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HEALTH & CONSUMERS DIRECTORATE-GENERAL

Unit G5 - Veterinary Programmes

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

Survey Programme for Salmonella

Approved* for 2012 by Commission Decision 2011/807/EU

Latvia

* in accordance with Council Decision 2009/470/EC

ANNEX II

**Food and Veterinary Service
Latvia**

Member State: **Latvia**

Disease: SALMONELLOSIS (ZOOONOTIC SALMONELLA – *S. Enteritidis*, *S. Typhimurium* *S. Hadar*, *S. Infantis* and *S. Virchow*) in breeding hens of *Gallus gallus*

Animal population covered by the program: **BREEDING HENS (*Gallus gallus*)**

Year of implementation: **2012**

Reference of this document: PROGRAM FOR CONTROL OF SALMONELLOSIS (ZOOONOTIC SALMONELLA) IN BREEDING HENS OF *GALLUS GALLUS* CO-FINANCED BY THE COMMUNITY

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Part A

General requirements for the national salmonella control programmes

(a) The aim of the programme

The aim of the **control programme for salmonellosis agents in flocks of breeding hens of *Gallus gallus* (hereinafter – programme)** is reduction of the prevalence of *Salmonella* Enteritidis (SE), *Salmonella* Typhimurium (ST), *Salmonella* Hadar, *Salmonella* Infantis and *Salmonella* Virchow in breeding hen flocks and to ensure that adequate and effective measures for monitoring and control of zoonotic *salmonella* infections are taken in breeding hen flocks. The reduction of the prevalence of the zoonotic *salmonella* in breeding hen flocks is focused on achievement of the targets laying down in Commission Regulation (EC) No 200/2010.

(b) 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

Minimum sampling requirements are in accordance with sampling requirements laid down in part B of Annex II of Regulation (EC) No 2160/2003 of the European Parliament and of the Council and in accordance with Annex of Commission Regulation No 200/2010.

Breeding flocks:

— rearing flocks — day-old chicks

— four-week-old birds

— pullets two weeks before moving to laying phase or laying unit

— adult breeding flocks — every third week during the laying period

(c) Specific requirements laid down in Part C of Annex II to Regulation (EC) No 2160/2003

The programme complies with the specific requirements laid down in Part C of Annex II to Regulation (EC) No 2160/2003.

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

The prevalence of *Salmonella* in animals and food of animal origin has been monitored since middle of the past century. Most isolates originated from poultry (57,6%) and from pigs (28,9%). In cattle, *Salmonella* was isolated in lower numbers (8,6%).

In poultry and pigs, the species-specific serotypes *S. Pullorum*, *S. Gallinarum* and *S. Cholerasuis* were isolated most often. Regarding zoonotic *Salmonella* serotypes, *S. Enteritidis* (9,6% of isolates) and *S. Typhimurium* (2,8%) were the prevailing serotypes in poultry from 1967 until 2004. In pigs, mainly *S. Typhimurium* was found (0,8%), while in cattle *S. Enteritidis* (57,9%) and *S. Dublin* (35,4%) were the most prominent serotypes. In fur animals, three different zoonotic serotypes were isolated: *S. Dublin* (23,5%), *S. Enteritidis* (22,5%) and *S. Typhimurium* (20,6%).

In 2006, the surveillance of *Salmonella spp.* was based on the Order of Cabinet of Ministers Nr. 298 (21.04.2006.) „Procedures for prevention and combating of such infectious diseases as to which both animals and humans are susceptible”, as well as on Directive 2003/99/EC on the monitoring of zoonoses and zoonotic agents. Besides that, regulations implemented based on Directive No 92/117/EEK were still taken into account until the confirmation of control programmes in compliance with Regulation No. (EC) 2160/2003 on the control of *salmonella* and other specified food-borne zoonotic agents.

From 2007-2009, sampling was carried out according to the requirements of the above mentioned Order of Cabinet of Ministers Nr. 298 (21.04.2006.) and Regulation (EC) No 2160/2003 as well as Regulation (EC) No 1003/2005/EC 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.

1.2. The structure and organisation of the relevant competent authorities

1) The structure of the **Food and Veterinary service** (hereinafter referred to as the FVS) is one of the main components of the mechanism that ensures the operational objectives and functions of the service.

- The FVS central office directs and coordinates the implementation of State functions delegated to the service.
- Territorial units (regional offices and one city office) are FVS administrative units that ensure monitoring within the territory of their region.
- The Sanitary Border Inspection (SBI) controls the import, transit and export of freight on the border in accordance with procedures laid down by the Cabinet of Ministers and requirements currently in force.
- Assessment and Registration Agency carries out the scientific research and evaluates specific types of food before launching them into the market and it is responsible for the marketing authorisation and surveillance of the veterinary medicinal products in Latvia.

2) Institute of Food Safety, Animal Health and Environment „BIOR” (hereinafter referred to as the “BIOR”) performs laboratory testing together with territorial units relating to the circulation of food, the diagnosis of infectious human diseases, the diagnosis of infectious animal diseases and ensures testing relating to the environment and environmental sanitary hygiene, as well as the circulation of veterinary medicines, pharmaceutical products, feedingstuffs and feed ingredients; performs the tasks of the national reference laboratory on the basis of authorisation and organises inter-

laboratory comparative testing. Institute of Food Safety, Animal Health and Environment „BIOR” is the legal successor of the National Diagnostic Centre of Food and Veterinary Service.

Official checks at other stages of the food chain

The control of zoonotic pathogens in food of animal origin, including veterinary expertise at slaughterhouses, is one of the tasks of the FVS Food Surveillance Department.

Based on EU and Latvian legislation, national control programmes are developed.

Infectology center of Latvia is responsible for the surveillance of zoonoses in humans in Latvia. Infectious diseases are notifiable according to the Regulation of the Cabinet of Ministers No. 7 of 5 January 1999 “Procedure of Notification of Infectious Diseases”.

1.3. Approved laboratories where official samples collected within the programme are analyzed.

“BIOR” performs the functions of the national reference laboratory in Latvia, with regard to the diagnosis of infectious animal diseases. All “BIOR” laboratories are accredited in the national accreditation system LATAK in accordance with Latvian standard LVS EN ISO/IEC 17025.

Food and Environment Testing Laboratory is accredited also in DAP (Germany) and FOCT P (Russia) accreditation.

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

Methods used in the examination will be performing in accordance with Annex of Commission Regulation (EC) No 200/2010.

Sampling is carried out in accordance with minimum requirements of Part B of Annex II to Regulation (EC) of the European Parliament and of the Council No 2160/2003 and Annex of Commission Regulation (EC) No 200/2010.

Laboratory examination comprising detection of *Salmonella* spp. carried out in accordance with the method recommended by the Community RL in Bilthoven (Netherlands) – Amendment 1 of EN/ISO 6579-2002/Amd1:2007 “Microbiology of food and feeding stuffs – Horizontal method for the detection of *Salmonella* spp. – Amendment 1: Annex D: Detection of *Salmonella* spp. in animal faeces and in environmental samples from the primary production stage”.

The isolates from positives samples are **serotyped** following the Kaufmann-White scheme and the **antimicrobial resistance** is determined following the CLSI method with the minimum inhibitory concentration (MIC). Isolated strains are stored in accordance with requirements. In case of isolates of *Salmonella* serovar Typhimurium and *Salmonella* serovar Enteritidis are phage typed.

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

The official samples are taken three times from adult breeding flocks of *Gallus gallus* by a FVS state veterinary inspector:

- a) within four weeks following the start of the laying cycle;
- b) eight weeks after the end of the first laying cycle;
- c) at any time during the laying cycle, but not close to the samples mentioned in a) and b)

or

If sampling at the initiative of the operator takes place at the hatchery, the official samples are taken following:

- a) routine sampling every 16 weeks at the hatchery;
- b) routine sampling at the holding on two occasions during the production cycle, the first one being within four weeks following moving to laying phase or laying unit and the second one being towards the end of the laying phase, not earlier than eight weeks before the end of the production cycle;
- c) confirmatory sampling at the holding, following detection of relevant salmonella from sampling at the hatchery.

Sampling protocol for feeds and table eggs:

Feed samples shall be taken in the frame of the national feed surveillance programme.

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

Measures taken in the case of salmonella detection (*S. Enteritidis* and/or *S. Typhimurium*) in breeding flock according to the Regulation (EC) No 2160/2003 of the European Parliament and of the Council of 17 November 2003 on the control of salmonella and other specified food – borne zoonotic agents Annex II part C.

- non - incubated eggs must be destroyed. However, such eggs may be used for human consumption if they are treated in a manner that guarantees the elimination of *salmonella* in accordance with Community legislation on food hygiene;
- adult birds must be slaughtered so as to reduce as much as possible the risk of spreading *salmonella*. Slaughtering must be carried out in accordance with Community legislation on food hygiene. Products derived from such birds may be placed on the market for human consumption in accordance with Community legislation on food hygiene.
- day - old chicks or pullets must be destroyed so as to reduce as much as possible the risk of spreading *salmonella*;
- the house and surrounding area, as well as vehicles, equipment and other materials that may be contaminated with disease agents are cleaned, washed and disinfected under the supervision of an authorised veterinarian or state veterinary officer;
- feeding stuffs, bedding and other materials that may be contaminated with disease agents are disinfected under the supervision of a veterinarian or state veterinary inspector; manure are disinfected or subjected to biothermic treatment;

In case of detection of *S.Hadar*, *S.Infantis* or *S.Virchow* stricter official control and stricter bio safety measures would be applied to the positive breeding flock.

Use of antimicrobials shall be governed by Regulation (EC) No 1177/2006

- Antimicrobials (e.g. antibiotics) shall not be used as a special method for the control of *Salmonella* infections in poultry.
- **Only authorized antimicrobials are allowed to use in the Republic of Latvia and only authorised veterinarian may use antimicrobials.**
- Antimicrobials may be used only after authorisation by and under supervision of the FVS and they may be applied only in poultry showing clinical signs of the disease suggesting that an excessive suffering of birds could occur. Results of bacteriological examination and anti-microbial susceptibility test must be available prior to the treatment.
- In exceptional cases, antimicrobials may be applied prior to the results of bacteriological examination and anti-microbial susceptibility test are available, provided that samples are taken by the FVS State inspector prior to the application. If sampling has not been performed prior to the application of antimicrobials, flocks shall be considered infected by *Salmonella*.

Vaccination

According to the Commission regulation (EC) No 1177/2006 in case of authorisation of live vaccine against zoonotic *Salmonella*, live *Salmonella* vaccines for poultry, for which the manufacturer does not provide an appropriate method to distinguish bacteriologically wild-type strains of *Salmonella* from vaccine strains, should be prohibited to use in the framework of national *Salmonella* control program.

The vaccination carries out only in the parent breeding flocks so far. There are only one establishment, which kept the parent breeding flocks (*Gallus Gallus*) – in broiler production sector – in the Latvia.

