



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

SANCO/12904/2010

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

Control programme of Salmonella

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

Estonia

* in accordance with Council Decision 2009/470/EC

Country Geographical English Name	Estonia
Submission number	1283321811650-386
Submission date	01/09/2010 08:13:32

(a) State the aim of the program

The submitted programme of broilers of Gallus gallus has been developed with the target to establish for the reduction of the prevalence of serotypes of zoonoses with public health significant according to the Commission Regulation (EC) No 646/2007 of 12 June 2007 implementing regulation (EC) No 2160/2003 as regards a Community target for the prevalence of certain salmonella serotypes and amending Regulation (EC) No 1003/2005. Estonia target referred to in Article 1(1) of Regulation (EC) No 646/2007 for the reduction of Salmonella enteritidis and Salmonella typhimurium in broiler flocks of Gallus gallus (Community target) is as follows:

a reduction of the maximum percentage to 1 % or less by 31 December 2011.

(b) Demonstrate the evidence that it complies with the minimum sampling requirements laid down in part B of Annex II to Regulation (EC) No 2160/2003 of the European Parliament and of the Council [1] indicating the relevant animal population and phases of production which sampling must cover
Broilers- birds leaving for slaughter

(c) demonstrate the evidence

(b) Animal population and phases of production which sampling cover	Broiler flocks of Gallus gallus
Gallus Slaughter Pigs	
Gallus Hens Pullets	
Partab Gallus Hens Laying	
Gallus Hens Day Old	
Gallus Four Week	
Gallus During Laying	
Partab Gallus Day Old	
Gallus Breeding Pigs	
Gallus Before Laying	

(c) Demonstrate the evidence...

The submitted programme of broilers of Gallus gallus has been developed with the target to establish for the reduction of the prevalence of serotypes of zoonoses with public health significant according to the Commission Regulation (EC) No 646/2007 of 12 June 2007 implementing regulation (EC) No 2160/2003 as regards a Community target for the prevalence of certain salmonella serotypes and amending Regulation (EC) No 1009/2005.

The results of the baseline study on the prevalence of salmonella in broilers of Gallus gallus carried out in Estonia in 01.10.2005-30.09.2006 was: prevalence of S. Enteritidis 3,9% and prevalence of Typhimurium 0%.

In 01.01-31.12.2008 was prevalence of S. Enteritidis 0,9% and prevalence of Typhimurium 0 %.

In 01.01-31.12.2009 was prevalence of S. Enteritidis and S. Typhimurium 0 %.

(d) Specification of following points :

(d)1. General

(d)1.1 A short summary referring to the occurrence

The results of the baseline study on the prevalence of salmonella in broilers of Gallus gallus carried out in Estonia in 01.10.2005-30.09.2006 was: prevalence of S. Enteritidis 3,9% and prevalence of Typhimurium 0%.

In 01.01-31.12.2008 the prevalence of S. Enteritidis was 0,9% and prevalence of Typhimurium was 0 %.

In 01.01-31.12.2009 the prevalence of S. Enteritidis and S. Typhimurium was 0 %.

In 01.01-30.06.2010 the prevalence of S. Enteritidis and S. Typhimurium was 0 %.

(d)1.2 A short summary referring to the occurrence of the salmonella

The VFB Animal Health Office organises and carries out infectious animal disease control and applies measures for protecting humans against zoonotic diseases; it also carries out supervision over the registration and identification of animals and the veterinary control of the domestic movement of animals; it protects the environment against hazards concurring with animal husbandry and infectious animal diseases; it controls the use of medicines and medicated feedstuffs by veterinarians and animal keepers who are involved in the production of products of animal origin; it organises the work of the national veterinary service and coordinates and carries out supervision over veterinary assistance, treatment and prophylactics for animals; it is involved in the approval and registration of livestock buildings and facilities, advises in the preparation of construction projects; and it participates in the preparation and carrying out of national or international projects for animal health.

Supervision over animal health is based on the Veterinary Activities Organisation Act, which provides the bases for organising veterinary activities. Veterinary activities are a system of measures which are applied to protect animal and human health and to ensure the welfare of animals which includes activities in the areas of animal health, animal product hygiene and animal protection.

An important role in the field of animal health is played by the Infectious Animal Disease Control Act, which includes measures for the prevention and control of infectious animal diseases which are both general (e.g. obligations regarding the identification and registration of animals) as well as specific (e.g. codes of conduct for outbreaks). In the event of the requirement for the prevention of an infectious animal disease, or a suspicion that one might be present, or in the event of an actual outbreak, close cooperation is required with the appropriate Veterinary and Food Laboratory, which carries out the necessary laboratory examinations.

In the event of a suspicion or outbreak of an infectious animal disease the infectious animal disease control rules established by the Minister of Agriculture are taken as a basis for any action that is taken. The prevention of an infectious animal disease and the elimination of an outbreak site takes place pursuant to the infectious animal disease control rules. The infectious animal disease control rules are obligatory, and are to be rigidly followed by all keepers of animals, handlers of animal products, persons present within the area of the outbreak, supervisory officials, authorised veterinarians, veterinarians holding an activity licence, and veterinary laboratories, as well as other individuals who are associated with the field of infectious animal disease control due to their working duties.

(d)1.3 A short summary referring to the occurrence of the salmonella

All samples collected in the frames of this study were investigated in central laboratory of Veterinary and Food Laboratory situated in Tartu (Kreutzwaldi 30, Tartu 51006, phone 07 386 100, fax 07 386 102). For further serotyping and phage typing, a proportion of the typable strains and of the non-typable isolates were sent to the CRL Microbiological Laboratory for Health Protection in Bilthoven The Netherlands. CRL confirmed our results. For epidemiological purposes, we tested also anti-microbial susceptibility of serotypes found in our flocks. Interpretive breakpoints were based on NCCLS criteria.

(d)1.4 Methods in examination

Sampling procedures were performed by fully state operated veterinary service. Activities were co-ordinated by Veterinary and Food Board (VFB). VFB is having the central competence on veterinary and food control matters. Within the area of government of VFB there are 15 local veterinary authorities (Veterinary Centres, one in each county). Samples were collected by veterinary officials of local veterinary centre. Above mentioned officials were also responsible for filling in accompanying document and sampling report, informing the laboratory about arrival of samples, packaging of them and sending into laboratory.

The method recommended by the Community Reference Laboratory for Salmonella in Bilthoven, the Netherlands, is used: the method is a modification of ISO 6579 (2002), where a semi solid medium (MSRV) is used as the single selective enrichment medium. The semi-solid medium should be incubated at 41.5 +/- 1 °C for 2x (24+/-3) hours. At least one isolate from each positive sample shall be typed in the National Reference Laboratory for Salmonella. The National Reference Laboratory for Salmonella shall follow the Kaufmann-White scheme. At least the strains isolated from samples collected by the competent authority, shall be stored for future phage typing or antimicrobial susceptibility testing, using the normal methods for culture collection, which must ensure integrity of the strains for a minimum of two years.

(d)1.5 A short summary referring to the occurrence of the salmonellosis

Official control sampling at flock level is taken:

- in one flock per year per holding

Surveillance of salmonella in feed, animals and food is carried out for many years in Estonia. In addition to surveillance systems, monitoring programme is conducted, which provides additional epidemiological information:

Feed samples:

- 1) On the enterprises handling feedstuffs the final products shall be studied bacteriologically under the framework of monitoring and self-inspection.
- 2) From imported feedstuffs official samples shall be taken in the course of random inspection during their storing.

(d)1.6 Measures

All flocks of birds (young birds, laying flock), where *S. typhimurium* or *S. enteritidis* has been diagnosed shall be sent immediately for slaughter pursuant to the requirements of Minister of Agriculture No 46, 29.03.2007 a.

The usual time-span between the time as flock is declared as "suspected flock" and when mentioned flock is declared as "infected", depends on the time of confirmatory tests carried out by laboratory (usually 24 to 48 hours). According to provisions of paragraph 3.1. of Annex of Commission Regulation (EC) No 1168/2006 and CR No 646/2007/EC paragraph 3. 1., the examination of the samples is carried out within 48h following receipt.

