



EUROPEAN COMMISSION  
HEALTH & CONSUMERS DIRECTORATE-GENERAL  
Directorate F - Food and Veterinary Office

DG(SANCO)/ 2008-7628 - MR - FINAL

FINAL REPORT OF A MISSION  
CARRIED OUT IN  
THE CZECH REPUBLIC  
FROM 26 MAY TO 04 JUNE 2008  
IN ORDER TO  
EVALUATE THE SYSTEMS IN PLACE TO CONTROL THE SALMONELLA RISK  
IN THE TABLE EGG SECTOR

*Please note that factual errors in the draft report have been corrected. Clarifications provided by the Competent Authority are included in endnotes.*

### ***Executive Summary***

*This report describes the outcome of an inspection mission carried out by the Food and Veterinary Office (FVO) in the Czech Republic(CZ), from 26 May to 4 June 2008. The main objective of the mission was to investigate the measures taken by the Competent Authority (CA) in order to prevent possible outbreaks of Salmonella food poisoning due to the consumption of table eggs or foodstuffs prepared from table eggs.*

*The report concludes that Community legislation has been transposed and implemented at national level with reference to the National Salmonella Control Programmes (NSCPs) for breeding and laying poultry flocks. Organisational responsibilities of the CA in the implementation of the NSCPs are clear and well structured. Accredited laboratories are involved in official testing. However, the mission team (MT) noted some systematic errors in the number of samples to be taken at screening and at confirmation level which seriously undermine the capacity of the programmes to separate individually the positive flocks. As a consequence, the monitoring programmes comply only partially with Regulations (EC) Nos 2160/2003, 1168/2006 and 1003/2005 concerning Salmonella control programmes in poultry.*

*As far as outbreaks in humans are concerned, although CZ is by far the Member State (MS) with the highest incidence of salmonellosis (over 18,000 cases in 2007) no appropriate epidemiological investigation has yet been carried out. The involvement of the veterinary authorities in human cases or outbreaks is practically nonexistent. This is not in line with the provisions of Directive 2003/99/EC.*

*Official controls carried out at different levels of the egg food chain, including catering, are at times inadequate. Non-compliances with Community rules were found in several of the premises visited.*

*Although the trend of the frequency of Salmonella indicates a constant decline of cases in humans over the last 5-6 years, it is difficult to assess at present the level of risk posed to the humans by the consumption of food containing eggs due to the uncertainties of the results on Salmonella prevalence in the poultry population.*

*The report addresses to the CZ CA recommendations aimed at rectifying identified shortcomings and further enhancing the control system in place.*

## TABLE OF CONTENTS

1	INTRODUCTION.....	1
2	OBJECTIVES OF THE MISSION.....	1
3	LEGAL BASIS FOR THE MISSION.....	2
4	BACKGROUND.....	3
4.1	Production information.....	3
4.2	Baseline study on the prevalence of Salmonella in laying hens.....	3
4.3	Salmonellosis in humans.....	3
5	MAIN FINDINGS.....	4
5.1	Legislation.....	4
5.2	CA.....	4
5.2.1	<i>Central and regional CAs.....</i>	<i>4</i>
5.2.2	<i>Coordination between the CCA and Regional CA .....</i>	<i>5</i>
5.2.3	<i>Training of staff.....</i>	<i>5</i>
5.3	Monitoring and control of salmonellosis in humans.....	5
5.4	Monitoring and control of salmonella in poultry.....	6
5.4.1	<i>National control programmes.....</i>	<i>6</i>
5.5	Laboratory services.....	9
5.5.1	<i>National Reference Laboratories .....</i>	<i>9</i>
5.5.2	<i>Other laboratories.....</i>	<i>10</i>
5.6	Official controls at farm level.....	10
5.6.1	<i>Approval of farms and Databases.....</i>	<i>10</i>
5.6.2	<i>Official inspections.....</i>	<i>10</i>
5.7	Official controls at establishment level.....	11
5.7.1	<i>Establishments visited during the mission.....</i>	<i>11</i>
6	CONCLUSIONS.....	13
7	CLOSING MEETING.....	13
8	RECOMMENDATIONS.....	14

## ABBREVIATIONS & SPECIAL TERMS USED IN THE REPORT

Abbreviation	Explanation
CA	Competent Authority/ies
CAFIA	Czech Agriculture and Food Inspection Authority
CCA	Central Competent Authority
CRL	Community Reference Laboratory
CZ	Czech Republic
DG	Directorate General
DPHS	District Public Health Stations
EC	European Community
EFSA	European Food Safety Authority
EU	European Union
FVO	Food and Veterinary Office
HACCP	Hazard Analyses Critical Control Point
MS	Member State
MT	Mission Team
NRL	National Reference Laboratory
NSCP/s	National <i>Salmonella</i> Control Programme/s
PHD	Public Health Department
RPHD	Regional Public Health Protection Department
RVA	Regional Veterinary Authority
SANCO	Health and Consumers Protection Directorate General
SE	<i>Salmonella</i> Enteritidis
ST	<i>Salmonella</i> Typhimurium
SVA	State Veterinary Authority
VA/s	Veterinary Authority/ies

## **1 INTRODUCTION**

The mission took place in CZ from 26 May to 4 June 2008. The MT comprised two inspectors from the FVO and a national expert.