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

- a) Regulation (EC) No. 2160/2003 of the European Parliament and of the Council of 17 November 2003 on the control of salmonella and other specified food-borne zoonotic agents;
- b) 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;
- c) 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*;
- d) Directive 2003/99/EC of the European Parliament and of the Council of 17 November 2003 on the monitoring of zoonoses and zoonotic agents, amending Council Decision 90/424/EEC and repealing Council Directive 92/117/EEC;
- e) The Law on the Supervision of the Handling of Food;
- f) The Veterinary Medicine Law;
- g) Regulation of Cabinet of Ministers No 177, 13 March 2005, “Procedure according to which compensations are given or owners of animals receive compensations for losses which have arise due to eradication of epizootic diseases or animal infectious diseases, which are under state supervision”;
- h) Regulation of Cabinet of Ministers No 712, 16 December, 2003 “Order of registration of animals, herds and holdings and identification of animals”;

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

Regulation of Cabinet of Ministers No 177, 13 March 2005, “Procedure according to which compensations are given or owners of animals receive compensations for losses which have arise due to eradication of epizootic diseases or animal infectious diseases, which are under state supervision” determines procedure according to which compensations are given or owner of animals receive compensations for losses which have arisen due to eradication of animal infectious diseases, which are under state supervision.

State veterinary inspector of the Food and veterinary service draws up a protocol regarding slaughtered animals, destroyed products, animal feed and materials.

In the Annexes of mentioned Regulation of Cabinet of Ministers No 177 are determine scales of compensations of birds, eggs, feed in cases of eradication of salmonellosis.

Compensation scale

No	Animal species and category	Compensation scale (per animal/hatching egg in LVL)
I. Poultry for meat production line		
1.	Day old chicken	0,20
2.	Adult broiler	1,00
3.	Day old chicken for breeding	1,57
4.	Breeding pullet	4,00
5.	Adult breeding hen	3,60
6.	Hatching egg	0,15
II. Poultry for egg production line		
7.	Day old chicken	0,23
8.	Adult breeding bird (hen, quail)	4,90
9.	Adult bird for table egg production (hen, quail)	2,10
10.	Day old chicken for breeding (hen, quail)	2,45
11.	Pullet for table egg production (hen, quail)	2,10

12.	Hatching egg (hen, quail)	0,055
III. Ostrich		
13.	Day old ostrich chicken	23
14.	Day old ostrich chicken for breeding	42
15.	Adult breeding ostrich	800
16.	Adult ostrich	620
17.	Hatching egg	10

2. Concerning food and feed businesses covered by the programme

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

Hygiene management at farms

The following bio security measures are recommended:

- a) All in-all out;
- b) Appropriate poultry keeping system to poultry species and category;
- c) Control of staff, visitors and vesicles;

- d) Vermin, feral animal and insect control;
- e) Control of feed and water supply; litter supply and disposal as well as;
- f) Appropriate cleaning and disinfection measures of equipment, buildings, vehicles adequate of poultry keeping technology.

In egg sorting/packaging plants that are parts of such holdings, HACCP principles shall be applied.

Measures to prevent incoming infections carried by animals, feed, drinking water, and people working at farms.

The following bio security measures are recommended:

- g) Control of staff, visitors and vehicles;
- h) Vermin, feral animal and insect control;
- i) Control of feed and water supply;
- j) Control of domestic animals of site (pets and other animals, including livestock, must be kept away from poultry houses and service buildings).

Hygiene in transporting animals to and from farms

The following bio security measures are recommended:

- meet the requirements for animal transport of the species involved as to the construction, arrangement and equipment, do not affect animal health, do not cause any pain or suffering to animals, prevent the animals from escape or falling out and protect them from unfavourable weather effects;
- are protected so that water, feed, litter, faeces or other waste cannot leak or fall out of them;
- are cleaned and disinfected both before and after the transport.

2.4. Routine veterinary supervision of farms

All poultry flocks included in the programme are subjected to visual monitoring by veterinarians. Monitoring of flocks also includes schemes for taking own samples and official samples. Official samples are taken by FVS State veterinary inspectors.

FVS State veterinary inspector carries out complex inspections on farms for animal welfare reasons, to take samples for residues, to administer and enforce national legislation and to check medicine records as well than this visit is considered as official sampling in the frame of the *salmonella* control programmes according to European Union and national rules.

2.5. Registration of farms

Regulation of Cabinet of Ministers No 712, 16 December, 2003 “Order of registration of animals, herds and holdings and identification of animals” determines order of individual identification of cattle, pigs, sheep, goats and horses and registration of holdings of agricultural animals, bee gardens, fishponds, hatcheries of aquatic animals. According to the requirements of Regulation of Cabinet of Ministers No 712 all holdings must be registered at least with one animal (bird).

To ensure common data registration system, Agricultural Data Centre (ADC) develops register of animals, herds and holdings. ADC (formerly - Latvian state pedigree information data processing centre) is a state agency under the supervision of the Ministry of Agriculture that performs

collection, processing and analysis of zootechnical, veterinary and agricultural data in the republic of Latvia to develop a uniform register of animals and herds (cattle, pigs, sheep, goats) and a pedigree information system according to international standards.

2.6. Record-keeping at farms.

According to the Regulation of Cabinet of Ministers No 712, 16 December, 2003 “Order of registration of animals, herds and holdings and identification of animals” animal owner summarizes information and develops register in written form or electronically on animals of certain (own) holding. Animal owner made changes in the register within three days on animal movement and keep it three years.

According to the Regulation of Cabinet of Ministers No 5, 2 January, 2008 “Welfare requirements for animal kept for farming purposes” animal owner develops “Animal medical treatment log” register, where owner keeps information on diseases cases as well as information regarding animal’s cause of death and keep it three years.

According to the Regulation of Cabinet of Ministers No 407, 19 June, 2007 “Regulation of labelling, distribution and control of veterinary medicine” animal owner develops register on used veterinary medicine. As well as animal owner develops register on used feed.

2.7. Documents to accompany animals when dispatched

According to the Regulation of Cabinet of Ministers No 712, 16 December, 2003 “Order of registration of animals, herds and holdings and identification of animals” in case of animal movement owner or veterinarian completes the declaration of animal movement.

Operators wishing to export more than 20 birds or hatching eggs to another EU member state (or certain third countries) must comply with EU Directive 90/539/EC and ensure that the consignment is accompanied by a completed and signed Intra-trade Animal Health Certificate (ITAHC) for poultry breeding and production.

The ITAHC will be amended to include the results of the last test for *Salmonella* as required in Commission Regulation (EC) 2160/2003 Article 9.1 prior to any dispatching of the live animals, or hatching eggs, from the food business of origin. The date and the result of testing shall be included in the relevant health certificates provided for in Community legislation. This certificate must be completed and signed by the FVS State veterinary inspector as well as the operator to confirm compliance with the relevant articles of Directive.

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

The identification of a flock must be indicated in application form for laboratory examination.

Latvia has fully implemented TRACES system since 31.12.2010. as its is required by Comission Regulation 599/2004.

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

Part B

1. Identification of the programme

Member State: **LATVIA**

Disease(s)¹: SALMONELLOSIS (ZOONOTIC SALMONELLA – *S. Enteritidis*, *S. Typhimurium*, *S. Hadar*, *S. Infantis*, *S. Virchow*) in breeding flocks of *Gallus gallus*

Year of implementation: **2012**

Reference of this document: PROGRAM FOR CONTROL OF SALMONELLOSIS (ZOONOTIC *SALMONELLA* IN BREEDING FLOCKS OF *GALLUS GALLUS*) CO-FINANCED BY THE COMMUNITY

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Date sent to the Commission: **April 21, 2011**

¹ One document per disease is used unless all measures of the programme on the target population are used for the monitoring, the control and eradication of different diseases.

2. **Historical data on the epidemiological evolution of the disease(s)**²:

The monitoring of salmonellosis of Latvian poultry production started in the 1967.

FVS staff or veterinarian notifies to FVS regional office:

- on infected poultry or poultry suspected to be infected by zoonotic *Salmonella*;
- if zoonotic *Salmonella* are detected on routinely sampling at holding.

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

The submitted program has been developed with the target for the reduction of certain *Salmonella* serotypes (*S. Enteritidis*, *S. Typhimurium*, *S. Hadar*, *S. Infantis*, *S. Virchow*) with public health significance in the breeding flocks of *Gallus gallus*.

Testing is carried out according to the sampling requirements of the:

- 1) Regulation (EC) No 2160/2003 of the European Parliament and of the Council of 17 November 2003 on the control of salmonella and other specified food-borne zoonotic agents;
- 2) 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*.

² A concise description is given with data on the target population (species, number of herds and animals present and under the programme), the main measures (testing, testing and slaughter, testing and killing, qualification of herds and animals, vaccination) and the main results (incidence, prevalence, qualification of herds and animals). The information is given according distinct periods if the measures were substantially modified. The information is documented by relevant summary epidemiological tables, graphs or maps.

³ A concise description of the programme is given with the main objective(s) (monitoring, control, eradication, qualification of herds and/or regions, reducing prevalence and incidence ...), the main measures (testing, testing and slaughter, testing and killing, qualification of herds and animals, vaccination ...), the target animal population and the area(s) of implementation and the definition of a positive case.

4. Measures of the submitted programme

4.1. *Summary of measures under the programme*

Duration of the programme:

First year: 2012

Last year: 2012

X Control

- X** Testing
- X** Slaughter of positive animals
- Killing of positive animals
- Vaccination
- Treatment of animal products
- X** Disposal of products

X Eradication

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

Monitoring or surveillance

Other measures (*specify*):

4.2. *Designation of the central authority charged with supervising and coordinating the departments responsible for implementing the programme*⁴:

The **Food and Veterinary Service (FVS) of Latvia** is a state administrative institution headed by the CVO and supervised by the Ministry of Agriculture. Regarding veterinary issues FVS ensures unified state surveillance and control over:

- prevention, control and eradication of animal contagious diseases and zoonoses; elaboration and implementation of animal disease surveillance programmes;

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

- animal welfare;
- animal registration, animal movements, import – export control;
- the animal feed, veterinary drugs and veterinary pharmaceutical products;
- evaluation and approval of specific types of food, marketing authorisation and surveillance of the veterinary medicinal products in Latvia.

The FVS consists of the central body placed in Riga and territorial structural units (the local level) – 10 regional offices and one city office (from 01.04.2009.). The central body coordinates activities of the local level and ensures a unified implementation of legislation. The local level carries out the official surveillance in accordance with the state surveillance programmes and reports to the central body.

Description and delimitation of the geographical and administrative areas in which the programme is to be implemented⁵:

The program will be implemented and applied in whole territory of Latvia. There are FVS 11 territorial structural units - regional offices cover all administrative areas. The regional offices carry out the official surveillance in accordance with the state surveillance and control programmes in the administrative area concerned.

⁵ Describe the name and denomination, the administrative boundaries, and the surface of the administrative and geographical areas in which the programme is to be applied. Illustrate with maps.

4.4. *Measures implemented under the programme*⁶⁷

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

Regulation of Cabinet of Ministers No 712, 16 December, 2003 “Order of registration of animals, herds and holdings and identification of animals” determines order of individual identification of cattle, pigs, sheep, goats and horses and registration of holdings of agricultural animals, bee gardens, fishponds, hatcheries of aquatic animals.