If examination of samples, which are collected during monitoring plan, own-check or during other studies, give positive results of Salmonella or a zoonotic disease, the diagnose is declared by the official veterinarian based on the results of confirmatory examination and additional samples.

Vaccination with Salmonella strains is not allowed according to the national legislation (Regulation on Prevention against Salmonella is approved by the degree of the Minister of Agriculture No 46, 29.03.2007).

Own-check sample from a flock is taken by the vet of the holding in accordance with the sampling of Commission Regulation (EC) No 1003/2005 and Commission Regulation (EC) No 1168/2006. Antibiotics is not used as a specific method to control Salmonella except under clearly defined exceptional circumstances as laid down in Commission Regulation (EC) No 1177/2006 of 1 August 2006 implementing Regulation (EC) No 2160/2003 of the European Parliament and of the Council as regards requirements for the use of specific control methods in the framework of national programmes for the control of Salmonella in poultry.

Estonia confirms that in the frame of the Salmonella control programme in broilers of Gallus gallus the provisions of CR No 646/2007/EC paragraph 1/2/4 (particularly provisions on exceptional cases) are implemented.

(d)1.7 A short summary referring to the occurrence of the salmonellos

In accordance with the Infectious Animal Disease Control Act, the annual volume of salmonella tests in broilers of Gallus gallus is laid down by the State Program on Monitoring and Surveillance of Animal Infectious Diseases adopted by the General Director of the Veterinary and Food Board. Instructions for salmonella monitoring in broilers of Gallus gallus are laid down in the Ministry of Agriculture Regulation No 46, 29.03.2007, which also provides guidelines for the prevention and control of salmonella in broilers of Gallus gallus and for the handling of products originating from suspected or infected birds.

(d)1.8 Financial assistance

No compensation is given to the owner of the flock if the broilers of Gallus gallus are slaughtered during the outbreak of Salmonella.

(d)2. Food and business covered by the programme

(d)2.1 Structure of the production

The programme will be implemented to all territory of Estonia and covers all broilers in Estonia. In Estonia there are four big broiler holdings (1, 190000 broilers). There are 414 flocks raised in these holdings.

(d)2.2 Structure of the production of feed

The Feed Office carries out the following tasks:

- establishing, updating and ensuring the compliant functioning of the control system for feedingsuffs
- a risk assessment and preparation of the supervision plan;
- assessing the training needs of the inspectors and the planning of training as well as carrying out or organising such training
- developing and updating inspection guidelines and supervision documents (manual);
- assessing the productivity of supervision and developing and implementing corrective measures
- establishing, updating and ensuring the compliant functioning of the control system for feedingsuffs
- a risk assessment and preparation of the supervision plan

(d)2.3 Relevant guidelines

(d)2.3.1 Hygiene management at farms

Infectious Animal Disease Control Act § 71 Biosecurity measures:
Animal keeper will implement the following biosecurity measures to prevent:

- 1) the organization of the movement of persons and vehicles;
- 2) livestock buildings and installations, and the animals specified in the occupation of a person unconnected with access to limitation;
- 3) livestock buildings and installations, and the animals specified in the occupation of a foreign country to restrict access to the person arriving earlier than 48 hours after its receipt by the person;
- 4) animals entering the herd kept separate from other animals on the basis of the status field of animal diseases;
- 5) isolated from healthy animals are ill;
- 6) feed, litter and other potential infection-bearing material handling and organizing the material, regular cleaning and disinfection;
- 7) a regular rodent and insect control;
- 8) livestock buildings and facilities and the limited area of the animals wild and domestic animals to prevent escape, and other appropriate measures necessary to prevent the spread of infectious animal diseases.

(d)2.3.2 Relevant guidelines

Good farming practises and strict bio-security measures are applied at the holdings. These measures are checked at least once a year during the holding visit. The drafts of Community guides to good practice for hygiene referred to in Article 9 of Regulation (EC) No 852/2004 of the European Parliament and of the Council of 29 April 2004 on the hygiene of foodstuffs, are partly applied to the relevant poultry population.

(d)2.3.3 Hygiene in transporting animals to and from farms

All poultry shipments must be authorized to exercise or licensed carrier. Truck wheels and be fitted in the entrance before entering the house of an area and exit from fogging disinfection. If the vehicle is visibly contaminated with manure, they must be thoroughly cleaned before entering the farm and disinfected. Truck drivers must be properly trained and informed so that they understand the importance of personal hygiene and to know how an infection of the hands, clothing and equipment through the spreads. Ideally, they should stay in the holding time, wear protective clothing provided by the farm. Relevant data sheets and other official documents must be fully completed and accompanied by a chicken to their destination.

(d)2.4 Routine veterinary supervision of farms

Supervision of animal health is based on the Veterinary Organisation Act. The official veterinary officer inspects holdings regularly to check compliance with programme. Authorised veterinarians inspect 100 % of broiler flocks of Gallus gallus each year. As part of the annual animal health inspection carried out in accordance with the Farm Inspection Report. Authorised veterinarians must take random samples at the place of destination. The type and number of samples corresponds with the previous requirements.

(d)2.5 Registration of farms

All broiler holdings in Estonia are covered by the State Programme on Monitoring and Surveillance of Animal Infectious Diseases and therefore also by the programme. Since 2000, all holdings with broilers in Estonia are registered in the Central Register of Agricultural Animals.

(d)2.6 Record keeping at farm

Each keeper of broilers is required to keep an up-to-date register of poultry kept in the farm in manual or computerised form. Animal keeper is required to keep record of medical products and medicated feedings/ stuffs administered to the farm animals. The records shall reflect:

1. identification date of the animal or group of animal
2. address of farm
3. person who is responsible for activity on the farm
4. type and range of activities on the farm
5. situation plan of the farm
6. technology and system of rearing
7. name and address of veterinarian who is responsible for veterinary care
8. contact on processing of animal by-products
9. plan of Salmonella infections
10. name and administered quantity of the medicinal product or medicated feedings/ stuff used
11. data on the issuer of the medicinal product; the veterinarian or pharmacy
12. evidence of controls of health and mortality
13. evidence of visitors
14. plan of special training of personal
15. plan of controls of clean of water
16. plan of controls of feedstuff

(d)2.7 Documents to accompany animals when dispatched

While dispatched, animals must be accompanied with the veterinary certificate, where the basis of their state of health should be verified, certifying that the certain contagious animal diseases transmissible by the relevant animal species has not been detected in the place of the animals origin. On the basis of the Rules on the contagious animal diseases, the trade of poultry and animal products and/or products of animal origin shall be possible only when the poultry originate from a herd that is officially free of salmonellosis. Movements of the sick and injured animals to the slaughterhouse shall be carried out on the basis of a veterinary permission only. The period of validity of a veterinary permission is 24 hours since issuing.

(d)2.8 Other relevant measures to ensure the traceability of animals

Estonia is linked to veterinary authorities of the EC and other Member States through TRACES. TRACES is in use in Estonia since 1st of May 2004. Estonia is also linked to ADNS since March 2002.

1. Identification of the programme

Disease	Zoonotic Salmonella
Species	Broiler flocks of Gallus gallus
Other Species	
Request period To	2011
Request period From	2011
1.1 Contact	
Contact Name	Ago Pärtel
Contact Phone	+372 605 17 10
Contact Fax	+372 621 14 41
Contact Email	ago.partel@vet.agri.ee

2. Historical data on the epidemiological evolution of the disease

Information on any routine certain zoonotic salmonella in broilers testing programmes in place: in accordance with the Infectious Animal Disease Control Act, the annual volume of salmonella tests in broilers is laid down by the State Program on Monitoring and Surveillance of Animal Infectious Diseases adopted by the General Director of the Veterinary and Food Board. Instructions for salmonella monitoring in broilers are laid down in the Ministry of Agriculture Regulation No 46, 29.03.2007, which also provides guidelines for the prevention and control of salmonella in broilers and for the handling of products originating from suspected or infected birds.

