisture. Tubegauze 'socks' are also acceptable.
The surface of the boot swab shall be moistened using appropriate diluent (such as 0,8 % sodium chloride, 0,1 % peptone in sterile deionised water, or sterile water).
Walking around shall be done in a manner which will sample representatively all parts of the sector, including littered and slatted areas when slats are safe to walk on. All separate pens within a house shall be included in the sampling. On completion of sampling in the chosen sector, boot swabs must be removed carefully so as not to dislodge adherent material.
The boot swabs may be pooled for analysis into a minimum of two pools.

(c) 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 150 g shall be collected to be tested individually:
(i) droppings belts beneath each tier of cages which are run regularly and discharged into an auger or conveyor system;

(ii) droppings pit system in which deflectors beneath the cages are scraped into a deep pit beneath the house;
(iii) droppings pit system in a step cage house when cages are offset and faeces fall directly into the pit.

There are normally several stacks of cages within a house. Pooled faeces from each stack shall be represented in the overall pooled sample. Two pooled samples shall be taken from each flock as described below.
In systems where there are belts or scrapers, these shall be run on the day of the sampling before sampling is carried out.
In systems where there are deflectors beneath cages and scrapers, pooled faeces which has lodged on the scraper after it has been run, shall be collected.
In step-cage systems where there is no belt or scraper system it is necessary to collect pooled faeces from the deep pit.
Droppings belt systems: pooled faecal material from the discharge ends of the belts shall be collected.

2.2.2. Official sampling

(a) Routine sampling shall be as described in point 2.2.1.

(b) Confirmatory sampling following detection of relevant salmonella from sampling at the hatchery shall be carried out as follows.
In addition to the sampling as described in point 2.2.1, the sampling may include a sample of birds taken at random from within each house of birds on the farm, normally up to five birds per house, unless the County Agricultural Office, Directorate of Food Chain Safety and Animal Health deems necessary to sample a higher number of birds. The examination shall consist in a test for research of anti-microbial or of bacterial growth inhibitory effect in samples. A test is considered failed if a positive is found in any of the birds.
In case the presence of relevant salmonella is not detected but anti-microbial or bacterial growth inhibitory effect are, sampling of the flock for relevant salmonella and bacterial growth inhibitory effect shall be repeated until no bacterial growth inhibitory effect is detected, or the breeding flock is destroyed. In the latter case, the breeding flock shall be accounted for as an infected breeding flock for the purpose of the Community target.

(c) Suspect cases
In exceptional cases where the Central Agricultural Office, Food and Feed Safety Directorate has reasons to suspect false negative results at the first official sampling at the holding, a secondary official confirmatory sampling may be performed, composed of faeces or birds (for the detection of salmonella in organs).
In exceptional cases where the National Food Investigation Institute has reasons to suspect false positive sampling performed at the initiative of the operator at the holding, follow-up official sampling may be performed.

3. Examination of the samples

3.1. Preparation of the samples

3.1.1. Boot swabs samples

(a) carefully unpack the pair of boot swabs (or 'socks') to avoid dislodging adherent faecal material and place in 225 ml BPW which has been prewarmed to room temperature;

(b) where five pairs of boot swabs are pooled into two samples, place five individual samples into a minimum of 225 ml BPW and ensure that all the samples are totally immersed in the BPW;

(c) swirl to fully saturate the sample and continue culture by using the detection method in 3.2.

3.1.2. Other faecal material samples

(a) at the laboratory place each sample (or pooled sample as appropriate) into an equal weight of Buffered Peptone Water 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.

3.2. Detection method

The method recommended by the Community Reference Laboratory for Salmonella in Bilthoven, Netherlands, shall be used: the method is a modification of ISO 6579 (2002), where a semi solid medium (MSRV) is used as the single selective enrichment medium. The semi-solid medium should be incubated at 41,5 +/– 1 °C for 2 × (24 +/– 3) hours.

As regards the boot swabs samples and other faecal material samples referred to in paragraph 3.1., it is possible to pool incubated BPW enrichment broth for future culture. To do that, incubate both samples in BPW as normal. Take 1 ml of incubated broth from each sample and mix thoroughly then take 0,1 ml of the mixture and inoculate the MSRV plates in the usual way.