To ensure common data registration system, Agricultural Data Centre (ADC) develops register of animals, herds and holdings. ADC (formerly - Latvian state pedigree information data processing centre) is a state agency under the supervision of the Ministry of Agriculture that performs collection, processing and analysis of veterinary and agricultural data in the Republic of Latvia to develop a uniform register of animals and herds (cattle, pigs, sheep, goats) and a pedigree information system according to international standards.

4.4.2. Measures and terms of legislation as regards the **identification of animals**⁷:

According to the Regulation of Cabinet of Ministers No 712, 16 December, 2003 “Order of registration of animals, herds and holdings and identification of animals” Agricultural Data Centre (ADC) develops register of animals, herds and holdings. ADC gives number for holding and this number is not changed during holding is active. Animal owner informs ADC on animal movement, liquidation of herd or holding, change of owners within seven days.

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

Animal owner, the person in charge, state authorised veterinarian notifies to FVS regional office:

- on infected poultry or poultry suspected to be infected by zoonotic salmonella;
- if zoonotic salmonella are detected on routinely sampling at holding.

⁶ Where appropriate Community legislation is mentioned. Otherwise the national legislation is mentioned.

⁷ Not applicable for poultry.

4.4.4. Measures and terms of legislation as regards the **measures in case of a positive result**⁸:

I Action in suspicious cases

Sampling as part of official controls consists of confirmatory sampling at the holding, following the detection of the presence of the relevant *Salmonella* serotypes from sampling at the hatchery.

In the event of a positive laboratory test performed during own control at the hatchery, the owner or veterinarian informs the FVS territorial unit (TU) and a State veterinary inspector takes official samples from the suspect breeding hen flock and sends them to the “BIOR” for testing and specifies the measures to be taken and restrictions on the possibly affected holding and/or hatchery until a diagnosis has been made:

- movement restrictions on the flock;
- take samples (bedding, feeding stuffs, water, feathers and/or dust, composite meconia, faecal samples, surface rinses) for laboratory testing to determine the possible paths and sources of infection;
- bacteriological testing of dead poultry;
- destroy dead birds using methods that reduce the risk of agents being spread where possible;
- place disinfectant mats at the entrance and exit of the house and other farm buildings;
- prohibit the removal of eggs from an affected house;
- control the movement of people who tend poultry;
- measures are taken to control pests and rodents.

II Action in cases of positive laboratory testing

As soon as a diagnosis has been officially approved, a State veterinary inspector shall specify the measures that are to be taken on the affected holding and/or hatchery according to the Regulation (EC) No 2160/2003 of the European Parliament and of the Council of 17 November 2003 on the control of salmonella and other specified food – borne zoonotic agents Annex II part C.

⁸ A short description is provided of the measures as regards positive animals (slaughter, destination of carcasses, use or treatment of animal products, the destruction of all products which could transmit the disease or the treatment of such products to avoid any possible contamination, a procedure for the disinfection of infected holdings, the therapeutic or preventive treatment chosen, a procedure for the restocking with healthy animals of holdings which have been depopulated by slaughter and the creation of a surveillance zone around the infected holding,...).

1. Measures to be taken in breeding poultry house:

- place disinfectant mats at the entrance and exit of the house and other farm buildings;
- prohibit the taking in and removal of birds from an affected house and/or holding;
- control the movement of people who tend poultry;
- take samples (bedding, feeding stuffs, water, dust, faecal samples, surface rinses) for laboratory testing to determine the possible paths and sources of infection;
- bacteriological testing of dead birds;
- destroy dead birds using methods that reduce the risk of agents being spread where possible;
- non - incubated eggs must be destroyed. However, such eggs may be used for human consumption if they are treated in a manner that guarantees the elimination of salmonella in accordance with Community legislation on food hygiene;
- transfer and slaughter adult breeding poultry separately from other poultry;
- adult birds must be slaughtered so as to reduce as much as possible the risk of spreading salmonella. Slaughtering must be carried out in accordance with Community legislation on food hygiene. Products derived from such birds may be placed on the market for human consumption in accordance with Community legislation on food hygiene.
- day - old chicks or pullets must be destroyed so as to reduce as much as possible the risk of spreading salmonella;
- the house and surrounding area, as well as vehicles, equipment and other materials that may be contaminated with disease agents are cleaned, washed and disinfected under the supervision of an authorised veterinarian or state veterinary officer;
- feeding stuffs, bedding and other materials that may be contaminated with disease agents are disinfected under the supervision of veterinarian or state veterinary inspector; manure are disinfected or subjected to biothermic treatment;
- the destruction or processing of eggs, as well as the slaughter and destruction of birds is documented;
- antimicrobials shall not be used, except circumstances referred in Article 2 of the 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;
- measures are taken to control pests and rodents.

2. Measures to be taken in the hatchery:

- take samples (dust or feathers, water, meconia, dead embryos, day-old chick corpses, rinses from crates used to transport chicks, surface rinses from eggs, equipment and hatcheries) for laboratory testing, in order to determine the possible paths and sources of infection;
- control the movement of people;

- hatching eggs from infected breeding poultry flocks are destroyed using methods that reduce the risk of agents being spread where possible;
- immediate investigation of the chicks taken out on the presence of the salmonellosis agents;
- the hatchery and surrounding area, as well as vehicles, equipment and other materials that may be contaminated with disease agents are cleaned, washed and disinfected under the supervision of veterinarian or state veterinary inspector;
- measures are taken to control pests and rodents.

III Lifting of restrictions:

Restrictions are lifted by a State veterinary inspector after the above measures have been taken and following receipt of a negative laboratory test, by inspecting samples of surface rinses from the holding and/or hatchery following final disinfection.

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 concerned⁹:

See above measures have been taken in the holding and/or hatchery.

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

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 200/2010 (**particularly provisions on exceptional cases**) are implemented.

I Samples from breeding hen flocks are taken:

1.1. for day-old chicks:

⁹ A short description of the control procedures and in particular rules on the movement of animals liable to be affected or contaminated by a given disease and the regular inspection of the holdings or areas is provided.

- rinses from the internal surfaces of the container in which the chicks have been transported to the holding;
- materials from chicks that have died during transportation;

1.2. four-week old birds: pooled faecal samples;

1.3. birds two weeks before the start of the laying cycle: pooled faecal samples.

II Samples from adult breeding flocks of *Gallus gallus* are taken every three weeks:

2.1. in free-access flocks:

- two pooled faecal samples, from each house where birds are kept;

or

- five pairs of boots/"socks".

2.2. in cage breeding flocks, depending on how faeces are collected:

- two pooled faecal samples from dropping belts;

or

- two pooled faecal samples from scrapers;

or

- two pooled faecal samples from deep pits.

2.3. These samples must also be taken from breeding poultry flocks with less than 250 birds.

III The official samples mentioned in point 2 are taken three times from adult poultry flocks by a FVS state veterinary inspector:

- 3.1. within four weeks following moving to laying phase or laying unit;
- 3.2. eight weeks before the end of the laying cycle;
- 3.3. at any time during the laying cycle, but not close to the samples mentioned in 3.1 and 3.2.

IV Surveillance system of *Salmonella* spp. in feedingstuffs

The State veterinary inspector selects the type of sample and the undertaking engaged in the circulation of feedingstuffs where the sample is to be taken by assessing the possible risks that may pose a serious threat to animal and human health at the object under supervision within the territorial unit – in accordance with instructions. In the event of positive laboratory test during the official control of feedingstuffs the inspector:

- informs the head of the territorial unit of the results of the analyses;
- informs the FVS central office;
- **recommend** how feedingstuffs should be used (processed) or destroyed;
- where appropriate informs, in writing, other territorial units involved in the distribution of non-compliant feedingstuffs.

V Vaccination

Vaccination against zoonotic *Salmonella* is allowed in the Republic of Latvia.

According to the Commission regulation (EC) No 1177/2006 in case of authorisation of live vaccine against zoonotic *Salmonella*, live *Salmonella* vaccines for poultry, for which the manufacturer does not provide an appropriate method to distinguish bacteriologically wild-type strains of *Salmonella* from vaccine strains, should be prohibited to use in the framework of national *Salmonella* control program.

Vaccination against *S.Pullorum* and *S.Gallinarum* is prohibited.

The vaccination carries out only in the parent breeding flocks with inactivated vaccine so far. There are only one establishment, which keep the parent breeding flocks (*Gallus Gallus*) – in broiler production sector – in the Latvia.

VI Use of antimicrobials

Use of antimicrobials for national control programme of salmonellosis is carried out on the basis of Commission regulation (EC) No 1177/2006 and in exceptional cases specified by this Regulation use of antimicrobials will be based wherever possible on the result of bacteriological sampling and of susceptibility testing.

Only authorized antimicrobials are allowed to use in the Republic of Latvia and only veterinarian may use antimicrobials.

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

Regulation of Cabinet of Ministers No 177 (15 March 2005) "Procedure according to which compensations are given or owner of animals receive compensations for losses which have arose due to eradication of epizootics or animal infectious diseases." determines procedure according to which compensations are given or owner of animals receive compensations for losses which have arisen due to eradication or outbreaks of animal infectious diseases, which are under state supervision.

FVS state veterinary inspector draws up a protocol regarding slaughtered animals, destroyed products, animal feed and materials.

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

The following bio security measures are recommended:

- 1) All in-all out;
- 2) Appropriate poultry keeping system to poultry species and category;
- 3) Control of staff, visitors and vehicles;
- 4) Vermin, feral animal and insect control;
- 5) Control of feed and water supply; litter supply and disposal as well as;
- 6) Appropriate cleaning and disinfection measures of equipment, buildings, vehicles adequate of poultry keeping technology;

- 7) Control of domestic animals of site (pets and other animals, including livestock, must be kept away from poultry houses and service buildings);
- 8) Control of hygiene of animal transporting.

In egg sorting/packaging plants that are parts of such holdings, HACCP principles are applied.

5. General description of the costs and benefits¹⁰:

The total costs of the program – 74 658,90 Euro.

The submitted programme has been developed with the target to established for the reduction of the prevalence of serotypes of zoonoses with public health significant according to the 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*.

Benefits:

1. To limit distribution of products contaminated with salmonellosis agents in the market and reduce the infection risk of consumers;
2. Control and eradication of microorganisms of *salmonella* genus in the whole food chain (especially - in the primary production).
3. Keep in under control public and animal (poultry) health in the National and European Community level.

¹⁰ A description is provided of all costs for the authorities and society and the benefits for farmers and society in general.