Protection of broilers from Salmonella infection is a part of active control programme - the National Infectious Animal Disease Control Programme. The results of the baseline study on the prevalence of salmonella in broiler flocks of Gallus gallus carried out in Estonia in 01.10.05-30.09.2006

In the year 2006 0,6 % of breeding birds were detected to be positive for Salmonella. Salmonella enteritidis was detected in all cases During the period 01.10.05-30.09.2006 in the frames of the Baseline study on the prevalence of Salmonella spp. in flocks of broilers Gallus gallus 769

sock swabs samples were collected from 154 flocks.
 Positive results were found in 8 flocks out of 154 flocks reared in 4 holdings.
 Salmonella Enteritidis was isolated in two holdings. Salmonella Enteritidis was detected in 14 sock swabs.
 All other samples collected and investigated turned to be negative.
 Salmonella serovars isolated: Salmonella Enteritidis (O: 1,9,12;gm;-). Prevalence of Salmonella spp. in holdings was 50% (2.4X100).

3. Description of the submitted programme

4. Measures of the submitted programme

4.1 Summary of measures under the programme

Duration of the programme :	2010 to 2011
First year :	
Control	
Testing	X
Slaughter and animals tested positive	X
Killing of animals tested positive	
Vaccination	
Treatment of animal products	
Disposal of products	
Monitoring or surveillance	
Other, please specify	no
Last year :	
Control/radication	
Testing	X
Slaughter of positive animals	X

Killing of animals tested positive

Extended slaughter or killing

Disposal of products

4.2 Designation of the central authority in charge of supervising and coordinating the departments responsible for implementing the programme

The Veterinary and Food Board, a governmental agency carrying out its tasks under the government of the Ministry of Agriculture, functions as a supervising body and sees to that the requirements stipulated by the legislation that governs veterinary, food safety, market regulation, animal welfare and farm animal breeding are followed and executes supervision over fulfilment of these requirements and applies enforcement by state pursuant to the procedures and in the amount prescribed by law. In addition to the mentioned acts, VFB adheres in its professional activities the Trade, Import And Export of Animals and Animal Products Act, the Import and Export Veterinary Control Act, the Animal Protection Act, the Farm Animals Breeding Act, the Organic Farming Act, the Medicinal Products Act, the Common Agricultural Policy Implementation Act, the Feeding Stuffs Act and other legislation laid down pursuant to these acts.

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

Salmonella programme in broiler flocks of *Gallus gallus* is active in all 15 counties.

4.4 Measures implemented under the programme

4.4.1 Measures and applicable legislation as regards the registration of holdings

All broiler holdings in Estonia are covered by the State Programme on Monitoring and Surveillance of Animal Infectious Diseases and therefore also by the programme and are registered in the Central register of Agriculture Animals (The Minister of Agriculture Regulation No 88, §1, 18.12.2002).

4.4.2 Measures and applicable legislation as regards the identification of animals

There is no legislation for marking of animals in the poultry sector.

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

All positive salmonella results must be reported immediately from the laboratories to the Estonian Veterinary and Food Board according to Regulation on requirements for control of Salmonella is approved by the degree of the Minister of Agriculture No 46, 29.03.2007.

4.4.4 Measures and applicable legislation as regards the measures in case of a positive result

In herds with broiler flocks, a requirement for the heat treatment of all poultry meat of hens and chickens testing positive for salmonella prior to slaughter has been introduced in 2008. In addition, the control programme requires thorough cleaning and disinfection following detection of salmonella in broiler flock.

We confirm that when suspected case of Salmonella has characteristic clinical signs of the disease or when investigations carried out during monitoring plan or self-control, the additional clinical examination, appropriate additional samples, epidemiological examination are carried out. Appropriate prevention measures are implemented to avoid the spreading of animal disease.

All above mentioned measures are served by an authorized veterinarian or official inspector.

We also confirm that confirmatory sampling is implemented by officials just in exceptional cases to exclude false positive results of own-check sampling.

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

Generally, all flocks are participating in the National Salmonella Control Programme on the same terms. Regulation on Prevention against Salmonella is approved by the degree of the Minister of Agriculture No 46, 29.03.2007.

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

While dispatched, animals must be accompanied with the veterinary certificate, where the basis of their state of health should be verified, certifying that the certain contagious animal diseases transmissible by the relevant animal species has not been detected in the place of the animals origin. On the basis of the Rules on the contagious animal diseases, the trade of poultry and animal products and/or products of animal origin, shall be possible only when the poultry originate from a herd that is officially free of salmonellosis. Movements of the sick and injured animals to the slaughterhouse shall be carried out on the basis of a veterinary permission only. The period of validity of a veterinary permission is 24 hours since issuing. Regulation on requirements for control of Salmonella is approved by the degree of the Minister of Agriculture No 46, 29.03.2007.

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

Vaccination with live Salmonella strains is not allowed according to the national legislation (Regulation on Prevention against Salmonella is approved by the degree of the Minister of Agriculture No 46, 29.03.2007). Estonia does not vaccinate laying flocks at the present, but in the case of sudden big outbreak, the choice of vaccine is based on epidemiological studies. The vaccines will be administered according to instructions and by authorized veterinarian or official inspector of VFB.

Antibiotics is not used as a specific method to control Salmonella except under clearly defined exceptional circumstances as laid down in Commission Regulation (EC) No 1177/2006 of 1 August 2006 implementing Regulation (EC) No 2160/2006 of the European Parliament and of the Council as regards requirements for the use of specific control methods in the framework of national programmes for the control of Salmonella in poultry. If antimicrobials are used for other purposes, sampling for Salmonella occur only after the withdrawal period.

Regulation on requirements for control of Salmonella is approved by the degree of the Minister of Agriculture No 46, 29.03.2007.

In Estonia there is not a central database on the use of vaccines administered in the frame of broiler programme, but all antimicrobials and vaccines are controlled by an authorized veterinarian or official inspector of VFB. There are no plans to set up a centralised database linked to the use of vaccines in the frame of the control programmes in the future?

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

At the moment there is no any compensation procedure laid down in the national legislation, but the Ministry of Agriculture is dealing with this item. It is planned to change the Animal Diseases Prevention Act and to put the compensation procedure in it in 2010. Regulation on requirements for control of Salmonella is approved by the degree of the Minister of Agriculture No 46, 29.03.2007.

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

Good farming practises and strict bio-security measures are applied at the holdings. These measures are checked at least once a year during the holding visit. The drafts of Community guides to good practice for hygiene referred to in Article 9 of Regulation (EC) No 852/2004 of the European Parliament and of the Council of 29 April 2004 on the hygiene of foodstuffs, are partly applied to the relevant poultry population.

Bio-security measures management and infrastructure in place in the flocks/holdings are established in the Animal Diseases Prevention Act §71 came in the force in 01.01.2010 (available on website <https://www.rigiteataja.ee/ert/act.jsp?id=13316646>). An authorized veterinarian or official inspector of VFB use checklists during verification of biosecurity measures when the own-check programme is supervised. Monitoring checklist on the control of animal health and animal protection is approved by the degree of the Director General of VFB No 2, 05.01.2010. Regulation on requirements for control of Salmonella is approved by the degree of the Minister of Agriculture No 46, 29.03.2007.