3.3. Serotyping

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

4. Results and reporting

A breeding flock shall be considered positive for the purpose of verifying the achievement of the Community target, when presence of relevant salmonella (other than vaccine strains) was detected in one or more faecal samples (or if there is a secondary official confirmation, in the relevant faecal samples or birds organ samples), taken at the holding. This shall not apply in exceptional cases of suspect breeding flocks where salmonella detection at the holding at the initiative of the operator was not confirmed by official sampling.

The cumulative results from sampling and testing in breeding flocks at holding level shall be accounted for, i.e. each breeding flock shall be counted only once irrespective of the number of sampling and testing operations. Positive breeding flocks shall be counted only once, irrespective of the number of sampling and testing operations.

Reporting shall include:

(a) detailed description of the options implemented for the sampling scheme and the type of samples taken, as appropriate;

(b) number of existing breeding flocks and those tested;

(c) results of the testing;

(d) explanations on the results, in particular concerning exceptional cases.

7.3. Targets on vaccination or treatment

Vaccination is not compulsory in breeding flocks of Meleagris gallopavo. The rules of using vaccination and treatment are laid down in Commission Regulation (EC) No 1177/2006 of 1 August 2006 implementing Regulation (EC) No 2160/2003 of the European Parliament and of the Council as regards requirements for the use of specific control methods in the framework of the national programmes for the control of salmonella in poultry.

8. Detailed analysis of the cost of the programme

Costs related to	Specification	Number of units	Unitary cost in €	Total amount in €	Community funding requested (yes/no)
1. Testing					
1.1. Cost of the analysis	Test: modified ISO 6579 (2002) using MSRV planned to be carried out in the framework of official sampling ((136x3x5)/2) (nearly 1000 official sample)	922	10	9220	yes
	official sampling of verifying the efficiency of desinfection	100	10	1000	yes
	Test: serotyping planned to be carried out in the framework of official sampling (136*3*2*0,067)	55	40	2200	yes
1.2. Cost of sampling	costs of sampling of approx. 136 flocks 11 times during 2010 (one session consists the taking of 5 pairs of swabs)	1680	50	84000	yes
1.3. Other costs					
2. Vaccination or treatment of animal products					
2.1. Purchase of vaccine/treatment of animal products	Cost of vaccine of approx. 400000 animals two times	800000	0.1	80000	yes
	Cost of treatment of approx. 4000 animals according to Art 2 Of Reg 1177/2006	4000	0.2	800	no
2.2. Distribution costs	Cost of the distribution (approx. 400000 animals)	400000	0.05	200000	no
2.3. Administering costs	Cost of the administration (approx. 400000	400000	0.1	40000	no

	animals)				
2.4. Control costs					
3. Slaughter and destruction					
3.1. Compensation of animals	Cost of compensation of the positive animals approx. 400000x0.01=40000 animals (SE/ST/SI/SV/SH infected animals)	40000	12	480000	yes
3.2. Transport costs	Slaughtering of infected flocks can only be authorised when meat from these flocks is treated according to specific food safety legislation. Therefore, slaughter is not likely to be performed at regular contracted slaughterhouses, which makes transport costs much higher than usual, approx. 400000x0.01=40000 animals, 15 kg/animal	600000	0.04	24000	no
3.3. Destruction costs	Cost of destruction of approx. 400000x0.01=40000 animals, 15 kg/animal	600000	0.2	120000	no
3.4. Loss in case of slaughtering	This loss is estimated to be of a large extent. However, losses due to the early slaughter of the flock and the decreased income due to hatching eggs which could not be produced is very hard to estimate.				
3.5 Costs from treatment of products (milk, eggs, hatching eggs, etc)		160000	0,7	112000	yes
4. Cleansing and disinfection	When taking into account the number of flocks (136) and the infection rate (with the five relevant serotype) (6,7%), an approximate number of 10 flocks to be cleansed and disinfected can be estimated. Cleansing and desinfection of an average flock depends on several factors, however an approximate amount of costs is given.	10	500	5000	no
5. Salaries (staff contracted for the programme only)					

6. Consumables and specific equipment			
7. Other costs			
	TOTAL	***968220***	
	Community funding requested	***580420***	***yes***