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

6.1. Evolution of the disease

6.1.2. Data on evolution of the disease

Year: 2003 - 2010

Animal species: Breeding birds of *Gallus gallus*

Disease^(a): SALMONELLOSIS

Year	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 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)	
							Serotypes targeted in the control programme. ^(f)	Other serotypes	Serotypes targeted in the control programme. ^(f)	Other serotypes	Serotypes targeted in the control programme ^(f)	Other serotypes	Serotypes targeted in the control programme ^(f)	Other serotypes	Serotypes targeted in the control programme ^(f)	Other serotypes
2010	Breeding flocks	31	168 329	31	168 329	31	-	-	-	-	-	-	-	-	-	-
2009	Breeding flocks	25	162 500	25	162 500	25	-	-	-	-	-	-	-	-	-	-
2008	Breeding flocks	26	179 712	26	179 712	26	-	-	-	-	-	-	-	-	-	-
2007	Breeding flocks	21	177 545	21	177 545	21	-	-	-	-	-	-	-	-	-	-
2006	Breeding flocks	25	175000	25	175000	25	-	-	-	-	-	-	-	-	-	-
2005	Breeding flocks	23	127142	23	127142	23	-	-	-	-	-	-	-	-	-	-
2004	Breeding flocks	25	133742	25	133742	25	1	-	1	-	6500	-	-	-	-	-
2003	Breeding flocks	26	170500	26	170500	26	-	-	-	-	-	-	-	-	-	-

- (a) For zoonotic *Salmonella* 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 , ect. Flocks equals 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 should not be counted twice even if it has been checked more than one
- (e) If a flock has been checked, in accordance with footnote (d), more than once, a positive sample should 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: 2007 - 2010

Disease (a): Salmonellosis

Animal species/category (b): breeding flocks of *Gallus gallus*

Description of the used microbiological or virological tests:

Laboratory examination comprising detection of *Salmonella* spp. shall be carried out in accordance with the method recommended by the Community RL in Bilthoven (Netherlands) – Amendment 1 of EN/ISO 6579-2002/Amd1:2007 “Microbiology of food and feeding stuffs – Horizontal method for the detection of *Salmonella* spp. – Amendment 1: Annex D: Detection of *Salmonella* spp. in animal faeces and in environmental samples from the primary production stage”.

The isolates from positives samples are **serotyped** following the Kaufmann-White scheme and the **antimicrobial resistance** is determined following the CLSI method with the minimum inhibitory concentration (MIC). Isolated strains are stored in accordance with requirements. In case of isolates of *Salmonella* serovar Typhimurium and *Salmonella* serovar Enteritidis are phage typed.

Year	Region [©]	Serological tests		Microbiological or virological tests		Other tests	
		Number of samples tested ^(d)	Number of positive samples [©]	Number of samples tested ^(d)	Number of positive samples [©]	Number of samples tested ^(d)	Number of positive samples [©]
2010	Latvia			266	0		
2009	Latvia			51	0		
2008	Latvia			1413	0		
2007	Latvia			988	2		

Year: 2006

Disease (a): Salmonellosis

Animal species/category (b): breeding flocks of *Gallus gallus*

Description of the used microbiological or virological tests:

The bacteriological detection of *Salmonella* spp. carried out by the method of ISO 6579 (2002). Serotyping is according to the Kaufmann – White scheme. Isolate per serotype is used for anti – microbial susceptibility testing.

Region [©]	Serological tests		Microbiological or virological tests		Other tests	
	Number of samples tested ^(d)	Number of positive samples [©]	Number of samples tested ^(d)	Number of positive samples [©]	Number of samples tested ^(d)	Number of positive samples [©]
Latvia			249	-		
Total			249	-		

Year: 2002 - 2005

Disease (a): Salmonellosis

Animal species/category (b): poultry

Description of the used microbiological or virological tests:

The bacteriological detection of Salmonella spp. carried out by ISO standard 17025, the method of ISO 6579 (2002). Serotyping is according to the Kaufmann – White scheme. Isolate per serotype is used for anti – microbial susceptibility testing.

Year	Region [©]	Serological tests		Microbiological or virological tests		Other tests	
		Number of samples tested ^(d)	Number of positive samples [©]	Number of samples tested ^(d)	Number of positive samples [©]	Number of samples tested ^(d)	Number of positive samples [©]
2005	Latvia			169	10		
2004	Latvia			78	4		
2003	Latvia			212	13		
2002	Latvia			688	53		

Year: 2000- 2001

Disease (a): Salmonellosis

Animal species/category (b): poultry

Description of the used microbiological or virological tests:

The method of ISO 12824:1997

Year	Region [©]	Serological tests		Microbiological or virological tests		Other tests	
		Number of samples tested ^(d)	Number of positive samples [©]	Number of samples tested ^(d)	Number of positive samples [©]	Number of samples tested ^(d)	Number of positive samples [©]
2001	Latvia			386	60		
2000	Latvia			386	26		

- (a) Disease and animal species if necessary.
- (b) Breeders, laying hens, etc, when appropriate.
- (c) Region as defined in the approved eradication programme of the Member state.
- (d) Number of samples tested, all confounded.
- (e) Number of positive samples, all confounded.

6.3. Data on infection

Year: 2003 - 2010

Disease^(a): Salmonellosis

Animal species: breeding birds of *Gallus gallus*

Year	Region ^(b)	Number of herds infected ^(c)	Number of animals infected
2010	Latvia	-	-
2009	Latvia	-	-
2008	Latvia	-	-
2007	Latvia	-	-
2006	Latvia	-	-
2005	Latvia	-	-
2004	Latvia	1	6500
2003	Latvia	-	-

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

6.4. Data on vaccination programmes

Vaccination: All breeding flocks are vaccinated with inactivated vaccine by Food Business Operators in Latvia, but it was not projected in zoonotic *salmonella* control programme in breeders for co-financing for 2012 due to fact, that it is not fundable at state level.

7. Targets

7.1. Targets related to testing

7.1.1. Targets on diagnostic tests

7.1.1.1. Number and specification of tests

Disease^(a): Salmonellosis **Animal species:** breeding birds of *Gallus gallus*

Region^(b)	Type of the test^(c)	Target population^(d)	Type of sample^(e)	Objective^(f)	Number of planned tests
Latvia	Amendment 1 of EN/ISO 6579-2002/Amd1:2007	Breeding flocks of <i>Gallus gallus</i>	Pooled faecal samples, boot swabs/socks, dust samples	Official control	270
Total					270

(a) Disease and species if necessary

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

(c) Description of the test (e.g. SN-test, AB-Elisa, RBT, ...)

(d) Specification of the targeted species and the categories of targeted animals (e.g. sex, age, breeding animal, slaughter animal, ...).

(e) Description of the sample (e.g. blood, serum, milk, ...)

(f) Description of the objective (e.g. qualification, surveillance, confirmation of suspected cases, monitoring of campaigns, seroconversion, control on deleted vaccines, testing of vaccine, control of vaccination, ...)

(g) 7.2.1.2. Testing scheme(s)¹¹:

¹¹ Describe the testing scheme according the different categories if appropriate (which herds and animals, the number of animals per herd, the frequency and the interval of sampling) with reference to the national and Community legislation where appropriate.

7.1.2. Targets on testing of flocks

Animal species: Breeding birds of *Gallus gallus*

Disease/infection^(a): SALMONELLOSIS

Region	Type of flock ^(b)	Total number of flocks ^(c)	Total number of animals	Total number of flocks under the programme	Total number of animals under the programme	Expected number of flocks to be checked ^(d)	Number of flocks ^(e) expected to be positive ^(a)			Number of flocks expected to be depopulated ^(a)		Total number of animals expected to be slaughtered destroyed ^(a)		Expected quantity of eggs to be destroyed (number or kg) ^(a)		Expected quantity of eggs to be channelled to egg products (number or kg) ^(a)	
							(a1)	(a2)	(a3)	(a3)	(a4)	(a4)	(a3)	(a4)	(a3)	(a4)	(a3)
Latvia	Breeding flocks	25	160 000	25	160 000	25	1*	-	-	-	1*	10 000	-	70 000	-	-	-
Total	Breeding flocks	25	160 000	25	160 000	25	1*	-	-	-	1*	10 000	-	70 000	-	-	-

^(f) For zoonotic Salmonella 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.

^(g) For example, breeding flocks (rearing, adult flocks), production flocks, laying hen flocks, ect. Flocks equals herds or as appropriate.

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

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

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

*While an establishment have self-control system regarding *Salmonella* and we have an official control, due to seasonal *Salmonella* variability and risk of salmonella introduction on farm (especially – with feed) we estimate 1 positive flock. Mean number of the birds kept in the one breeding flock are 10 000.

7.2. Targets on vaccination

Vaccination: All breeding flocks are vaccinated with inactivated vaccine by Food Business Operators in Latvia, but it was not projected in zoonotic *salmonella* control programme in breeders for co-financing for 2012 due to fact, that it is not fundable at state level.

8. **Detailed analysis of the cost of the programme¹² (one table per year of implementation)**

<i>Costs related to</i>	<i>Specification</i>	<i>Number of units</i>	<i>Unitary cost in €</i>	<i>Total amount in €</i>	<i>Community funding requested (yes/no)</i>
1. Testing	<i>Amendment 1 of EN/ISO 6579-2002/Amd1:2007</i>				
1.1. Cost of the analysis	<i>Test: bacteriological detection (cultivation)</i>	<i>270</i>	<i>23,14</i>	<i>6247,80</i>	<i>Yes</i>
	<i>Test: serotyping</i>	<i>10</i>	<i>61,41</i>	<i>614,10</i>	<i>Yes</i>
	<i>Test: anti-microbial susceptibility (MIC)</i>	<i>10</i>	<i>28,49</i>	<i>284,90</i>	<i>Yes</i>
	<i>Test :phagetyping</i>	<i>10</i>	<i>58,07</i>	<i>580,70</i>	<i>Yes</i>
	<i>Bacteriological test to verify the efficiency of disinfection of poultry houses after depopulation of a salmonella-positive flock</i>	<i>10</i>	<i>23,14</i>	<i>231,40</i>	<i>Yes</i>
1.2. Cost of sampling					
1.3. Other costs					
2. Vaccination or treatment					
2.1. Purchase of vaccine/treatment					

¹² Fixed costs should not be included. All amounts are VAT excluded.

2.2. Distribution costs					

2.3. Administering costs					
2.4. Control costs					
3. Slaughter and destruction					
3.1. Compensation of animals	<i>Adult breeding birds of Gallus gallus</i>	<i>10 000</i>	<i>5,13</i>	<i>51300</i>	<i>Yes</i>
3.2. Transport costs					
3.3. Destruction costs					
3.4. Loss in case of slaughtering					
3.5 Costs from treatment of products (milk, eggs, hatching eggs, etc)	<i>Hatching eggs</i>	<i>70 000</i>	<i>0,22</i>	<i>15400</i>	<i>Yes</i>
4. Cleaning and disinfection					

5. Salaries (staff contracted for the programme only)					
6. Consumables and specific equipment					
7. Other costs					
TOTAL				74 658,90	Yes

ANNEX II

**Food and Veterinary Service
Latvia**

Member State: **Latvia**

Disease: SALMONELLOSIS (ZOOBOTIC *SALMONELLA* – *S. Enteritidis*, *S. Typhimurium*) in laying hen of *Gallus gallus*

Animal population covered by the program: **LAYING HENS (*Gallus gallus*)**

Year of implementation: **2012**

Reference of this document: PROGRAM FOR CONTROL OF SALMONELLOSIS (ZOOBOTIC *SALMONELLA*) IN LAYING HEN OF *GALLUS GALLUS* CO-FINANCED BY THE COMMUNITY

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Part A

General requirements for the national salmonella control programmes

(a) The aim of the programme

The aim of the **control programme for zoonotic salmonellosis agents in flocks of laying hens of *Gallus gallus* (hereinafter – programme)** is reduction of the prevalence of *Salmonella* Enteritidis (SE) and *Salmonella* Typhimurium (ST) in laying hen flocks and ensure that adequate and effective measures for monitoring and control of Zoonotic *salmonella* infections are taken in laying hen flocks. The reduction of the prevalence of the Zoonotic *salmonella* in laying hens flocks is focused on achievement of the targets laying down in Commission Regulation (EC) No 1168/2006.