5. General description of the costs and benefits of the programme

To limit distribution of products contaminated with Salmonella present on the market and reduce the infection risk of consumers. Control and eradication of microorganisms of Salmonella genus in the whole food chain (especially – at the primary production). Keep under the control public and animal (poultry) health at the National and Community level. Bacteriological investigation of capro samples or boot swabs samples costs 18,86EUR

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

6.1 Evolution of the zoonotic salmonellosis

Year	Region	Type of flock	Total number of flocks of animals (a)	Total number of flocks of animals under the programme	Total number of animals under the programme (b)	Number of flocks checked (c)	Serotype	Number of positive flocks (c)	Number of flocks depopulated	Total number of animals slaughtered or destroyed	kg/number destroyed (d)	Quantity of eggs destroyed (d)	kg/number (eggs destroyed to egg product)	Quantity of eggs channelled to egg product
2,009	Estonia	Broiler flocks of Gallus gallus	414	9,304,980	414	0	salmonella enteritidis	0	0	0	number	0	number	0
2,008	Estonia	Broiler flocks of Gallus gallus	350	8,317,908	350	3	salmonella enteritidis	3	3	66,270	number	0	number	0
2,007	Estonia	Broiler flocks of Gallus gallus	162	1,401,896	62	6	salmonella enteritidis	6	6	30,000	number	0	number	0
2,006	Estonia	Broiler flocks of Gallus gallus	58	1,190,000	58	1	salmonella enteritidis	1	1	5,000	number	0	number	0
2,005	Estonia	Broiler flocks of Gallus gallus	60	1,500,000	60	1	salmonella enteritidis	1	5,000	1	number	0	number	0
		Sum:	944	21,714,784	944	21,714,784		11	5,010	101,271		0		0

6.2 Stratified data on surveillance and laboratory tests

6.2.1 Stratified data on surveillance and laboratory tests for year :

Year	Region	Test Type	Test Description	Number of samples tested	Number of positive samples
2009	Estonia	microbiological test	sock samples	2,070	0
2008	Estonia	microbiological test	sock samples	1,760	3
2007	Estonia	microbiological test	sock samples	1,228	16
2006	Estonia	microbiological test	sock samples	769	14
2005	Estonia	microbiological test	sock samples	750	13

6.2 Stratified data on surveillance and laboratory tests

6.2.1 Stratified data on surveillance and laboratory tests for year :

Year	Region	Test Type	Test Description	Number of samples tested	Number of positive samples
				6,577	36
			Sum:		

6.3 Data on infection for year :

Year	Region	Number of herds infected	Number of animals infected
2009	Estonia	0	0
2008	Estonia	3	66,270
2007	Estonia	6	30,000
2006	Estonia	1	5,000
2005	Estonia	1	5,000
	Sum:	11	106,270

6.4 Data on vaccination or treatment programmes for year :

Year	Region	Total number of herds	Total number of animals	Number of herds in vaccination or treatment programme	Number of animals vaccinated or treated	Number of doses of vaccine or treatment administered
2009	Estonia	414	9,304,980	0	0	0
2008	Estonia	350	8,317,908	0	0	0
2007	Estonia	62	1,401,896	0	0	0
2006	Estonia	58	1,190,000	0	0	0
2005	Estonia	60	1,500,000	0	0	0
	Sum:	944	21,714,784	0	0	0

7. Targets

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

7.1.1 Targets on diagnostic tests for year :

Year	Region	Type of the test (description)	Target population (categories and species targeted)	Type of sample	Objective	Number of planned tests
2011	Estonia	Bacteriology (ISO 6579:2002-method)	Broiler flocks of Gallus gallus	Faeces	surveillance	2,200
Sum:						2,200

7.1.2 Targets on testing of flocks for year :

Year	Region	Type of flock	Total number of flocks (a)	Total number of animals under the programme	Number of flocks checked (b)	Serotype	Number of positive flocks (c)	Number of flocks depopulated	Total number of animals slaughtered or destroyed	kg/number of eggs destroyed	Quantity of eggs channelled to egg product
2011	Estonia	Broiler flocks of Gallus gallus	420	10,000,000	420	salmonella enteritidis	1	1	10,000	number	0.0
Sum:			420	10,000,000	420		1	1	10,000	number	0.0

7.2 Targets on vaccination or treatment

7.2.1 Targets on vaccination or treatment for year :

Year	Region	Total number of herds in vaccination or treatment programme	Total number of animals expected to be vaccinated or treated	Number of herds or flocks expected to be vaccinated or treated	Number of animals expected to be vaccinated or treated	Number of doses of vaccine or treatment expected to be administered
<p>7.2.2 Targets on vaccination or treatment for year :</p>						

7.2 Targets on vaccination or treatment

7.2.1 Targets on vaccination or treatment for year :

Year	Region	Total number of herds in vaccination or treatment programme	Total number of animals in vaccination or treatment programme	Number of herds or flocks expected to be vaccinated or treated	Number of herds or flocks expected to be vaccinated or treated	Number of animals expected to be vaccinated or treated	Number of doses of vaccine or treatment expected to be administered
2011		0	0	0	0	0	0
	Sum:	0	0	0	0	0	0

8. Detailed analysis of the cost of the programme for year :

Year	Category	Specification	Cost related to	Number of units	Unitary cost	Total amount in EURO	Community funding requested
	1. Testing	bacteriological tests	Cost of analysis	2,200	19	41,492	yes
	1. Testing	serotyping of relevant isolates tests	Cost of analysis	10	66	658	yes
	2. Vaccination or treatment	Vaccination or treatment of animal products	Distribution costs	0	0	0	no
	3. Slaughter and destruction (without any salaries)	Compensation of animals	Compensation of animals	0	0	0	no
2011	4. Cleaning and disinfection	Cleaning and disinfection	Cleaning and disinfection	0	0	0	no
	5. Salaries (staff contracted for the programme only)	Salaries	Salaries	0	0	0	no
	6. Consumables and specific equipment	Consumables and specific equipment	Consumables and specific equipment	0	0	0	no
	7. Other costs	no	no	0	0	0	no
						42,150	
			Total	2,210		42,150	

Country Geographical English Name	Estonia
Submission number	1283321274889-384
Submission date	01/09/2010 08:07:55

(a) State the aim of the program

Estonia target referred to in Article 1(1) of Regulation (EC) No 1168/2006 for the reduction of Salmonella enteritidis and Salmonella typhimurium in laying flocks of Gallus gallus (Community target) is as follows:
 a reduction of the maximum percentage to 2 % or less by 31 December 2011.
 Due to the fact that the number of flocks of laying hens increased since the programme was submitted to the European Commission and Salmonella enteritidis and Salmonella typhimurium prevalence detected during the baseline survey was 8 %, the target for Estonia should be the reduction of S. enteritidis and S. typhimurium minimum 10 %.

(b) Animal population and phases of production which sampling cover

	Laying flocks of Gallus gallus
Gallus Slaughter Pigs:	
Gallus Hens Pullets	X
Partab Gallus Hens Laying	X
Gallus Hens Day Old	X
Gallus Four Week	
Gallus During Laying	
Partab Gallus Day Old	
Gallus Breeding Pigs	
Gallus Before Laying	

(c) Demonstrate the evidence...

The submitted programme on Salmonella reduction in flocks of laying hens of Gallus gallus has been developed 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 prevalence of certain salmonella serotypes and amending Regulation (EC) No 1003/2005. The results of the baseline study on the prevalence of salmonella in flocks of laying hens of Gallus gallus carried out in Estonia in 01.10.2004-30.09.2005 showed the prevalence of S. Enteritidis 8% and prevalence of Typhimurium 0%.

In 01.01-31.12.2009 S. Enteritidis and S. Typhimurium prevalence was 0 %.

(d) Specification of following points :

(d)1. General

(d)1.1 A short summary referring to the occurrence

The submitted programme on Salmonella reduction in flocks of laying hens of Gallus gallus has been developed 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 prevalence of certain salmonella serotypes and amending Regulation (EC) No 1003/2005. The results of the baseline study on the prevalence of salmonella in flocks of laying hens of Gallus gallus carried out in Estonia in 01.10.2004-30.09.2005 showed the prevalence of S. Enteritidis 8% and prevalence of Typhimurium 0%.

In 01.01-31.12.2008 S. Enteritidis prevalence was 1,9% and prevalence of S. Typhimurium 0 %.

In 01.01-31.12.2009 S. Enteritidis and S. Typhimurium prevalence was 0 %.

In 01.01-30.09.2010 the prevalence of S. Enteritidis and S. Typhimurium was 0%.

(d)1.2 A short summary referring to the occurrence of the salmonella

The VFB Animal Health Office organises and carries out infectious animal disease control and applies measures for protecting humans against zoonotic diseases; it also carries out supervision over the registration and identification of animals and the veterinary control of the domestic movement of animals; it protects the environment against hazards concurring with animal husbandry and infectious animal diseases; it controls the use of medicines and medicated feedstuffs by veterinarians and animal keepers who are involved in the production of products of animal origin; it organises the work of the national veterinary service and coordinates and carries out supervision over veterinary assistance, treatment and prophylactics for animals; it is involved in the approval and registration of livestock buildings and facilities, advises in the preparation of construction projects, and it participates in the preparation and carrying out of national or international projects for animal health.