This mission was scheduled as part of the FVO's planned mission programme. This was the first mission undertaken to CZ on this specific topic.

## **2 OBJECTIVES OF THE MISSION**

The main objective of the mission was to investigate the measures taken by the CA in order to prevent possible outbreaks of *Salmonella* food poisoning due to the consumption of table eggs or foodstuffs prepared from table eggs.

In order to achieve this objective the MT evaluated the organisation of the CA and its capacity for implementing the relevant Community requirements from the farm to the table.

The MT proceeded as follows:

- an opening meeting was held on 26 May 2008 with the Central CA (CCA). At this meeting, the objectives of, and itinerary for, the mission were confirmed by the MT, and additional information required for the satisfactory completion of the mission was requested;
- the following sites were visited:

<b>Competent authority visits</b>		
Central CA	1	
Regional CA	4	Provincial control units in two provinces 3 to Ministry of agriculture, 1 to Ministry of Health
<b>Laboratory visits</b>		
National Reference Laboratory	1	National Reference Laboratory
Other laboratories	2	State Veterinary Laboratory in Olomouc
<b>Primary production</b>		
Breeding hen farms	2	
Laying hen farms	2	
<b>Establishments</b>		
Packing stations	2	
Processing facilities (egg products)	1	
Caterers	1	Kitchen in hospital

- representatives of the CCA accompanied the MT during the whole mission.

### **3 LEGAL BASIS FOR THE MISSION**

The mission was carried out under the general provisions of Community legislation and, in particular:

- 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, in particular Article 17;
- Regulation (EC) No 882/2004 of the European Parliament and of the Council of 29 April 2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules, in particular Article 45;
- Commission Decision 98/139/EC of 4 February 1998 laying down certain detailed rules concerning on-the spot checks carried out in the veterinary field by

Commission experts in the Member States.

Please note, it should be understood that for all legal texts quoted in this document, it is necessary to refer to the latest amended version. A list of legal references can be found in the Annex to this report.

## 4 BACKGROUND

### 4.1 PRODUCTION INFORMATION

According to the data from December 2005, at national level 78 breeding holdings were registered, with a total of 2,273,200 birds. In the same year, 92 holdings of laying hens were registered, with 7,000,000 birds. Laying hens are reared essentially in cages. Production of eggs in 2007 was over 1,618 million of which more than 3 million were exported. Egg products were also exported for a total quantity of 1,800,000 eggs.

**Table: Number of egg related establishments**

Establishments	Number
Packing Centres	46*
Egg Product establishments	28*

Note: \* source: State Veterinary Service.

### 4.2 BASELINE STUDY ON THE PREVALENCE OF SALMONELLA IN LAYING HENS

An EU-wide *Salmonella* baseline study, under Commission Decision 2004/665/EC, was conducted in commercial large-scale laying hen holdings with at least 1,000 laying hens in the flock. The study was carried out in all MS and coordinated by the European Food Safety Authority (EFSA). The sampling of the holdings took place during the period from October 2004 to September 2005. The aim of the study was to estimate the prevalence of *Salmonella* in holdings at the global EU-level as well as for each MS specifically.

According to this baseline study, the prevalence of zoonotic *Salmonella* in the CZ laying sector was the highest in the EU, namely a combined figure of 62.5 % for *Salmonella* Enteritidis (SE) and *Salmonella* Typhimurium (ST) in the clean dataset.

### 4.3 SALMONELLOSIS IN HUMANS

As in other MS, the incidence of salmonellosis in the CZ increased starting from the beginning of 1990s, and reached a peak in 1995/6, with around 50,000 cases per year. Since then the trend has been of decreasing incidence. However a very high number of over 18,000 cases were still recorded in 2007, being by far the highest incidence in EU. In 2006, the last year for which EFSA Report on *Salmonella* has been published, the

incidence in CZ was 236 cases/100.000, against 34 cases/100,000 EU average. CZ accounted for 15% of all European cases of *salmonellosis* in 2006

## 5 MAIN FINDINGS

### 5.1 LEGISLATION

According to information provided by the CA, Directive 2003/99/EC of the European Parliament and of the Council on the monitoring of zoonoses and zoonotic agents has been transposed with Decree No 356/2004 Coll. Regulation (EC) No 2160/2003 and its subsequent amendments are directly applicable across the EU territory so no transposition was required into Czech law. In accordance with that Regulation and following on the results of the baseline study NSCPs have been implemented since 1/1/2007 for both laying hens and breeders.