In accordance with Commission Regulation (EC) No 1168/2006, targets of the Programme are the following:

Annual minimum percentage decreasing of adult laying hen positive flocks at least of:

- a) 10 %, in the case when prevalence in the previous year was under 10 %,
- b) 20 %, in the case when prevalence in the previous year was between 10 and 19 %,
- c) 30 %, in the case when prevalence in the previous year was between 20 and 39 %,
- d) 40 %, in the case when prevalence in the previous year was of 40 % or more.

(b) 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

Minimum sampling requirements are in accordance with sampling requirements laid down in par B of Annex II to Regulation (EC) No 2160/2003 of the European Parliament and of the Council and in accordance with Commission Regulation (EC) 1168/2006.

Laying hens:

— rearing flocks — day-old chicks

— pullets two weeks before moving to laying phase or laying unit

— laying flocks — every 15 weeks during the laying phase

(c) Specific requirements laid down in Parts D of Annex II to Regulation (EC) No 2160/2003

The programme complies with the specific requirements laid down in Part D of Annex II to Regulation (EC) No 2160/2003.

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

The prevalence of *Salmonella* in animals and food of animal origin has been monitored since middle of the past century. Most isolates originated from poultry (57,6%) and from pigs (28,9%). In cattle, *Salmonella* was isolated in lower numbers (8,6%).

In poultry and pigs, the species-specific serotypes *S. Pullorum*, *S. Gallinarum* and *S. Cholerasuis* were isolated most often. Regarding zoonotic *Salmonella* serotypes, *S. Enteritidis* (9,6% of isolates) and *S. Typhimurium* (2,8%) were the prevailing serotypes in poultry from 1967 until 2004. In pigs, mainly *S. Typhimurium* was found (0,8%), while in cattle *S. Enteritidis* (57,9%) and *S. Dublin* (35,4%) were the most prominent serotypes. In fur animals, three different zoonotic serotypes were isolated: *S. Dublin* (23,5%), *S. Enteritidis* (22,5%) and *S. Typhimurium* (20,6%).

In 2006 and 2007, the surveillance of *Salmonella* spp. was based on the Order of Cabinet of Ministers No 298 (21.04.2006.) „Procedures for prevention and combating of such infectious diseases as to which both animals and humans are susceptible”, as well as on Directive 2003/99/EC on the monitoring of zoonoses and zoonotic agents. Besides that, regulations implemented based on Directive No 92/117/EEK were still taken into account until the confirmation of control programmes in compliance with Regulation No (EC) 2160/2003 on the control of salmonella and other specified food-borne zoonotic agents.

1.2. The structure and organization of the relevant competent authorities

1) The structure of the **Food and Veterinary service** (hereinafter referred to as the FVS) is one of the main components of the mechanism that ensures the operational objectives and functions of the service.

- The FVS central office directs and coordinates the implementation of State functions delegated to the service.
- Territorial units (regional offices and one city office) are FVS administrative units that ensure monitoring within the territory of their region.
- The Sanitary Border Inspection (SBI) controls the import, transit and export of freight on the border in accordance with procedures laid down by the Cabinet of Ministers and requirements currently in force.

- Assessment and Registration Agency carries out the scientific research and evaluates specific types of food before launching them into the market and it is responsible for the marketing authorisation and surveillance of the veterinary medicinal products in Latvia.

2) Institute of Food Safety, Animal Health and Environment „BIOR” (hereinafter referred to as the “BIOR”) performs laboratory testing together with territorial units relating to the circulation of food, the diagnosis of infectious human diseases, the diagnosis of infectious animal diseases and ensures testing relating to the environment and environmental sanitary hygiene, as well as the circulation of veterinary medicines, pharmaceutical products, feedingstuffs and feed ingredients; performs the tasks of the national reference laboratory on the basis of authorisation and organises inter-laboratory comparative testing. Institute of Food Safety, Animal Health and Environment „BIOR” is the legal successor of the National Diagnostic Centre of Food and Veterinary Service.

Official checks at other stages of the food chain

The control of zoonotic pathogens in food of animal origin, including veterinary expertise at slaughterhouses, is one of the tasks of the FVS Food Surveillance Department.

Based on EU and Latvian legislation, national control programmes are developed.

Infectology center of Latvia is responsible for the surveillance of zoonoses in humans in Latvia. Infectious diseases are notifiable according to the Regulation of the Cabinet of Ministers No. 7 of 5 January 1999 “Procedure of Notification of Infectious Diseases”.

1.3. Approved laboratories where official samples collected within the programme are analyzed.

“BIOR” performs the functions of the national reference laboratory in Latvia, with regard to the diagnosis of infectious animal diseases. All “BIOR” laboratories are accredited in the national accreditation system LATAK in accordance with Latvian standard LVS EN ISO/IEC 17025.

Food and Environment Testing Laboratory is accredited also in DAP (Germany) and ГООТ Р (Russia) accreditation.

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

Methods used in the examination will be performing in accordance with Annex of Commission Regulation (EC) No 1168/2006.

Sampling is carried out in accordance with minimum requirements of Part B of Annex II to Regulation (EC) of the European Parliament and of the Council No 2160/2003 and Commission Regulation (EC) No 1168/2006.

Laboratory examination comprising detection of *Salmonella* spp. carried out in accordance with the method recommended by the Community RL in Bilthoven (Netherlands) – Amendment 1 of EN/ISO 6579-2002/Amd1:2007 “Microbiology of food and feeding stuffs – Horizontal method for the detection of *Salmonella* spp. – Amendment 1: Annex D: Detection of *Salmonella* spp. in animal faeces and in environmental samples from the primary production stage”.

The isolates from positives samples are **serotyped** following the Kaufmann-White scheme and the **antimicrobial resistance** is determined following the CLSI method with the minimum inhibitory concentration (MIC). Isolated strains are stored in accordance with requirements. In case of isolates of *Salmonella* serovar Typhimurium and *Salmonella* serovar Enteritidis are phage typed.

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

Official sampling at flock level:

- a) in one flock once per year per holding comprising at least 1000 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 on *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 FVS considers it appropriate.

Sampling protocol for feeds and table eggs:

- a) Feed samples shall be taken in the frame of the national feed surveillance programme.
- b) Samples of table eggs shall be taken at egg sorting or packaging plants, either within the HACCP programme, or at any suspicion on zoonotic *salmonella* infection in primary production of table eggs.

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

Measures taken in the case of salmonella detection (*S. Enteritidis* and/or *S. Typhimurium*) in pooled faecal samples and dust samples.

The FVS shall order at least the following measures:

1) table eggs coming from infected flocks may be used for human consumption only if treated in a manner that guarantees the destruction of all *Salmonella* serotypes with public health significance in accordance with Community legislation on food hygiene;

Eggs shall be:

(a) considered as Class B eggs as defined in Article 2(4) of Commission Regulation (EC) No 589/2008 laying down detailed rules for implementing Council Regulation (EC) No 1234/2007 as regards marketing standards for eggs;

(b) marked with the indication referred to in Article 10 of Commission Regulation (EC) No 589/2008 which clearly distinguishes them from Class A eggs prior to being placed on the market;

(c) prohibited access to packaging centres unless the competent authority is satisfied with the measures to pre-vent possible cross-contamination of eggs from other flocks;

2) performance of bacteriological examination of feed for the presence of *Salmonella* spp. and water if necessary;

3) performance of thorough cleansing and disinfection; performance of thorough mechanical cleansing and disinfection, as well as safe removal of faeces and litter after completion of each production cycle;

When birds from infected flocks are slaughtered or destroyed, steps must be taken to reduce the risk of spreading zoonoses as far as possible. Slaughtering shall be carried out in accordance with Community legislation on food hygiene. Products derived from such birds may be placed on the market for human consumption in accordance with Community legislation on food hygiene. If not destined for human consumption, such products must be used or disposed of in accordance with Regulation (EC) No 1774/2002;

Thorough cleansing and disinfection, including safe removal of faeces or litter must be performed after slaughtering or killing of poultry from infected flocks;

4) In order to exclude false-positive initial results from the samples taken by operator, the State inspector from the FVS shall carry out official sampling for confirmation of the infection. The confirmation method shall be carried out according to Annex 1, 4 (b)(i) of Commission Regulation No 1237/2007, 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.

The confirmation method will be based on the technical specifications referred to in Article 5 of Commission Decision 2004/665/EC (seven samples); however, a sub-sample of 25 grams must be collected of each faecal material and dust sample for analysis; all samples must be analysed separately. The FVS may lift the restrictions if the flock is not confirmed by this confirmation method. In addition to the sampling, the FVS shall verify the absence of the use of antimicrobials, potentially affecting the result of the analyses of the sampling.

Use of antimicrobials shall be governed by Regulation (EC) No 1177/2006

- Antimicrobials (e.g. antibiotics) shall not be used as a special method for the control of *Salmonella* infections in poultry.
- **Only authorized antimicrobials are allowed to use in the Republic of Latvia and only veterinarian may use antimicrobials.**

- Antimicrobials may be used only after authorisation by and under supervision of the FVS and they may be applied only in poultry showing clinical signs of the disease suggesting that an excessive suffering of birds could occur. Results of bacteriological examination and anti-microbial susceptibility test must be available prior to the treatment.
- In exceptional cases, antimicrobials may be applied prior to the results of bacteriological examination and anti-microbial susceptibility test are available, provided that samples are taken by the FVS State inspector prior to the application. If sampling has not been performed prior to the application of antimicrobials, flocks shall be considered infected by *Salmonella*.

Vaccination

Laying hens are not vaccinated against *S. Enteritidis* or *S. Typhimurium* in Latvia so far. It is planned that vaccination programme of laying hens against zoonotic salmonella serotype *S. Enteritidis* started by the end of 2011 and continue in 2012.

According to the Commission regulation (EC) No 1177/2006 in case of authorisation of live vaccine against zoonotic *Salmonella*, live *Salmonella* vaccines for poultry, for which the manufacturer does not provide an appropriate method to distinguish bacteriologically wild-type strains of *Salmonella* from vaccine strains, should be prohibited to use in the framework of national *Salmonella* control program.