Supervision over animal health is based on the Veterinary Activities Organisation Act, which provides the bases for organising veterinary activities. Veterinary activities are a system of measures which are applied to protect animal and human health and to ensure the welfare of animals which includes activities in the areas of animal health, animal product hygiene and animal protection.

An important role in the field of animal health is played by the Infectious Animal Disease Control Act, which includes measures for the prevention and control of infectious animal diseases which are both general (e.g. obligations regarding the identification and registration of animals) as well as specific (e.g. codes of conduct for outbreaks). In the event of the requirement for the prevention of an infectious animal disease, or a suspicion that one might be present, or in the event of an actual outbreak, close cooperation is required with the appropriate Veterinary and Food Laboratory, which carries out the necessary laboratory examinations.

In the event of a suspicion or outbreak of an infectious animal disease the infectious animal disease control rules established by the Minister of Agriculture are taken as a basis for any action that is taken. The prevention of an infectious animal disease and the elimination of an outbreak site takes place pursuant to the infectious animal disease control rules. The infectious animal disease control rules are obligatory, and are to be rigidly followed by all keepers of animals, handlers of animal products, persons present within the area of the outbreak, supervisory officials, authorised veterinarians, veterinarians holding an activity licence, and veterinary laboratories, as well as other individuals who are associated with the field of infectious animal disease control due to their working duties.

(d)1.3 A short summary referring to the occurrence of the salmonella

All samples collected in the frames of this study were investigated in central laboratory of Veterinary and Food Laboratory situated in Tartu (Kreutzwaldi 30, Tartu 51006, phone 07 386 100, fax 07 386 102). For further serotyping and phage typing, a proportion of the typable strains and of the non-typable isolates were sent to the CRL Microbiological Laboratory for Health Protection in Bilthoven The Netherlands. CRL confirmed our results. For epidemiological purposes, we tested also anti-microbial susceptibility of serotypes found in our flocks. Interpretive breakpoints were based on NCCLS criteria.

(d)1.4 Methods in examination

Sampling procedures were performed by fully state operated veterinary service. Activities were co-ordinated by Veterinary and Food Board (VFB). VFB is having the central competence on veterinary and food control matters. Within the area of government of VFB there are 15 local veterinary authorities (Veterinary Centres, one in each county). Samples were collected by veterinary officials of local veterinary centre. Above-mentioned officials were also responsible for filling in accompanying document and sampling report, informing the laboratory about arrival of samples, packaging of them and sending into laboratory.

The method recommended by the Community Reference Laboratory for Salmonella in Bilthoven, the Netherlands, is used; the method is a modification of ISO 6579 (2002), where a semi solid medium (MSRV) is used as the single selective enrichment medium. The semi-solid medium should be incubated at 41.5 +/- 1 °C for 2x (24+/-3) hours. At least one isolate from each positive sample shall be typed in the National Reference Laboratory for Salmonella. The National Reference Laboratory for Salmonella shall follow the Kaufmann-White scheme. At least the strains isolated from samples collected by the competent authority, shall be stored for future phage typing or antimicrobial susceptibility testing, using the normal methods for culture collection, which must ensure integrity of the strains for a minimum of two years.

(d)1.5 A short summary referring to the occurrence of the salmonellosis

Official control sampling at flock level is taken:

- in one flock per year per holding comprising at least 50 birds

Surveillance of salmonella in feed, animals and food is carried out for many years in Estonia. In addition to surveillance systems, monitoring programme is conducted, which provides additional epidemiological information:

Feed samples:

- 1) On the enterprises handling feedstuffs the final products shall be studied bacteriologically under the framework of monitoring and self-inspection.
- 2) From imported feedstuffs official samples shall be taken in the course of random inspection during their storing.

Official control sampling at flock level is taken:

- in one flock per year per holding comprising at least 50 birds

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Feed samples:

- 1) On the enterprises handling feedstuffs the final products shall be studied bacteriologically under the framework of monitoring and self-inspection.
- 2) From imported feedstuffs official samples shall be taken in the course of random inspection during their storing.

(d)1.6 Measures

All flocks of birds (young birds, laying flock), where *S. typhimurium* or *S. enteritidis* has been diagnosed shall be sent immediately for slaughter pursuant to the requirements of Minister of Agriculture No 46, 29.03.2007.a.

The usual time-span between the time as flock is declared as 'suspected flock' and when mentioned flock is declared as 'infected', depends on the time of confirmatory tests carried out by laboratory (usually 24 to 48 hours). According to provisions of paragraph 3.1. of Annex of Commission Regulation (EC) No 1168/2006 and CR No 646/2007/EC paragraph 3. 1., the examination of the samples is carried out within 48h following receipt.

Own-check sample from a flock is taken by the vet of the holding in accordance with the sampling of Commission Regulation (EC) No 1003/2005 and Commission Regulation (EC) No 1168/2006. If examination of samples, which are collected during monitoring plan, own-check or during other studies, give positive results of Salmonella or a zoonotic disease, the diagnose is declared by the official veterinarian based on the results of confirmatory examination and additional samples.

Vaccination with live Salmonella strains is not allowed according to the national legislation (Regulation on Prevention against Salmonella is approved by the degree of the Minister of Agriculture No 46, 29.03.2007).

Vaccination of layers hens flocks with inactivated Salmonella strains is allowed only with the permission of the Veterinary and Food Board.

Antibiotics is not used as a specific method to control Salmonella except under clearly defined exceptional circumstances as laid down in Commission Regulation (EC) No 1177/2006 of 1 August 2006 implementing Regulation (EC) No 2160/2006 of the European Parliament and of the Council as regards requirements for the use of specific control methods in the framework of national programmes for the control of Salmonella in poultry. If antimicrobials are used for other purposes, sampling for Salmonella occur only after the withdrawal period.

Eggs originating from flocks with unknown health status, that are suspected of being infected or from infected flocks may be used for human consumption only if treated in a manner that

guarantees the elimination of all salmonella serotypes with public health significance in accordance with Community legislation on food hygiene. Estonia confirms that in the frame of the Salmonella control programme in laying flocks of Gallus gallus the provisions of paragraph 1 and 2 (frequency of sampling) and 4 (results and reporting) of Annex of CR (EC) No 1168/2006 will be implemented in the year of 2011.

(d)1.7 A short summary referring to the occurrence of the salmonellos

In accordance with the Infectious Animal Disease Control Act, the annual volume of salmonella tests in laying hens of Gallus gallus is laid down by the State Program on Monitoring and Surveillance of Animal Infectious Diseases adopted by the General Director of the Veterinary and Food Board. Instructions for salmonella monitoring in laying hens of Gallus gallus are laid down in the Ministry of Agriculture Regulation No 46, 29.03.2007, which also provides guidelines for the prevention and control of salmonella in laying hens of Gallus gallus and for the handling of products originating from suspected or infected birds.

(d)1.8 Financial assistance

Compensation is given to the owner of the flock if the laying hens of Gallus gallus are slaughtered or destroyed during the outbreak of Salmonella. Destroyed eggs are not compensated. The scale of the compensation is given in Animal Diseases Prevention Act.

(d)2. Food and business covered by the programme

(d)2.1 Structure of the production

The programme will be implemented to all territory of Estonia and covers all laying hens in Estonia. In Estonia are 7 big holdings (1000 laying hens or more present) and 11 holdings having more, then 50 laying hens. The sampling frame was covered primarily holdings with at least 50 laying hens. Total number of herds was 48.