Act No 258/2000 of Czech legislation prohibits the use of raw eggs for the preparation of food in institutional catering such as collective kitchens in schools, student canteens, hospitals, homes for elderly and similar food outlets. Raw eggs can be used in normal restaurants. It should be noted that there are no Community requirements covering where raw eggs can be used, but that several MS have introduced such a ban in order to reduce the *Salmonella* risk for consumers using such facilities.

### 5.2 CA

#### 5.2.1 Central and regional CAs

Two CA authorities are responsible of the *Salmonella/salmonellosis* control and monitoring in humans and poultry. At central level the State Veterinary Authority (SVA) of the Ministry of Agriculture is responsible for the control of *Salmonella in poultry*; the Public Health Department (PHD) of the Ministry of Health is responsible for *salmonellosis* in humans. One more control body Czech Agriculture and Food Inspection Authority (CAFIA) of the Ministry of Agriculture is in charge of controls of eggs at retail level.

Controls and monitoring activities are performed throughout the MS via the regional offices of the two CAs the Regional Veterinary Administration (RVA) and the Regional Public Health Protection Department (RPHPD). There are 14 RPDPH; the regions are divided into smaller units, formerly called districts. In the districts there are office which are part of the RPHPD. A reporting system, from regional to central level, exists for both CAs.

The PHD, with its subordinate bodies, is responsible for surveillance in case of food poisoning outbreaks or other health issues attributed to foodstuffs. It is also responsible for official controls in the catering sector. Controls are performed through the inspectors of the 79 local offices of DPHS/ RPHD. Controls in establishments handling eggs and eggs products are performed by the RVA in egg packing and egg breaking plants or by



CAFIA at retail level in case of packed products.

### 5.2.2 Coordination between the CCA and Regional CA

CZ legislation and guidelines allow for the possibility of establishing special committees and for the coordination and collaboration between the two CAs at central and local level. Article 63 of the Food Law for Public Health (Act 258/2000) requires that the two authorities immediately inform each other in case of zoonotic diseases. Article 49 of 166/1999 (Veterinary Act) requires that RVA in the case of confirmation of a zoonotic disease must inform, among the others, the PHD.

The MT verified in the regions visited that the RVA immediately informs the RPHD of any confirmed case of *Salmonella* in poultry and of the measures taken. On the other hand, there was no evidence that the RPHD had ever actively informed the RVA about any cases of *salmonellosis* in humans. Rather, veterinarians learn about *salmonellosis* in humans from the publication of information provided in general periodic reports the frequency of which could vary from one week to a month or even to a year depending on the region. Such reports are in fact made available to all public bodies involved i.e. SVA, RVA, PHD and the Ministry of Health.

The RPHD confirmed that they would inform the RVA only in case of major outbreaks irrespective of the disease, although as an example an occurrence of Avian influenza was cited. The MT verified that in three major *Salmonella* outbreaks which occurred in one region in 2007 there was no formal communication to the RVA. The PHD informed the MT that in cases like those the exchange of information could occur in an informal way. The PHD in one region stated that the only time the RVA was involved in a zoonotic disease in 2007 was in a case of *Listeriosis*, and that they would do the same if a case of a disease such as *Tularaemia* should occur.

### 5.2.3 Training of staff

The MT verified that training courses on NSCPs were carried out at different levels, national and local, and involved CAs, private veterinarians working in the poultry industry as well as farmers. Reports on these training activities were available when requested. Evidence was given also of general training, including HACCP verification, provided to Public Health officers by the PHD.

## 5.3 MONITORING AND CONTROL OF SALMONELLOSIS IN HUMANS

Most cases of *salmonellosis* are reported either by doctors, hospitals or laboratories, and are confirmed by bacteriology. Data concerning serovars are also available. From the records made available, the MT team verified that the diagnostic and reporting systems of the PHD are well established and effective; this could also partially explain the high number of cases reported. Data concerning sporadic and epidemic episodes of *salmonellosis* are stored at district level and are also entered into the EPIDAT system. Data from the region are sent to the Ministry of Health. The DPHS are in charge of the epidemiological investigation in the districts assigned to them. A national guideline for the performance of epidemiological investigations in outbreaks is available for use by the

officials.

The MT verified that epidemiological investigation is carried out in all cases of *salmonellosis* in humans. However, in one region, despite the fact that almost the entirety (88%) of cases are due to SE, which also represents more than the 90% of *Salmonella* isolations in layers (92% in 2007 in CZ) and that the same phagetype of SE (PT8) is prevalent in humans and layers, eggs and egg products have never been analysed and/or proved to be the source of infection. In fact the last case in which eggs and egg products were strongly suspected to be the source of the disease in that region was in 2002.

Although the MT was informed that in most cases of human *salmonellosis* food, and in particular eggs and poultry meat, could be the likely source of infection, this was never really investigated. In fact epidemiological investigations were never carried out beyond the level of interviews with patients. Food has never been sampled because the CAs stated that the suspected foods had always been completely consumed; no other sampling was ever performed at retail, production, or at farm level. The CA informed the MT that at the national level it is not compulsory for catering facilities to keep a sample of meals for analysis in case this is needed other than in prisons or in military canteens.