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

- a) Regulation (EC) No. 2160/2003 of the European Parliament and of the Council of 17 November 2003 on the control of salmonella and other specified food-borne zoonotic agents;

- b) 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;
- c) Commission Regulation (EC) No 1168/2006 of 31 July 2006 implementing Regulation (EC) No 2160/2003 as regards a Community target for the reduction of the prevalence of certain *salmonella* serotypes in laying hens of Gallus Gallus and amending Regulation (EC) No 1003/2005;
- d) Commission Regulation EC No 1237/2007, 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;
- e) Directive 2003/99/EC of the European Parliament and of the Council of 17 November 2003 on the monitoring of zoonoses and zoonotic agents, amending Council Decision 90/424/EEC and repealing Council Directive 92/117/EEC;
- f) The Law on the Supervision of the Handling of Food;
- g) The Veterinary Medicine Law;
- h) Regulation of Cabinet of Ministers No 177, 13 March 2005, “Procedure according to which compensations are given or owners of animals receive compensations for losses which have arise due to eradication of epizootic diseases or animal infectious diseases, which are under state supervision”;
- i) Regulation of Cabinet of Ministers No 712, 16 December, 2003 “Order of registration of animals, herds and holdings and identification of animals”.

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

Regulation of Cabinet of Ministers No 177, 13 March 2005, “Procedure according to which compensations are given or owners of animals receive compensations for losses which have arise due to eradication of epizootic diseases or animal infectious diseases, which are under state supervision” determines procedure according to which compensations are given or owner of animals receive compensations for losses which have arisen due to eradication of animal infectious diseases, which are under state supervision.

State veterinary inspector of the Food and veterinary service draws up a protocol regarding slaughtered animals, destroyed products, animal feed and materials.

In the Annexes of mentioned Regulation of Cabinet of Ministers No 177 are determine scales of compensations of birds, eggs, feed in cases of eradication of salmonellosis.

Compensation scale

No	Animal species and category	Compensation scale (per animal/hatching egg in LVL)
I. Poultry for meat production line		
1.	Day old chicken	0,20
2.	Adult broiler	1,00
3.	Day old chicken for breeding	1,57
4.	Breeding pullet	4,00
5.	Adult breeding hen	3,60
6.	Hatching egg	0,15
II. Poultry for egg production line		
7.	Day old chicken	0,23
8.	Adult breeding bird (hen, quail)	4,90
9.	Adult bird for table egg production (hen, quail)	2,10
10.	Day old chicken for breeding (hen, quail)	2,45

11.	Pullet for table egg production (hen, quail)	2,10
12.	Hatching egg (hen, quail)	0,055
III. Ostrich		
13.	Day old ostrich chicken	23
14.	Day old ostrich chicken for breeding	42
15.	Adult breeding ostrich	800
16.	Adult ostrich	620
17.	Hatching egg	10

2. Concerning food and feed businesses covered by the programme

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

Hygiene management at farms

The following bio security measures are recommended:

- a) All in-all out;
- b) Appropriate poultry keeping system to poultry species and category;

- c) Control of staff, visitors and vehicles;
- d) Vermin, feral animal and insect control;
- e) Control of feed and water supply; litter supply and disposal as well as;
- f) Appropriate cleaning and disinfection measures of equipment, buildings, vehicles adequate of poultry keeping technology.

In egg sorting/packaging plants that are parts of such holdings, HACCP principles shall be applied.

Measures to prevent incoming infections carried by animals feed, drinking water and people working at farms:

The following bio security measures are recommended:

- g) Control of staff, visitors and vehicles;
- h) Vermin, feral animal and insect control;
- i) Control of feed and water supply;
- j) Control of domestic animals of site (pets and other animals, including livestock, must be kept away from poultry houses and service buildings).

Hygiene in transporting animals to and from farms:

The following bio security measures are recommended:

- meet the requirements for animal transport of the species involved as to the construction, arrangement and equipment, do not affect animal health, do not cause any pain or suffering to animals, prevent the animals from escape or falling out and protect them from unfavourable weather effects;
- are protected so that water, feed, litter, faeces or other waste cannot leak or fall out of them;
- are cleaned and disinfected both before and after the transportation.

2.4. Routine veterinary supervision of farms

All poultry flocks included in the programme are subjected to visual monitoring by veterinarians. Monitoring of flocks also includes schemes for taking own samples and official samples. Official samples are taken by FVS State veterinary inspectors.

FVS State veterinary inspector carries out complex inspections on farms for animal welfare reasons, to take samples for residues, to administer and enforce national legislation and to check medicine records as well than this visit is considered as official sampling in the frame of the *Salmonella* control programmes according to the European Union and national rules.

2.5. Registration of farms

Regulation of Cabinet of Ministers No 712, 16 December, 2003 “Order of registration of animals, herds and holdings and identification of animals” determines order of individual identification of cattle, pigs, sheep, goats and horses and registration of holdings of agricultural animals, bee gardens, fishponds, hatcheries of aquatic animals. According to the requirements of Regulation of Cabinet of Ministers No 712 all holdings must be registered at least with one animal (bird).

To ensure common data registration system, Agricultural Data Centre (ADC) develops register of animals, herds and holdings. ADC (formerly - Latvian state pedigree information data processing centre) is a state agency under the supervision of the Ministry of Agriculture that performs

collection, processing and analysis of zoo technical, veterinary and agricultural data in the republic of Latvia to develop a uniform register of animals and herds (cattle, pigs, sheep, goats) and a pedigree information system according to international standards.

2.6. Record-keeping at farms.

According to the Regulation of Cabinet of Ministers No 712, 16 December, 2003 “Order of registration of animals, herds and holdings and identification of animals” animal owner summarizes information and develops register in written form or electronically on animals of certain (own) holding. Animal owner made changes in the register within three days on animal movement and keep it three years.

According to the Regulation of Cabinet of Ministers No 5, 2 January, 2008 “Welfare requirements for animal kept for farming purposes” animal owner develops “Animal medical treatment log” register, where owner keeps information on diseases cases as well as information regarding animal’s cause of death and keep it three years.

According to the Regulation of Cabinet of Ministers No 407, 19 June, 2007 “Regulation of labelling, distribution and control of veterinary medicine” animal owner develops register on used veterinary medicine. As well as animal owner develops register on used feed.

2.7. Documents to accompany animals when dispatched

According to the Regulation of Cabinet of Ministers No 712, 16 December, 2003 “Order of registration of animals, herds and holdings and identification of animals” in case of animal movement owner or authorised veterinarian completes the declaration of animal movement and sends it to Agricultural Data Centre within seven days.

Operators wishing to export more than 20 birds or hatching eggs to another EU member state (or certain third countries) must comply with EU Directive 90/539/EC and ensure that the consignment is accompanied by a completed and signed Intra-trade Animal Health Certificate (ITAHC) for poultry breeding and production.

The ITAHC will be amended to include the results of the last test for *Salmonella* as required in Commission Regulation (EC) 2160/2003 Article 9.1 prior to any dispatching of the live animals, or hatching eggs, from the food business of origin. The date and the result of testing shall be included in the relevant health certificates provided for in Community legislation. This certificate must be completed and signed by the FVS State veterinary inspector as well as the operator to confirm compliance with the relevant articles of Directive.

In the case of intra-Community trade, the consignment of animals have to be accompanied by the veterinary certificate in accordance with Commission Regulation (EC) No 599/2004 concerning the adoption of a harmonised model certificate and inspection report linked to intra-Community trade in animals and products of animal origin.

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

The identification of a flock must be indicated in application form for laboratory examination.

Latvia has fully implemented TRACES system since 31.12.2010. as its is required by Comission Regulation 599/2004.

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

Part B

1. Identification of the programme

Member State: **LATVIA**

Disease(s)¹: SALMONELLOSIS (ZOOTIC *SALMONELLA* – *S. Enteritidis*, *S. Typhimurium*) in laying hens of *Gallus gallus*

Year of implementation: **2012**

Reference of this document: PROGRAM FOR CONTROL OF SALMONELLOSIS (ZOOTIC *SALMONELLA* IN LAYING HENS OF *GALLUS GALLUS*) CO-FINANCED BY THE COMMUNITY

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Date sent to the Commission: **April 26, 2011**

¹ One document per disease is used unless all measures of the programme on the target population are used for the monitoring, the control and eradication of different diseases.

2. **Historical data on the epidemiological evolution of the disease(s)²:**

The monitoring of salmonellosis of Latvian poultry production started in the 1967.

FVS staff or veterinarian notifies to FVS regional office:

- on infected poultry or poultry suspected to be infected by zoonotic *salmonella*;
- if zoonotic *salmonella* are detected on routinely sampling at holding.

3. **Description of the submitted programme³:**

The submitted program has been developed with the target for the reduction of *salmonella* serotypes with public health significance.

Within frame of program control of salmonellosis is ensured by testing of laying hens of *Gallus gallus* in all territory of Latvia. Testing is carried out according to the sampling requirements of the:

- 1) Regulation (EC) No 2160/2003 of the European Parliament and of the Council of 17 November 2003 on the control of *salmonella* and other specified food-borne zoonotic agents;
- 2) Commission Regulation (EC) No 1168/2006 of 31 July 2006 implementing regulation (EC) No 2160/2003 as regards a Community target for the reduction of the prevalence of certain salmonella serotypes in laying hens of *Gallus gallus* and amending Regulation (EC) No 1003/2005.

² A concise description is given with data on the target population (species, number of herds and animals present and under the programme), the main measures (testing, testing and slaughter, testing and killing, qualification of herds and animals, vaccination) and the main results (incidence, prevalence, qualification of herds and animals). The information is given according distinct periods if the measures were substantially modified. The information is documented by relevant summary epidemiological tables, graphs or maps.

³ A concise description of the programme is given with the main objective(s) (monitoring, control, eradication, qualification of herds and/or regions, reducing prevalence and incidence ...), the main measures (testing, testing and slaughter, testing and killing, qualification of herds and animals, vaccination ...), the target animal population and the area(s) of implementation and the definition of a positive case.

Positive case of salmonellosis (*S. Enteritidis*, *S. Typhimurium*) - confirmed positive by "BIOR". Laboratory examination comprising detection of *Salmonella* spp. carried out in accordance with the method recommended by the Community RL in Bilthoven (Netherlands) – Amendment 1 of EN/ISO 6579-2002/Amd1:2007 "Microbiology of food and feeding stuffs – Horizontal method for the detection of *Salmonella* spp. – Amendment 1: Annex D: Detection of *Salmonella* spp. in animal faeces and in environmental samples from the primary production stage".

The isolates from positives samples are **serotyped** following the Kaufmann-White scheme and the **antimicrobial resistance** is determined following the CLSI method with the minimum inhibitory concentration (MIC). Isolated strains are stored in accordance with requirements. In case of isolates of *Salmonella* serovar Typhimurium and *Salmonella* serovar Enteritidis are phage typed.

Taking of official samples for laboratory testing within control programme is carried out by FVS State veterinary inspectors.

Testing of laying hens in 2012 will start in January and will be completed not later than in December 2012.