(d)2.2 Structure of the production of feed

The Feed Office carries out the following tasks:

- establishing, updating and ensuring the compliant functioning of the control system for feedings
- a risk assessment and preparation of the supervision plan;
- assessing the training needs of the inspectors and the planning of training as well as carrying out or organising such training
- developing and updating inspection guidelines and supervision documents (manual);
- assessing the productivity of supervision and developing and implementing corrective measures
- establishing, updating and ensuring the compliant functioning of the control system for feedings
- a risk assessment and preparation of the supervision plan

(d)2.3 Relevant guidelines

(d)2.3.1 Hygiene management at farms

Infectious Animal Disease Control Act § 71 Biosecurity measures:

Animal keeper will implement the following biosecurity measures to prevent:

- 1) the organization of the movement of persons and vehicles;
- 2) livestock buildings and installations, and the animals specified in the occupation of a person unconnected with access to limitation;
- 3) livestock buildings and installations, and the animals specified in the occupation of a foreign country to restrict access to the person arriving earlier than 48 hours after its receipt by the person;
- 4) animals entering the herd kept separate from other animals on the basis of the status field of animal diseases;
- 5) isolated from healthy animals are ill;
- 6) feed, litter and other potential infection-bearing material handling and organizing the material, regular cleaning and disinfection;
- 7) a regular rodent and insect control;
- 8) livestock buildings and facilities and the limited area of the animals wild and domestic animals to prevent escape, and other appropriate measures necessary to prevent the spread of infectious animal diseases.

(d)2.3.2 Relevant guidelines

Good farming practises and strict bio-security measures are applied at the holdings. These measures are checked at least once a year during the holding visit. The drafts of Community guides to good practice for hygiene referred to in Article 9 of Regulation (EC) No 853/2004 of the European Parliament and of the Council of 29 April 2004 on the hygiene of foodstuffs, are partly applied to the relevant poultry population.

(d)2.3.3 Hygiene in transporting animals to and from farms

All poultry shipments must be authorized to exercise or licensed carrier.

Truck wheels and be fitted in the entrance before entering the house of an area and exit from fogging disinfection, if the vehicle is visibly contaminated with manure, they must be thoroughly cleaned before entering the farm and disinfected. Truck drivers must be properly trained and informed so that they understand the importance of personal hygiene and to know how an infection of the hands, clothing and equipment through the spreads. Ideally, they should stay in the holding time, wear protective clothing provided by the farm. Relevant data sheets and other official documents must be fully completed and accompanied by a chicken to their destination.

(d)2.4 Routine veterinary supervision of farms

Supervision of animal health is based on the Veterinary Organisation Act. The official veterinary officer inspects holdings regularly to check compliance with programme. Authorised veterinarians inspect 100 % of laying hens flocks of Gallus gallus each year. As part of the annual animal health inspection carried out in accordance with the Farm Inspection Report. Authorised veterinarians must take random samples at the place of destination. The type and number of samples corresponds with the previous requirements. During than laying period the samples mentioned for routine screening are to be taken by an official veterinary officer from young birds at the age of 22-26 weeks and 8 weeks before slaughter.

(d)2.5 Registration of farms

All laying hens holdings in Estonia are covered by the State Programme on Monitoring and Surveillance of Animal Infectious Diseases and therefore also by the programme. Since 2000, all holdings with laying hens in Estonia are registered in the Central Register of Agricultural Animals.

(d)2.6 Record keeping at farm

Each keeper of birds is required to keep an up-to-date register of poultry kept in the farm in manual or computerised form.

Animal keeper is required to keep record of medical products and medicated feedings/stuffs administered to the farm animals. The records shall reflect:

1. identification date of the animal or group of animal
2. address of farm
3. person who is responsible for activity on the farm

4. type and range of activities on the farm
5. situation plan of the farm
6. technology and system of rearing
7. name and address of veterinarian who is responsible for veterinary care
8. contact on processing of animal by-products
9. plan of Salmonella infections
10. name and administered quantity of the medicinal product or medicated feedingsstuff used
11. data on the issuer of the medicinal product: the veterinarian or pharmacy
12. evidence of controls of health and mortality
13. evidence of visitors
14. plan of special training of personal
15. plan of controls of clean of water
16. plan of controls of feedstuff

(d)2.7 Documents to accompany animals when dispatched

While dispatched, animals must be accompanied with the veterinary certificate, where the basis of their state of health should be verified, certifying that the certain contagious animal diseases transmissible by the relevant animal species has not been detected in the place of the animals origin. On the basis of the Rules on the contagious animal diseases, the trade of poultry and animal products and/or products of animal origin shall be possible only when the poultry originate from a herd that is officially free of salmonellosis. Movements of the sick and injured animals to the slaughterhouse shall be carried out on the basis of a veterinary permission only. The period of validity of a veterinary permission is 24 hours since issuing.

(d)2.8 Other relevant measures to ensure the traceability of animals

Estonia is linked to veterinary authorities of the EC and other Member States through TRACES. TRACES is in use in Estonia since 1st of May 2004. Estonia is also linked to ADINS since March 2002.

1. Identification of the programme

Disease	Zoonotic Salmonella
Species	Laying flocks of Gallus gallus
Other Species	
Requestperiod To	2011
Requestperiod From	2011
1.1 Contact	
Contact Name	Ago Pärtel
Contact Phone	+372 605 17 10
Contact Fax	+372 621 14 41

Contact Email

ago.paniel@vet.agri.ee

2. Historical data on the epidemiological evolution of the disease

Information on any routine certain zoonotic salmonella in breeding poultry testing programmes in place:

In accordance with the Infectious Animal Disease Control Act, the annual volume of salmonella tests in laying hens of Gallus gallus is laid down by the State Program on Monitoring and Surveillance of Animal Infectious Diseases adopted by the General Director of the Veterinary and Food Board. Instructions for salmonella monitoring in laying hens of Gallus gallus are laid down in the Ministry of Agriculture Regulation No 46, 29.03.2007, which also provides guidelines for the prevention and control of salmonella in laying hens of Gallus gallus and for the handling of products originating from suspected or infected birds.

I- Protection of laying hens of Gallus gallus from Salmonella infection is a part of active control programme - the National Infectious Animal Disease Control Programme.

The structure of laying hens of Gallus gallus:

In Estonia there are 48 large flocks with laying hens. Sampling will be performed in all holdings with more than 50 hens.

Epidemiological situation in 2005-2009.a.

The results of the baseline study on the prevalence of salmonella in laying flocks of Gallus gallus carried out in Estonia in 01.10.2004-30.09.2005.

Positive results were found in 2 flocks out of 35 flocks reared in 11 holdings.

Salmonella enteritidis was detected in dusty material and naturally mixed faeces samples in one holding in Lääne-Virumaa county. Salmonella Isangi was detected in dusty material in another holding situated in the same county. All other samples collected and investigated turned to be negative.

Salmonella serovars isolated: S. Isangi, S. Enteritidis.

Prevalence of Salmonella spp. in holdings: 16%.

Number and prevalence of Salmonella spp. positive holdings by size category

Prevalence of S. Enteritidis and Typhimurium: prevalence of S. Enteritidis is 8%, prevalence of Typhimurium is 0%.

Data about additional sampling carried out in the holdings under the study in the period from 01.10.04 to 30.09.2005 is available in the following table. Most of these samples were investigated in the frames of National Infectious Animal Disease Control Programme, some of them in the frames of self-control of the enterprise.

In 2006 25 flocks of laying hens were analysed. Flock was found to be positive for Salmonella enteritidis.

In 01.01-31.12.2009 the prevalence of S. Enteritidis and S. Typhimurium was 0 %.