In one region, PHD stated that RVA was never involved in an epidemiological investigation in any case of *salmonellosis*. The only way for the RVA to know about human cases is through the periodic reports from PHD (ref. to 5.2.3.). That means for example that, in case of a monthly report SVA will have the information, up to 45 days after the confirmation of the disease. In another region the MT was told that in the case of one epidemic in 2007 the PHA had identified eggs as the most probable source of the infection but because the eggs were not expired no further investigation was performed. The RVA was not informed of the case and stated to have known about the epidemic through an annual report.

## **5.4 MONITORING AND CONTROL OF SALMONELLA IN POULTRY**

### *5.4.1 National control programmes*

Eradication programmes are applied both for breeders and layers since January 2007. Every district has an animal health official in charge of the implementation of the programme, under the coordination of the RVA. In general the activities of the programmes are based on the Community Regulation on zoonoses controls. Samples are taken by officials for official purposes and by private veterinarians for own controls. Both categories of samples are sent to only three official laboratories in the country. The RVA is then responsible, based on the results of the samples, for any follow up measure .

All data related to these control plans are entered in a computer data system which allows every regional office to enter and access the data. Several files relative to the application of NSCPs were assessed. The MT found that the information was properly stored and it was easy to retrieve the data concerning all the single operations (sample taking and dispatching, laboratory results, application of restrictive measures)

Staff in the field all appear to be well informed and trained on the provisions of the two NSCPs and an effective information chain exists centred on the use of the computer system. A supervision system on the correct implementation of the programmes has

been established where the SVA supervises, through visits in the field, the activities of the regional bodies. Under the same system the RVA supervises the application of the programme by its own staff. Reports of such activity were made available to the MT. Evidence was also available that if a confirmatory sample is found to be positive in the application of the NSCP, immediate measures are taken and the application of these measures is immediately communicated to all relevant CAs including RPHD.

The MT noted, from the data made available by the laboratories visited that, significant differences exist in positive results between official and own checks samples. It appears that positive cases are much more frequently detected in official samples than in own checks samples. For 2007 from preliminary calculations made in one laboratory differences between results range from less than 1% for own check samples to 6% for official samples. Data provided in another laboratory gave 6% positivity for own checks and 13% for official samples. All these differences are statistically significant. In one farm, three flocks were found positives by official analysis, while no positives were found in more than 500 samples taken in own checks.

### **Vaccination**

Only vaccines approved and registered by the CA may be used for vaccination against SE in breeding and laying hens. *Salmonella* vaccines must comply with the provisions of Commission Regulation (EC) No 1177/2006. All flocks of breeders and layers included in the NSCPs have to be vaccinated. A vaccination plan must be presented to the CA before the flock is housed. However the only instrument of verification of the real and correct administration of the vaccine is through compensation following a declaration by the private veterinarian. In the reports given by the official laboratories, no evidence is given of the performance of the discriminatory test, even when analysing samples coming from flocks vaccinated with a live vaccine. However the MT could verify that discriminatory tests are carried out at the National Reference Laboratory (NRL).

All the farms visited by the MT are routinely vaccinated against SE, including breeding flocks and documents with the relevant information were found.

### **Compensation**

Farmers are compensated by the Ministry of Agriculture for costs and losses arising as a consequence of the enforcement of emergency veterinary measures in accordance with Act No. 166/1999 concerning veterinary care and amending certain related laws (Veterinary Act). However CZ legislation allows for compensation only when an infectious agent is detected in organs. This does not allow compensation in case a flock is slaughtered or eliminated following detection of *Salmonella* in faecal samples, whereas the relevant Community regulations for the sector are based on the detection of *Salmonella* in faeces and/or dust. Provisions for vaccination against *salmonellosis* are included in the NSCP and the cost of the vaccines is covered by the compensation scheme of the programme.

#### *5.4.1.1 National control plans for breeders*

The CA began implementation of the NSCP in January 2007. The programme covers the five most frequent *Salmonella* serotypes in human *salmonellosis*, as set out in Commission Regulation (EC) No 1003/2005. Under the programme, flocks testing

positive for any of the five *Salmonella* serotypes are subject to eradication measures as foreseen in, Part C of Annex II to Regulation (EC) No 2160/2003. However, in case of positive samples, eradication is carried out only after the positivity is confirmed in organs, even in the case of isolation of SE and ST. It is worth noting that Community legislation allows for confirmation only in particular cases and not as a general rule.