4. Measures of the submitted programme

4.1. *Summary of measures under the programme*

Duration of the programme:

First year: 2012

Last year: 2012

X Control

- X** Testing
- X** Slaughter of positive animals
- Killing of positive animals
- X** Vaccination
- Treatment
- X** Disposal of products

Monitoring or surveillance

Other measures (*specify*):

X Eradication

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

4.2. *Designation of the central authority charged with supervising and coordinating the departments responsible for implementing the programme*⁴:

The **Food and Veterinary Service (FVS) of Latvia** is a state administrative institution headed by the CVO and supervised by the Ministry of Agriculture. Regarding veterinary issues FVS ensures unified state surveillance and control over:

- prevention, control and eradication of animal contagious diseases and zoonoses; elaboration and implementation of animal disease surveillance programmes;

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

- animal welfare;
- animal registration, animal movements, import – export control;
- the animal feed, veterinary drugs and veterinary pharmaceutical products;
- evaluation and approval of specific types of food, marketing authorisation and surveillance of the veterinary medicinal products in Latvia.

The FVS consists of the central body placed in Riga and territorial structural units (the local level) – 10 regional offices and one city office (from 01.04.2009.). The central body coordinates activities of the local level and ensures a unified implementation of legislation. The local level carries out the official surveillance in accordance with the state surveillance programmes and reports to the central body.

Taking of official samples for laboratory testing within control programme **are carried out by state veterinary inspectors.**

Description and delimitation of the geographical and administrative areas in which the programme is to be implemented⁵:

The program will be implemented and applied in whole territory of Latvia. There are FVS territorial structural units – 11 regional offices cover all administrative areas. The regional offices carry out the official surveillance in accordance with the state surveillance and control programmes in the administrative area concerned.

⁵ Describe the name and denomination, the administrative boundaries, and the surface of the administrative and geographical areas in which the programme is to be applied. Illustrate with maps.

4.4. Measures implemented under the programme⁶⁷

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

Regulation of Cabinet of Ministers No 712, 16 December, 2003 “Order of registration of animals, herds and holdings and identification of animals” determines order of individual identification of cattle, pigs, sheep, goats and horses and registration of holdings of agricultural animals, bee gardens, fishponds, hatcheries of aquatic animals.

To ensure common data registration system, Agricultural Data Centre (ADC) develops register of animals, herds and holdings. ADC (formerly - Latvian state pedigree information data processing centre) is a state agency under the supervision of the Ministry of Agriculture that performs collection, processing and analysis of veterinary and agricultural data in the Republic of Latvia to develop a uniform register of animals and herds (cattle, pigs, sheep, goats) and a pedigree information system according to international standards.

4.4.2. Measures and terms of legislation as regards the **identification of animals**⁷:

According to the Regulation of Cabinet of Ministers No 712, 16 December, 2003 “Order of registration of animals, herds and holdings and identification of animals” Agricultural Data Centre (ADC) develops register of animals, herds and holdings. ADC gives number for holding and this number is not changed during holding or herd is active. Animal owner informs ADC on animal movement, liquidation of herd or holding, change of owners within seven days.

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

Animal owner, the person in charge, veterinarian notifies to FVS regional office:

- on infected poultry or poultry suspected to be infected by zoonotic *salmonella*;
- if zoonotic *salmonella* are detected on routinely sampling at holding.

⁶ Where appropriate Community legislation is mentioned. Otherwise the national legislation is mentioned.

⁷ Not applicable for poultry.

4.4.4. Measures and terms of legislation as regards the **measures in case of a positive result**⁸:

Measures in case of a positive result are taken according to 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 as follows:

I Action in suspicious cases

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

In the event of a positive laboratory test performed during own control, the owner or veterinarian informs the FVS territorial unit (TU) and a State veterinary inspector takes official samples from the suspect laying hen flock and sends them to the “BIOR” for testing and specifies the measures to be taken and restrictions on the possibly affected holding until a diagnosis has been made:

- take samples (bedding, feeding stuffs, water, faecal samples, dust, surface rinses) for laboratory testing to determine the possible paths and sources of infection;
- bacteriological testing of dead poultry;
- destroy dead birds using methods that reduce the risk of agents being spread where possible;
- place disinfectant mats at the entrance and exit of the house and other farm buildings;
- prohibit the taking in and removal of birds from an affected house;
- prohibit the removal of eggs from an affected house;
- control the movement of people who tend poultry;

⁸ A short description is provided of the measures as regards positive animals (slaughter, destination of carcasses, use or treatment of animal products, the destruction of all products which could transmit the disease or the treatment of such products to avoid any possible contamination, a procedure for the disinfection of infected holdings, the therapeutic or preventive treatment chosen, a procedure for the restocking with healthy animals of holdings which have been depopulated by slaughter and the creation of a surveillance zone around the infected holding,...).

- measures are taken to control pests and rodents.

II Action in cases of positive laboratory testing

As soon as a diagnosis has been officially approved, a State veterinary inspector shall specify the measures that are to be taken on the affected holding:

1. Measures to be taken in laying hens' house:

- place disinfectant mats at the entrance and exit of the house and other farm buildings;
- prohibit the taking in and removal of birds from an affected house and/or holding;
- control the movement of people who tend poultry;
- take samples (bedding, feeding stuffs, water, dust, faecal samples, surface rinses) for laboratory testing to determine the possible paths and sources of infection;
- bacteriological testing of dead birds;
- destroy dead birds using methods that reduce the risk of agents being spread where possible;
- eggs may be used for human consumption if they are treated in a manner that guarantees the elimination of *salmonella* in accordance with Community legislation on food hygiene;
- slaughtering of birds shall be carried out in accordance with Community legislation on food hygiene. Products derived from such birds may be placed on the market for human consumption in accordance with Community legislation on food hygiene.
- the house and surrounding area, as well as vehicles, equipment and other materials that may be contaminated with disease agents are cleaned, washed and disinfected under the supervision of veterinarian or state veterinary inspector;
- feeding stuffs, bedding and other materials that may be contaminated with disease agents are disinfected under the supervision of veterinarian or state veterinary inspector; manure are disinfected or subjected to biothermic treatment;
- the processing of eggs, as well as the slaughter of birds is documented;
- antimicrobials shall not be used, except circumstances referred in Article 2 of the 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;
- measures are taken to control pests and rodents.

III Lifting of restrictions:

Restrictions are lifted by a State veterinary inspector after the above measures have been taken and following receipt of a negative laboratory test, by inspecting samples of surface rinses from the holding following final disinfection.

- 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 concerned⁹:

See above measures have been taken in the holding.

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

In the frame of the *Salmonella* control programme in **laying hen 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.

I. Samples of the flocks of laying hens are taken:

1.1. for day-old chicks:

- rinses from the internal surfaces of the container in which the chicks have been transported to the establishment;
- materials from chicks that have died during transportation;

1.2. pullets two weeks before the start of the laying cycle: pooled faecal samples.

II. Samples from adult laying hens are taken every fifteen weeks. The first sampling shall take place at the age of 24 ± 2 weeks:

⁹ A short description of the control procedures and in particular rules on the movement of animals liable to be affected or contaminated by a given disease and the regular inspection of the holdings or areas is provided.

2.1. in cage flocks:

- two pooled faecal samples, from each house where birds are kept;

2.2. in barn or free range flocks:

- two pairs of boot swabs or socks from each house where birds are kept.

III. The official samples mentioned in II. and **dust sample** or additional sample of faeces or additional pair of boot swabs or socks are taken from adult laying hens flocks by State veterinary inspector:

- 3.1. in one flock per year per holding comprising at least 1000 birds;
- 3.2. at the age of 24 ± 2 weeks in laying flocks on the holdings housed in houses where *Salmonella* was detected in the preceding year;
- 3.3. in any case of suspicion of *Salmonella* Enteritidis or *Salmonella* Typhimurium infection, as a result of the epidemiological investigation of food – born outbreaks in accordance with Article 8 of Directive 2003/99/EC of the European Parliament and of the Council;
- 3.4. in cases where the FVS considers it appropriate.
- 3.5. a sampling carried out by FVS replaces one sampling at the initiative of the operator.

IV Surveillance system of *Salmonella* spp. in feedingstuffs

The State veterinary inspector selects the type of sample and the undertaking engaged in the circulation of feedingstuffs where the sample is to be taken by assessing the possible risks that may pose a serious threat to animal and human health at the object under supervision within the territorial unit – in accordance with instructions. In the event of positive laboratory test during the official control of feedingstuffs the inspector:

- informs the head of the territorial unit of the results of the analyses;
- informs the FVS central office;
- **recommend** how feedingstuffs should be used (processed) or destroyed;
- where appropriate informs, in writing, other territorial units involved in the distribution of non-compliant feedingstuffs.

V Vaccination

Vaccination against zoonotic *Salmonella* is allowed in the Republic of Latvia.

Laying hens are not vaccinated against *S. Enteritidis* or *S. Typhimurium* in Latvia so far. It is planned that vaccination programme of laying hens against zoonotic salmonella serotype *S. Enteritidis* started by the end of 2011 and continue in 2012.

According to the Commission regulation (EC) No 1177/2006 in case of authorisation of live vaccine against zoonotic *salmonella*, live *salmonella* vaccines for poultry, for which the manufacturer does not provide an appropriate method to distinguish bacteriologically wild-type strains of *salmonella* from vaccine strains, should be prohibited to use in the framework of national *salmonella* control programme.

Vaccination against *S. Pullorum* and *S. Gallinarum* is prohibited.

VI Use of antimicrobials

Use of antimicrobials for national control programme of salmonellosis is carried out on the basis of Commission Regulation (EC) No 1177/2006 and in exceptional cases specified by this Regulation use of antimicrobials will be based wherever possible on the result of bacteriological sampling and of susceptibility testing.

Only authorized antimicrobials are allowed to use in the Republic of Latvia and only veterinarian may use antimicrobials.

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

Regulation of Cabinet of Ministers No 177, 15 March 2005, "Procedure according to which compensations are given or owner of animals receive compensations for losses which have arose due to eradication of epizootics or animal infectious diseases." determines procedure according to which compensations are given or owner of animals receive compensations for losses which have arisen due to eradication or outbreaks of animal infectious diseases, which are under state supervision.

FVS state veterinary inspector draws up a protocol regarding slaughtered animals, destroyed products, animal feed and materials.

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

The following bio security measures are recommended:

- a) All in-all out;
- b) Appropriate poultry keeping system to poultry species and category;
- c) Control of staff, visitors and vesicles;
- d) Vermin, feral animal and insect control;
- e) Control of feed and water supply; litter supply and disposal as well as;
- f) Appropriate cleaning and disinfection measures of equipment, buildings, vehicles adequate of poultry keeping technology;
- g) Control of domestic animals of site (pets and other animals, including livestock, must be kept away from poultry houses and service buildings);
- h) Control of hygiene in animal transporting.

In egg sorting/packaging plants that are parts of such holdings, HACCP principles shall be applied.

5. General description of the costs and benefits¹⁰:

The total costs of the program 1 004 212,51 Euro.

The submitted programme has been developed with the target to established for the reduction of the prevalence of serotypes of zoonotic *salmonella* with public health significance according to the Commission Regulation (EC) No 1168/2006 of 31 July 2006 implementing regulation (EC) No 2160/2003 as regards a Community target for the reduction of the prevalence of certain salmonella serotypes in laying hens of *Gallus gallus* and amending Regulation (EC) No 1003/2005.