In 01.01-30.08.2010 the prevalence of S. Enteritidis and S. Typhimurium was 0%

3. Description of the submitted programme

4. Measures of the submitted programme

4.1 Summary of measures under the programme

Duration of the programme :	2010 to 2013
First year :	
Control	
Testing	X
Slaughter and animals tested positive	
Killing of animals tested positive	X
Vaccination	
Treatment of animal products	
Disposal of products	X
Monitoring or surveillance	
Other, please specify	no

Last year :

Control/eradication	
Testing	X
Slaughter of positive animals	
Killing of animals tested positive	X
Extended slaughter or killing	
Disposal of products	X

4.2 Designation of the central authority in charge of supervising and coordinating the departments responsible for implementing the programme

The Veterinary and Food Board, a governmental agency carrying out its tasks under the government of the Ministry of Agriculture, functions as a supervising body and sees to that the requirements stipulated by the legislation that governs veterinary, food safety, market regulation, animal welfare and farm animal breeding are followed and executes supervision over fulfilment of these requirements and applies enforcement by state pursuant to the procedures and in the amount prescribed by law. In addition to the mentioned acts, VFB adheres in its professional activities the Trade, Import And Export of Animals and Animal Products Act, the Import and Export Veterinary Control Act, the Animal Protection Act, the Farm Animals Breeding Act, the Organic Farming Act, the Medicinal Products Act, the Common Agricultural Policy Implementation Act, the Feeding Stuffs Act and other legislation laid down pursuant to these acts. The broader objective of VFB is to ensure the consumers the production of safe, healthy and quality raw materials for food and food, to prevent and eradicate infectious animal diseases, to

protect people from diseases common to both people and animals and diseases that are spread by animals, but at the same time to protect animals from human activity or inactivity endangering their health and welfare, to ensure productivity of farm animals and increase their genetic value, and to preserve genetic pool and profitability of keeping animals.
The tasks of the Veterinary and Food Board are to:

- plan and organise the prevention and control of infectious animal diseases;
 - protect humans from diseases common to both people and animals;
 - protect animals from factors endangering their welfare and demand that the animals are kept and treated as appropriate;
 - grant approval to enterprises involved in handling foodstuffs and persons who determine the quality classes of carcasses;
 - check the safety of raw material for food and food when raw material for food and food are produced during the whole food chain;
 - execute supervision over organic processing of raw material for food and food;
 - organise laboratory analysis in order to diagnose infectious animal diseases and assess the properties of food, feedingsstuffs, hay, straw, medicated feedingsstuffs and drinking water;
 - protect the environment from harmful factors that are the result of keeping animals or infectious animal diseases;
 - issue activity licences for the provision of veterinary services;
 - control the use of medicinal products and medicated feedingsstuffs by veterinarians and animal-keepers manufacturing animal products;
 - check animals, raw material for food and food, including checks of products of animal origin and agricultural products carrying markings that refer to organic farming, upon their importation to the Republic of Estonia;
 - arrange the grant of approval to persons involved in animal breeding;
 - execute supervision over animal breeding;
 - organise preservation of genetic resources of farm animals;
 - organise control procedures necessary for the implementation market regulation measures on milk and meat market.
- In performing its tasks, VFB uses the services of the Veterinary and Food Laboratory, laboratories authorised in accordance with the Veterinary Activities Organisation Act, laboratories that hold an activity licence for a veterinary laboratory and laboratories authorised in accordance with the Food Act.

The organisation of the Veterinary and Food Board consists of the Central Office and 15 local offices – Veterinary Centres in the counties.

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

Salmonella programme in laying hens of Gallus gallus is active in all 15 counties.

4.4 Measures implemented under the programme

4.4.1 Measures and applicable legislation as regards the registration of holdings

All laying hens holdings in Estonia are covered by the State Programme on Monitoring and Surveillance of Animal Infectious Diseases and therefore also by the programme and are registered in the Central register of Agriculture Animals (The Minister of Agriculture Regulation No 88, §1, 18.12.2002).

4.4.2 Measures and applicable legislation as regards the identification of animals

There is no legislation for marking of animals in the poultry sector.

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

All positive salmonella results must be reported immediately from the laboratories to the Estonian Veterinary and Food Board according to Regulation on requirements for control of Salmonella is approved by the degree of the Minister of Agriculture No 46, 29.03.2007.

4.4.4 Measures and applicable legislation as regards the measures in case of a positive result

Regulation of the Minister of Agriculture No 46 from 29.03.2007 "Prevention against salmonellosis" lays down rules for Salmonella Monitoring Programme in Estonia and measures to ensure that proper and effective measures are taken to control Salmonella at all relevant stages of production. SMPF started in 2002 and is approved annually by the Director General of Veterinary

and Food Board. In addition to the monitoring programme samples are taken in the frames of official surveillance and by the industry in accordance with their self-control programmes. According to the abovementioned Regulation in case of detecting Salmonella the supervision official should find out the infection sources and their spreading ways, remove or block them. It is prohibited to take birds to a flock doubted to be infected or actually infected or to take them out, except for slaughter. All poultry flocks (young birds, breeding flock, productive flock), where Salmonella spp. has been diagnosed should be sent immediately for slaughter or destroyed in accordance with Regulation No 1774/2002. After the flock infected by salmonellosis has been sent to the slaughterhouse, the carriage boxes, transport boxes and transport means shall be cleaned, washed and disinfected. The litter of flocks infected by salmonellosis shall be composted away from the livestock buildings. Enclosures and inventory of poultry farm shall be cleaned, washed and disinfected after the litter of birds has been taken out and tested then bacteriologically for Salmonella. The dead and slaughtered birds shall be made harmless or utilised. Poultry buildings should be checked on the efficiency of deratisation, disinfection and on protection against wild birds. Empty period is required for 21 day. Disposal of manure is restricted. Feeding stuffs should be destroyed or heat-treated. Taking into account the particulars of each case, the Veterinary and Food Board has the right to allow the use of alternative methods like treatment with antibiotics instead slaughter of breeding flock. Table eggs from flocks infected or suspected of being infected by salmonella are allowed to be used for preparation of pasteurized egg products or shall be destroyed. Hatching eggs should be destroyed. When salmonella is detected in samples taken at packaging centres, contaminated eggs can be used for the production of pasteurized products. Contaminated food or raw material will be withdrawn from the market or handling, when salmonella is detected in food or raw material for food already present on the market.

In addition to the requirements laid down in the Regulation of Minister of Agriculture No 46 the requirements laid down in the Commission Regulation 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 are taken into account as specific control methods for the control of Salmonella in the frames of the national Salmonella control programme. We confirm that when suspected case of Salmonella has characteristic clinical signs of the disease or when investigations carried out during monitoring plan or self-control, the additional clinical examination, appropriate additional samples, epidemiological examination are carried out. Appropriate prevention measures are implemented to avoid the spreading of animal disease. All above mentioned measures are served by an authorized veterinarian or official inspector.

We also confirm that confirmatory sampling is implemented by an authorized veterinarian or official inspector just in exceptional cases to exclude false positive results of own-check sampling.

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

Generally, all flocks are participating in the National Salmonella Control Programme according to Regulation on requirements for control of Salmonella is approved by the degree of the Minister of Agriculture No 46, §32, 29.03.2007.

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

While dispatched, animals must be accompanied with the veterinary certificate, where the basis of their state of health should be verified, certifying that the certain contagious animal diseases transmissible by the relevant animal species has not been detected in the place of the animals origin. On the basis of the Rules on the contagious animal diseases, the trade of poultry and animal products and/or products of animal origin shall be possible only when the poultry originate from a herd that is officially free of salmonellosis. Movements of the sick and injured animals to the slaughterhouse shall be carried out on the basis of a veterinary permission only. The period of validity of a veterinary permission is 24 hours since issuing. Regulation on requirements for control of Salmonella is approved by the degree of the Minister of Agriculture No 46, 29.03.2007.

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

Vaccination with live Salmonella strains is not allowed according to the national legislation (Regulation on Prevention against Salmonella is approved by the degree of the Minister of Agriculture No 46, 29.03.2007).

Vaccination of layers hens flocks with inactivated Salmonella strains is allowed only with the permission of the Veterinary and Food Board. Estonia does not vaccinate laying flocks at the present, but in the case of sudden big outbreak, the choice of vaccine is based on epidemiological studies. The vaccines will be administered according to instructions and by authorized veterinarian or official inspector of VFB.

Antibiotics is not used as a specific method to control Salmonella except under clearly defined exceptional circumstances as laid down in Commission Regulation (EC) No 1177/2006 of 1 August 2006 implementing Regulation (EC) No 2160/2003 of the European Parliament and of the Council as regards requirements for the use of specific control methods in the framework of national programmes for the control of Salmonella in poultry. If antimicrobials are used for other purposes, sampling for Salmonella occur only after the withdrawal period.