Furthermore the NSCP allows for confirmation only with the testing of organs from five animals per positive flock. This sampling method is not foreseen by Community legislation. The CA claims to have used, as a guideline to establish the number of five birds, the repealed Directive 92/117/EEC. However this sample size has not been statistically calculated and is independent from the flock size. Considering the expected prevalence in a flock positive for SE and/or ST of about 26-30, such small sample size does not guarantee the detection of the presence of infection. This could explain the non-confirmation of a large proportion of positive cases found at the first official sampling. According to the CA, confirmation is necessary because national legislation does not allow taking extraordinary measures and compensating farmers unless positivity is found in animals.

Moreover, the MT noted the following:

- For each sampled flock two pooled samples as foreseen in Point 2.2.2.1 of the Annex to Regulation (EC) No 1003/2005 are sent to the laboratory. However at the laboratory these two samples are combined together and the resulting single sample is analysed.
- Although in the NSCP all the different sampling methods foreseen under the Community regulation are allowed, only the most laborious one is used (collection of 300 single fresh droppings per flock); however the use of this method is in line with the requirements of of Regulation (EC) No 1003/2005.
- All sampling activity is carried out at holdings level, samples are never taken at hatchery level; this is allowed by Community legislation on the sector.

During 2007, 552 breeding flocks were sampled. Among these, 24 flocks tested positive for SE, 3 for ST and 1 for *Salmonella* Infantis. In all, these 28 positive flocks, correspond to a 5% prevalence.. Seven were confirmed and extraordinary measures were taken.

#### *5.4.1.2 National control programme for laying hens*

The baseline study organised by EFSA indicated for CZ a combined prevalence figure of 62.5% for SE and ST in the clean dataset. This prevalence was the highest in the EU. Although Community regulations allow for starting a NSCP in laying hens from January 2008, CZ voluntarily decided to start the programme in January 2007.

The frequency of sampling is done based on the requirements set out in Annex II B of Regulation (EC) No 2160/2003, whereas the sampling methodology is only partially done according point 2.2 in the Annex to Commission Regulation (EC) No 1168/2006. In fact in the case of official sampling, only one faecal sample is taken, instead of three samples (either two faecal and one dust or three faecal).

Neither in case of detection nor in case of confirmation of positivity for SE and ST in a flock, is official sampling carried out in the remaining flocks as foreseen in point 2.1 (d)

of Annex to Regulation (EC) No 1168/2006.

Even in case of SE or ST detection in a farm, the NSCP does not foresee the restriction of the movement of eggs until the confirmation of the infection (Regulation (EC) No 178/2002 Article 14). Furthermore even after confirmation, no recall of eggs is implemented or required. Indeed in the period from detection to confirmation (average of two weeks) the eggs can freely be sold and circulated throughout the entire EU territory.

Official samples are taken from all the flocks of all holdings, although Regulation (EC) No 1168/2006 requires one flock per holding to be sampled. As for confirmation of samples, the procedure applied in breeders is repeated in layers.

The CA submitted a NSCP for Laying Poultry to Commission Services, which was approved by Commission Decision 2007/848/EC. The Community's financial contribution for 2008 was established by Commission Decision 2007/782/EC.

In 2007, 94 holdings for a total of 426 flocks of laying hens were sampled. According to the information provided by the CA, 47 holdings for a total of 101 flocks tested positive for SE and one flock tested positive for ST. Infection was confirmed and restriction measures taken in 28 flocks from 21 holdings.

The estimated prevalence of positive flocks is therefore 24% (102/426), which means that apparently CZ has already met the target foreseen by the end of 2009. However these data could be biased by the sampling methodology applied as discussed above.

The MT noted in the farms visited that sampling frequency and in general the provisions established in the programme are implemented both by farmers and veterinary officials.

## **5.5 LABORATORY SERVICES**

In the framework of NSCPs three state laboratories are authorised by the SVA to carry out examinations: Olomuc, Jihlava and Prague. The three laboratories carry out all the analyses for the control plans both for official and own checks samples. Confirmation of positive cases is performed only at the NRL in Prague.

The two laboratories visited appeared to have structure, equipment and personnel adequate to fulfil the role assigned to them within the NSCPs.

### *5.5.1 National Reference Laboratories*

The State Veterinary Institute in Prague is the appointed NRL for *Salmonella*.

The NRL is accredited to ISO 17025 standard and regularly participates in international ring tests organised by the Community Reference Laboratory (CRL). The MT had access to the results obtained in the 2007 ring test, and verified that these were fully satisfactory. The NRL in collaboration with another department of the same institute carries out all the analyses required by its role in the control programme, i.e. *Salmonella* detection for screening and confirmation of suspect cases, serotyping of *Salmonella* strains, discriminatory test between vaccine and field strains, detection of possible antimicrobial use in case of positive non-confirmed cases. All the methods used are accredited according to ISO 17025.

Starting from 2008, the NRL organises a ring trial for detection and serotyping. Four

laboratories including the ones participating in the NSCPs are involved in this ring trial.

The MT reviewed files concerning positive and negative cases and found that all the procedures including testing and results communication had been properly followed and were well documented.