Benefits:

1. To limit distribution of products contaminated with salmonellosis agents in the market and reduce the infection risk of consumers;
2. Control and eradication of microorganisms of salmonella genus in the whole food chain (especially - in the primary production).
3. Keep in under control public and animal (poultry) health in the National and European Community level.

¹⁰ A description is provided of all costs for the authorities and society and the benefits for farmers and society in general.

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

6.1. Evolution of the disease

6.1.2. Data on evolution of the disease

Year: 2004 - 2010

Animal species: adult laying hens of *Gallus gallus*

Disease^(a): SALMONELLOSIS

Year	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 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)	
							Serotypes targeted in the control programme ^(f)	Other serotypes	Serotypes targeted in the control programme ^(f)	Other serotypes	Serotypes targeted in the control programme ^(f)	Other serotypes	Serotypes targeted in the control programme ^(f)	Other serotypes	Serotypes targeted in the control programme ^(f)	Other serotypes
2010	Laying hens	68	3480226	68	3480226	68	2**	1	-	-	-	-	-	-	-	-
2009	Laying hens	71	2637697	71	2637697	71	7*	-	2	-	26367	-	43920	-	-	-
2008	Laying hens	69	1854561	69	1854561	69	10	4	-	-	-	-	-	-	-	-
2007	Laying hens	73	1899827	73	1899827	73	15	-	-	-	-	-	-	-	-	-
2006	Laying hens	64	1627856	64	1627856	25	4	-	-	-	-	-	-	-	-	-
2005	Laying hens	55	1743757	55	1743757	23	2	-	-	-	-	-	-	-	-	-
2004	Laying hens	55	1584927	55	1584927	26	2	-	-	-	-	-	-	-	-	-

*In 2009 - 4 positive layer flocks out of total 7 positive laying hen flocks were flocks which are direct suppliers of small quantities to final consumer (with no more 50 birds in one flock).

** In 2010 – in one flock official samples are taken on 27.12.2010., but testing reports received on 4.01.2011., then all measures in positive case taken regard to this flock were in January 2011.

- (a) For zoonotic Salmonella 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 , ect. Flocks equals 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 should not be counted twice even if it has been checked more than one
- (e) If a flock has been checked, in accordance with footnote (d), more than once, a positive sample should 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: 2007-2010

Disease (a): Salmonellosis

Animal species/category (b): laying hens

Description of the used microbiological or virological tests:

Laboratory examination comprising detection of *Salmonella* spp. carried out in accordance with the method recommended by the Community RL in Bilthoven (Netherlands) – Amendment 1 of EN/ISO 6579-2002/Amd1:2007 “Microbiology of food and feeding stuffs – Horizontal method for the detection of *Salmonella* spp. – Amendment 1: Annex D: Detection of *Salmonella* spp. in animal faeces and in environmental samples from the primary production stage”.

The isolates from positives samples are **serotyped** following the Kaufmann-White scheme and the **antimicrobial resistance** is determined following the CLSI method with the minimum inhibitory concentration (MIC). Isolated strains are stored in accordance with requirements. In case of isolates of *Salmonella* serovar Typhimurium and *Salmonella* serovar Enteritidis are phage typed.

Year	Region [©]	Serological tests		Microbiological or virological tests		Other tests	
		Number of samples tested ^(d)	Number of positive samples [©]	Number of samples tested ^(d)	Number of positive samples [©]	Number of samples tested ^(d)	Number of positive samples [©]
2010	Latvia			94	17		
2009	Latvia			130	21		
2008	Latvia			531	61		
2007	Latvia			672	101		

Year: 2002 - 2006

Disease (a): Salmonellosis

Animal species/category (b): poultry

Description of the used microbiological or virological tests:

The bacteriological detection of Salmonella spp. carried out by the method of ISO 6579 (2002). Serotyping is according to the Kaufmann – White scheme. Isolate per serotype is used for anti – microbial susceptibility testing.

Year	Region [©]	Serological tests		Microbiological or virological tests		Other tests	
		Number of samples tested _(d)	Number of positive samples [©]	Number of samples tested _(d)	Number of positive samples [©]	Number of samples tested _(d)	Number of positive samples [©]
2006	Latvia			333	17		
2005	Latvia			169	10		
2004	Latvia			78	4		
2003	Latvia			212	13		
2002	Latvia			688	53		

Year: 2000- 2001

Disease (a): Salmonellosis

Animal species/category (b): poultry

Description of the used microbiological or virological tests:

The method of ISO 12824:1997

Year	Region [©]	Serological tests		Microbiological or virological tests		Other tests	
		Number of samples tested ^(d)	Number of positive samples [©]	Number of samples tested ^(d)	Number of positive samples [©]	Number of samples tested ^(d)	Number of positive samples [©]
2001	Latvia			386	60		
2000	Latvia			386	26		

- (a) Disease and animal species if necessary.
- (b) Breeders, laying hens, etc, when appropriate.
- (c) Region as defined in the approved eradication programme of the Member state.
- (d) Number of samples tested, all confounded.
- (e) Number of positive samples, all confounded.

6.3. Data on infection

Year: 2007- 2010

Disease^(a): Salmonellosis

Animal species: laying hens of *Gallus gallus*

Year	Region ^(b)	Number of herds infected ^(c)	Number of animals infected
2010	Latvia	2** (targeted serotypes)	-
2009	Latvia	7	-
2008	Latvia	10	-
2007	Latvia	15	-

** In 2010 – in one flock official samples are taken on 27.12.2010., but testing reports received on 4.01.2011., then all measures in positive case taken regard to this flock were in January 2011.

6.4. Data on vaccination programmes

Laying hens are not vaccinated against *S. Enteritidis* or *S. Typhimurium* in Latvia so far. It is planned that vaccination programme of laying hens against zoonotic salmonella serotype *S. Enteritidis* started by the end of 2011 and continue in 2012.

7. Targets

7.1. Targets related to testing

7.1.1. Targets on diagnostic tests

7.1.1.1. Number and specification of tests

Disease^(a): Salmonellosis **Animal species:** laying hens of *Gallus gallus*

Region^(b)	Type of the test^(c)	Target population^(d)	Type of sample^(e)	Objective^(f)	Number of planned tests
Latvia	Amendment 1 of EN/ISO 6579-2002/Amd1:2007	Laying hens of <i>Gallus gallus</i>	Pooled faecal samples and dust samples	Control	150
Total					150

- (a) Disease and species if necessary
- (b) Region as defined in the approved eradication programme of the Member State
- (c) Description of the test (e.g. SN-test, AB-Elisa, RBT, ...)
- (d) Specification of the targeted species and the categories of targeted animals (e.g. sex, age, breeding animal, slaughter animal, ...).
- (e) Description of the sample (e.g. blood, serum, milk, ...)
- (f) Description of the objective (e.g. qualification, surveillance, confirmation of suspected cases, monitoring of campaigns, seroconversion, control on deleted vaccines, testing of vaccine, control of vaccination, ...)
- (g) 7.2.1.2. Testing scheme(s)¹¹:

¹¹ Describe the testing scheme according the different categories if appropriate (which herds and animals, the number of animals per herd, the frequency and the interval of sampling) with reference to the national and Community legislation where appropriate.

7.1.2. *Targets on testing of flocks*

Animal species: Laying hens of *Gallus gallus*

Disease/infection^(a): SALMONELLOSIS

Region	Type of flock ^(b)	Total number of flocks ^(c)	Total number of animals	Total number of flocks under the programme	Total number of animals under the programme	Expected number of flocks to be checked ^(d)	Number of flocks ^(a) expected to be positive ^(e)			Number of flocks expected to be depopulated ^(a)		Total number of animals expected to be slaughtered destroyed ^(a)		Expected quantity of eggs to be destroyed (number or kg) ^(a)		Expected quantity of eggs to be channelled to egg products (number or kg) ^(a)	
							(a1)	(a2)	(a3)	(a3)	(a4)	(a4)	(a3)	(a4)	(a3)	(a4)	(a3)
Latvia	Laying hen flocks	70	2 600 000	70	2 600 000	70	4*	-	-	-		60 000	-	-	-	100 000	-
Total	Laying hen flocks	70	2 600 000	70	2 600 000	70	4*					60 000				100 000	

* **For 2012 it is planned that 5% of laying hens flocks will be positive on salmonella. Mean number of the birds kept in the one layer flock are 15 000.**

^(f) For zoonotic Salmonella 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.

^(g) For example, breeding flocks (rearing, adult flocks), production flocks, laying hen flocks, ect. Flocks equals herds or as appropriate.

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

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

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

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

7.2.1. Targets on vaccination ¹²

Animal species: ^(a): laying hens of *Gallus gallus*

Region ^(b)	Total number of herds ^(c) in vaccination programme	Total number of animals in vaccination programme	Targets on vaccination programme			
			Number of herds ^(c) in vaccination programme	Number of herds ^(c) expected to be vaccinated	Number of animals expected to be vaccinated	Number of doses of vaccine expected to be administered
Latvia	70	2 600 000	70	70	2 600 000	8 035 000
Total	70	2 600 000	70	70	2 600 000	8 035 000

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

¹² Data to provide only if appropriate.

8. Detailed analysis of the cost of the programme¹³

<i>Costs related to</i>	<i>Specification</i>	<i>Number of units</i>	<i>Unitary cost in €</i>	<i>Total amount in €</i>	<i>Community funding requested (yes/no)</i>
1. Testing	<i>Amendment 1 of EN/ISO 6579-2002/Amd1:2007</i>				
1.1. Cost of the analysis	<i>Test: bacteriological detection</i>	150	23,14	3471,00	Yes
	<i>Test: serotyping</i>	40	61,41	2456,40	Yes
	<i>Test: anti-microbial susceptibility (MIC)</i>	40	28,49	1139,60	Yes
	<i>Test :phagetyping</i>	40	58,07	2322,80	Yes
	<i>Bacteriological test to verify the efficiency of disinfection of poultry houses after depopulation of a salmonella-positive flock</i>	40	23,14	925,60	Yes
	<i>Tests for the detection of antimicrobials or bacterial growth inhibitory effect in tissues from birds from flocks tested for salmonella</i>	3	132,37	397,11	Yes
1.2. Cost of sampling					
1.3. Other costs					
2. Vaccination or treatment					
2.1. Purchase of vaccine/treatment	<i>Live marked Salmonella Enteritidis vaccine</i>	8 035 000	0,1	803 500,00	Yes
2.2. Distribution costs					

¹³ Fixed costs should not be included. All amounts are VAT excluded.

2.3. Administering costs					
2.4. Control costs					
3. Slaughter and destruction					
3.1. Compensation of animals	<i>Laying hens</i>	<i>60 000</i>	<i>3,00</i>	<i>180 000</i>	Yes
3.2. Transport costs					
3.3. Destruction costs					
3.4. Loss in case of slaughtering					
3.5 Costs from treatment of products (milk, eggs, hatching eggs, etc)	<i>Eggs</i>	<i>100 000</i>	<i>0,1</i>	<i>10 000</i>	Yes
4. Cleaning and disinfection					

5. Salaries (staff contracted for the programme only)					
6. Consumables and specific equipment					
7. Other costs					
TOTAL				1 004 212,51	Yes