In Estonia there is not a central database on the use of vaccines administered in the frame of laying hen programme, but all antimicrobials and vaccines are controlled by an authorized veterinarian or official inspector of VFB. There are no plans to set up a centralised database linked to the use of vaccines in the frame of the control programmes in the future.

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

The owners of slaughtered and killed animals are compensated according to the relevant European Union legislation and Infectious Animal Disease Control Act §55 Costs relating to prevention and control of infectious animal diseases and appointed in accordance with the Rural Development and Agricultural Market Regulation Act, § 3 paragraph 3 of the requirements for infectious animal disease losses incurred in the following: the value of slaughtered animal.

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

Good farming practises and strict bio-security measures are applied at the holdings. These measures are checked at least once a year during the holding visit. The drafts of Community guides to good practice for hygiene referred to in Article 9 of Regulation (EC) No 853/2004 of the European Parliament and of the Council of 29 April 2004 on the hygiene of foodstuffs, are partly applied to the relevant poultry population.

Bio-security measures management and infrastructure in place in the flocks/holdings are established in the Animal Diseases Prevention Act §71 came in the force in 01.01.2010 (available on website <https://www.rigiteataja.ee/ant/act.jsp?id=13316546>) An authorized veterinarian or official inspector of VFB use checklists during verification of biosecurity measures when the own-check programme is supervised. Monitoring checklist on the control of animal health and animal protection is approved by the degree of the Director General of VFB No 2, 05.01.2010.

5. General description of the costs and benefits of the programme

To limit distribution of products contaminated with Salmonella present on the market and reduce the infection risk of consumers. Control and eradication of microorganisms of Salmonella genus in the whole food chain (especially – at the primary production). Keep under the control public and animal (poultry) health at the National and Community level.

The total costs of the programme on laying hens of Gallus gallus in 2010– 26189 Euro
Bacteriological investigation of copro samples or boot swabs samples costs 18,86EUR

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

6.1 Evolution of the zoonotic salmonellosis

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

6.1 Evolution of the zoonotic salmonellosis

Year	Region	Type of flock	Total number of flocks of animals (a)	Total number of animals under the programme	Number of flocks checked (b)	Serotype	Number of positive flocks (c)	Number of flocks depopulated	Total number of animals slaughtered or destroyed	kg/number of eggs destroyed (d)	kg/number of eggs destroyed to egg product
2,009	Estonia	Laying flocks of Gallus gallus	48	778,000	48	salmonella enteritidis or salmonella typhimurium	0	0	0	number	0
2,008	Estonia	Laying flocks of Gallus gallus	52	776,006	48	salmonella enteritidis	1	1	5,000	number	0
2,007	Estonia	Laying flocks of Gallus gallus	61	954,500	61	salmonella enteritidis	1	1	500	number	0
2,006	Estonia	Laying flocks of Gallus gallus	60	829,878	60	salmonella enteritidis	1	1	5,000	number	0
2,005	Estonia	Laying flocks of Gallus gallus	60	880,230	60	salmonella enteritidis or salmonella typhimurium	2	2	10,208	number	0
Sum:			281	4,218,614	277		5	5	20,708	0	0

6.2 Stratified data on surveillance and laboratory tests

6.2.1 Stratified data on surveillance and laboratory tests for year :

Year	Region	Test Type	Test Description	Number of samples tested	Number of positive samples
2009	Estonia	microbiological test	faecal samples, meconium, chickens, dust	204	0
2008	Estonia	microbiological test	faecal samples, meconium, chickens, dust	432	1

6.2 Stratified data on surveillance and laboratory tests

6.2.1 Stratified data on surveillance and laboratory tests for year :

Year	Region	Test Type	Test Description	Number of samples tested	Number of positive samples
2007	Estonia	microbiological test	faecal samples, meconium, chickens, dust	732	1
2006	Estonia	microbiological test	faecal samples, meconium, chickens, dust	989	1
2005	Estonia	microbiological test	faecal samples, meconium, chickens, dust	1,011	2
			Sum:	3,368	5

6.3 Data on infection for year :

Year	Region	Number of herds infected	Number of animals infected
2009	Estonia	0	0
2008	Estonia	1	5,000
2007	Estonia	1	500
2006	Estonia	1	5,000
2005	Estonia	2	10,208
	Sum:	5	20,708

6.4 Data on vaccination or treatment programmes for year :

Year	Region	Total number of herds	Total number of animals	Number of herds in vaccination or treatment programme	Number of animals vaccinated or treated	Number of doses of vaccine or treatment administered
2009	Estonia	48	778,000	0	0	0

6.4 Data on vaccination or treatment programmes for year :

Year	Region	Total number of herds	Total number of animals	Number of herds in vaccination or treatment programme	Number of herds vaccinated or treated	Number of animals vaccinated or treated	Number of doses of vaccine or treatment administered
2008	Estonia	52	776,006	0	0	0	0
2007	Estonia	61	954,500	0	0	0	0
2006	Estonia	60	829,878	0	0	0	0
2005	Estonia	60	880,230	0	0	0	0
Sum:		281	4,218,614	0	0	0	0

7. Targets

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

7.1.1 Targets on diagnostic tests for year :

Year	Region	Type of the test (description)	Target population (categories and species targeted)	Type of sample	Objective	Number of planned tests
2,011	Estonia	faecal samples, meconium, chickens, dust	Laying flocks of Gallus gallus	Faeces	surveillance	564
Sum:						564

7.1.2 Targets on testing of flocks for year :

Year	Region	Type of flock	Total number of flocks (a)	Total number of animals	Total number of flocks/he under the programme	Number of flocks checked (b)	Serotype	Number of positive flocks (c)	Number of flocks depopulated	Total number of animals slaughtered or destroyed	kg/number of eggs destroyed (y)	Quantity of eggs channelled to egg product (z)
Sum:												

7.1.2 Targets on testing of flocks for year :

Year	Region	Type of flock	Total number of flocks (a)	Total number of animals under the programme	Number of flocks checked (b)	Serotype	Number of positive flocks (c)	Number of flocks depopulated	Total number of animals slaughtered or destroyed	kg/number of eggs destroyed	Quantity of eggs destroyed	kg/number of eggs channelled to egg product	Quantity of eggs channelled to egg product
2011	Estonia	Laying flocks of Gallus gallus	48	48	48	salmonella enteritidis	1	5,000	5,000	number	10,000	number	10,000.0
			Sum:	48	48		Sum:	5,000	5,000	Sum:	10,000	Sum:	10,000.0

7.2 Targets on vaccination or treatment

7.2.1 Targets on vaccination or treatment for year :

Year	Region	Total number of herds in vaccination or treatment programme	Total number of animals in vaccination or treatment programme	Number of herds or flocks expected to be vaccinated or treated	Number of animals expected to be vaccinated or treated	Number of doses of vaccine or treatment expected to be administered
2011		0	0	0	0	0
		Sum:	0	0	0	0

8. Detailed analysis of the cost of the programme for year :

Year	Category	Specification	Cost related to	Number of units	Unitary cost	Total amount in EURO	Community funding requested
2011	1. Testing	Number of bacteriological tests	Cost of analysis	564	19	10,637	yes
	2. Vaccination or treatment	vaccination	Purchase of vaccine/treatment of animal products	0	0	0	no
	3. Slaughter and destruction (without any salaries)	Compensation of animals	Compensation of animals	5,000	2	9,500	yes

8. Detailed analysis of the cost of the programme for year :

Year	Category	Specification	Cost related to	Number of units	Unitary cost	Total amount in EURO	Community funding requested
2011	4. Cleaning and disinfection	Cleaning and disinfection	Cleaning and disinfection	0	0	0	no
	5. Salaries (staff contracted for the programme only)	Slaughter and destruction	Salaries	5,000	2	7,500	no
	6. Consumables and specific equipment	Consumables and specific equipment	Consumables and specific equipment	0	0	0	no
	7. Other costs	no		0	0	0	no
						27,637	
				Total	10,564	27,637	