#### *5.5.2 Other laboratories*

The MT visited one of the regional laboratories involved in the NSCPs. The laboratory is accredited to ISO 17025 standard and has participated in the ring test organised in 2008 by the NRL with good results. They perform detection and serotyping of *Salmonella* in the framework of NSCPs using accredited methodologies. All isolated *Salmonella* strains are sent to the NRL for confirmation and storage. The laboratory carries out analyses both for official and own checks on faeces, chicks and swabs, but rarely on dust and boot swabs. The laboratory does not carry out any analyses for the use of antimicrobials in dead chicks. This is not consistent with the information gathered by the MT in farms.

### **5.6 OFFICIAL CONTROLS AT FARM LEVEL**

#### *5.6.1 Approval of farms and Databases*

In the CZ the farms are approved and registered in the "Database of Farms" in accordance with Breeding Act No 154/2000 and corresponding Decree No 136/2004 laying down details for identification of animals and their registration and registration of holdings and person. At present all poultry holdings are registered in the national database, which is managed by a private company. The CA stated that farmers are not obliged to report directly to the VA changes in activities carried out in the farm. Should a change in the activity occur, farmers must inform the private company which will then enter the information in the on-line system that is made available to the VA.

Registration requires that specific conditions such as separation from other poultry holdings, excluding contacts with wild birds, facilities to change clothes, disinfection and pest control are met. Requirements for approval and registration are included in Decree 382/2003 transposing Council Directive 90/539/EEC, and are part of a check list used during annual inspections.

#### *5.6.2 Official inspections*

Official controls must be carried out in farms at least once per year to assess the continuous compliance with the criteria mentioned above for biosecurity. In spite of this, biosecurity standards in the visited farms was not always satisfactory and at least in one farm it was very poor. In this particular farm the external condition of the structure and the immediate surroundings were such that it was impossible to implement basic activities such as movement restriction, pest control and even a proper inspection (Council Directive 90/539/EEC). It was impossible for the MT and the accompanying authorities to access and evaluate the condition of a part of the external structure and perimeter of the poultry houses due to physical impediments (overgrown vegetation); it was impossible to verify if a proper ceiling existed for one of the houses. The new litter

to be used inside the houses was stored in an extremely poor condition in direct contact with pests and wild birds. In this farm the MT was not allowed to enter the premises, allegedly for biosecurity reasons.

## **5.7 OFFICIAL CONTROLS AT ESTABLISHMENT LEVEL**

The RVA is responsible for official inspection in farms, egg packing centres, egg processing plants, and feed mills as far as sampling as part of NSCPs is concerned. The RPHD is responsible for official inspections in catering establishments, whereas CAFIA is responsible for retail shops where packed products are sold.

### **Egg packing centres and processing plants**

Under a national inspection programme, VA officials must inspect a packing centres and egg processing plants once per month. There is no written procedure nor a check list for this kind of inspection. However a report is produced for each visit, and data are recorded in the national database (“Client”). Requirements for this kind of establishment to be approved include HACCP and traceability systems.

### **Catering**

The RPHD officials are in charge of control in catering. They visit catering facilities at least once per year, according to a regional control programme which is based on a general national control programme. In 5% of inspections, samples have to be taken for microbiological investigation. Up to now a specific sampling scheme for eggs and egg products was not foreseen; this has been implemented in 2008 within the framework of the “leading theme” of the year, which is *Salmonella*. Samples will consist of: eggs, egg products, meals and swabs. The PHD explained that the choice of *Salmonella* as a leading theme was triggered among the others by the FVO visit. ([see Endnote](#))

In the establishment visited, the MT noted that in one case no follow up of recommendations following an outbreak of food poisoning had been formally carried out by the CA (Regulation (EC) 882/2004, Article 8).

### **Feed Mills**

Feed mills are approved and inspected by Central Institute for Supervising and Testing in Agriculture but, as far as the NSCPs are concerned, official controls are carried out by the RVA. An annual sampling plan is established at regional level at the beginning of the year. The MT was shown a letter giving instructions on the quantity of feeding stuffs to be taken when sampling; the procedure is a general one, not specific for *Salmonella*. HACCP systems are not compulsory in feed mills (Regulation (EC) No 183/2005). The feeding stuffs samples have to be sent to the three laboratories involved in NSCPs. No special instructions are available on procedures to be adopted in case of positive findings.

#### *5.7.1 Establishments visited during the mission*

### **Catering**

The MT visited a hospital kitchen, approved by the PHD for the preparation and distribution of food products in the hospital premises. At the time of the inspection, the CA was carrying out a follow up inspection. A Standard Operating Procedure (SOP) was available on the correct receiving and handling of eggs, but this had only recently been

prepared following a recommendation of the CA. The MT verified that a training session on food handling including eggs had been carried out. The MT noted that the hospital kitchen's traceability system was revised on 13 May 2008 in response to the 2007 CA inspection. However the system still remains flawed due to the possible mixing of eggs coming from different batches in the storage area, and to the fact that a large proportion of eggs were not stamped in a readable way (Council Regulation (EC) No 1028/2006). No own checks sampling is carried out in this premises.

Bad hygiene practices were noted by the MT in the store for eggs in the kitchen. It was explained that this was due to the fact that the premises were old and they were under continuous renewal. In this premises an outbreak of food poisoning occurred in 2006, with 43 persons involved. On that occasion the CA carried out an inspection and found several shortcomings in the hygiene procedures implemented in the facility. *Proteus mirabilis* was identified as cause of the poisoning, and food borne origin was strongly suspected. However, no food samples were taken, since no leftovers or samples of consumed food were available.

### **Packing centre**

In the establishments visited the HACCP plan was implemented, as well as a SOP comprised of an accredited traceability system. The MT verified that traceability is based on the "best before" date as written on the labels and on commercial documents accompanying the consignments of eggs. The MT noted that in one case the date of laying was also marked in the documents but this appeared to have been added after the eggs had left the premises.

Concerning the premises visited, one was very clean throughout, but the establishment was not in operation at the time of the visit. In the second establishment, the use of dirty machinery and trolleys was noted, as well as shortcomings in the marking of eggs (Council Regulation (EC) No 1028/2006).

### **Processing plant**

Two egg processing plants were visited; in one no physical inspection was carried out of the premises, but only a documentary review.

An HACCP plan was available in both establishments, and results were available for eggs, egg product and environmental swabs. In one of the establishments in 2007 a positive case of *Salmonella* in pasteurised product was detected. Evidence was available that the RVA had followed the case and taken measures to stop the production, and had informed the PHD about the case. However it has to be noted that results were given two weeks after the sample had been taken due to the fact that the laboratory awaited the determination of the *Salmonella* strain isolate. No recall of the product was carried out because this had already been used by then. Furthermore, at the same time in the farm annexed to the processing plant three positive flocks were detected but only two were confirmed as positive for *Salmonella*.

The second egg breaking plant visited was not in operation at the time of the visit, however the mission team noted that machinery had not been washed properly and in general hygiene and cleaning conditions were of a poor standard.

### **Feed mill**



The MT visited one feed mill which produces feed for pigs and a very small quantity of feed for poultry. The food business operator is in the process of preparing an HACCP programme, which is meant to be ready by the end of 2008. In this programme own checks for *Salmonella* are foreseen, once a month for compound feeding stuffs, and once a year for fish meal. Two official samples were taken in 2007, with negative results.

General conditions of the premises appeared to be adequate for the kind of production carried out, although pest control was difficult to implement due to an unclear separation between external and internal parts of the storage area (Regulation (EC) NO 183/2005).

## 6 CONCLUSIONS

The CAs involved in *salmonellosis* monitoring and control and the CA responsible for the same in the poultry population have both a system that if run properly could further reduce the incidence of the disease in humans. PHD has an effective diagnostic and reporting system while the SVA has put in place well structured and supervised NSCPs with trained staff, good system of communication and high standard laboratory services.

However the capacity of the CAs to effectively minimise the *salmonellosis* risk to humans is put in doubt by several shortcomings in the activities carried out by the two CAs:

- The mechanisms for collaboration between the two CAs, as foreseen under Czech law, are in practice virtually non-existent in the monitoring and control of *salmonellosis* although the SVA informs the PHD of confirmed cases of *Salmonella* in poultry.
- The RPHPD never carries out a complete epidemiological survey on *salmonellosis* in humans, so that the source of infection remains always unclear even though the bacteria causing disease in humans is exactly the same isolate in the laying poultry sector.
- The capacity of the NSCPs to isolate *Salmonella* positivity in flocks is seriously undermined by systematic sampling size errors embedded in the programmes both at the first sampling stage and more importantly at the confirmation stage.
- The SVA has a compensation rule at variance with the methods required by Community legislation.

Given the poor structures and the deficiencies in hygiene procedures in some establishments and farms, FBOs cannot be said to always meet the standards necessary to prevent *Salmonella* contamination.

## 7 CLOSING MEETING

A closing meeting was held on 4 June 2008 with the CCA. At this meeting, the main findings and conclusions of the mission were presented by the MT. During this meeting, the CCA acknowledged the findings and preliminary conclusions presented by the MT

and provided additional information. Representatives from the two CA committed themselves to immediately work to solve the shortcomings found during the mission.

## 8 RECOMMENDATIONS

The CZ authorities should provide Commission services with an action plan, including a timetable for its completion, in order to address the following recommendations:

No.	Recommendation
1	CAs involved in monitoring salmonellosis in humans and Salmonella in poultry should establish an effective and continuous relationship as required in Article 3 of Directive 2003/99/EC.
2	Taking into consideration the above recommendation, CAs should take in consideration Article 8 of Directive 2003/99/EC when carrying out epidemiological investigations.
3	SVA should review the NSCPs in order for the sampling size applied to be in line with the provisions of point 2.2 of the Annex to Commission Regulation (EC) No 1168/2006.
4	The CA should review the NSCP for breeders to be in line with the requirements of point 2.2.2.1. in particular (a) of Annex to Commission Regulation (EC) No 1003/2005.
5	The CA should review the sampling size when carrying out confirmatory analyses, in order for the sampling to be in line with the statistical requirements in point 2.2.2.1. of the Annex to Commission Regulation (EC) No 1003/2005 and taking in consideration Annex I to Commission Regulation (EC) No 1237/2007.
6	The CA should ensure that deficiencies found regarding hygiene requirements of Regulation (EC) No 852/2004 of the European Parliament and of the Council, Annexes I and II are corrected.

The competent authority's response to the recommendations can be found at:

[http://ec.europa.eu/food/fvo/ap/ap\\_the\\_czech\\_republic\\_7628\\_2008.pdf](http://ec.europa.eu/food/fvo/ap/ap_the_czech_republic_7628_2008.pdf)

## 9 ENDNOTES

Concerning	Detail
Section 5.7	In their answer on the draft report the Competent authority stated that Salmonella species are taken in consideration in the frame of a monitoring project for dietary exposure (Mikromon project).

## ANNEX 1 - LIST OF LEGISLATION REFERENCED IN THE REPORT

Reference	OJ Ref.	Detail
Directive 2003/99/EC	OJ L 325, 12.12.2003, p. 31–40	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
Directive 90/539/EEC	OJ L 303, 31.10.1990, p. 6–28	Council Directive 90/539/EEC of 15 October 1990 on animal health conditions governing intra-Community trade in, and Council Directive 90/539/EEC of 15 October 1990 on animal health conditions governing intra-Community trade in, and imports from third countries of, poultry and hatching eggs
Directive 92/117/EEC	OJ L 62, 15.3.1993, p. 38–48	Council Directive 92/117/EEC of 17 December 1992 concerning measures for protection against specified zoonoses and specified zoonotic agents in animals and products of animal origin in order to prevent outbreaks of food-borne infections and intoxications
Regulation (EC) No 178/2002	OJ L 31, 1.2.2002, p. 1–24	Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety
Regulation (EC) No 2160/2003	OJ L 325, 12.12.2003, p. 1–15	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
Regulation (EC) No 852/2004	OJ L 139, 30.4.2004, p. 1, Corrected and re-published in OJ L 226, 25.6.2004, p. 3	Regulation (EC) No 852/2004 of the European Parliament and of the Council of 29 April 2004 on the hygiene of foodstuffs
Regulation (EC) No 183/2005	OJ L 35, 8.2.2005, p. 1–22	Regulation (EC) No 183/2005 of the European Parliament and of the Council of 12 January 2005 laying down requirements for feed hygiene
Regulation (EC) No	OJ L 170, 1.7.2005, p.	Commission Regulation (EC) No 1003/2005 of 30 June 2005 implementing Regulation (EC) No

<b>Reference</b>	<b>OJ Ref.</b>	<b>Detail</b>
1003/2005	12–17	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
Regulation (EC) No 1028/2006	OJ L 186, 7.7.2006, p. 1–5	Council Regulation (EC) No 1028/2006 of 19 June 2006 on marketing standards for eggs
Regulation (EC) No 1168/2006	OJ L 211, 1.8.2006, p. 4–8	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
Regulation (EC) No 1177/2006	OJ L 212, 2.8.2006, p. 3–5	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
Regulation (EC) No 882/2004	OJ L 165, 30.4.2004, p. 1, Corrected and re-published in OJ L 191, 28.5.2004, p. 1	Regulation (EC) No 882/2004 of the European Parliament and of the Council of 29 April 2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules
Regulation (EC) No 1237/2007	OJ L 280, 24.10.2007, p. 5–9	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
Decision 98/139/EC	OJ L 38, 12.2.1998, p. 10–13	98/139/EC: Commission Decision of 4 February 1998 laying down certain detailed rules concerning on-the-spot checks carried out in the veterinary field by Commission experts in the Member States
Decision 2004/665/EC	OJ L 303, 30.9.2004, p. 30–34	2004/665/EC: Commission Decision of 22 September 2004 concerning a baseline study on the prevalence of salmonella in laying flocks of Gallus gallus
Decision	OJ L 314,	2007/782/EC: Commission Decision of 30

Reference	OJ Ref.	Detail
2007/782/EC	1.12.2007, p. 29–39	November 2007 approving annual and multi-annual national programmes and the financial contribution from the Community for the eradication, control and monitoring of certain animal diseases and zoonoses, presented by the Member States for 2008 and following years
Decision 2007/848/EC	OJ L 333, 19.12.2007, p. 83–84	2007/848/EC: Commission Decision of 11 December 2007 approving certain national programmes for the control of salmonella in flocks of laying hens of Gallus gallus