SANTE/2017/10856

REPORT OF THE

“Salmonella” TASK FORCE SUB-GROUP

Meeting held in Warsaw, Poland (5-7 April 2017)
Scope and objectives of the EU-Task Force sub-group.

On the general point of view, the scope of the Task Force is to share information and experience of the expert members with the hosting colleagues as well as to give technical support if needed or requested by the visited country. Its main goal is to leave at the disposal of the visited country, the expertise of its expert members, to give a contribution, with an external independent technical assessment, in the evaluation of strength and weaknesses of strategies and measures in place for the control of the disease concerned.

After the visit a report is issued by the experts, based on the information provided on the spot by the country and on the findings verified directly by the experts themselves during the visit. Conclusions and recommendations are formulated from a general point of view and are proposed in the report with the main scope to be a basis for the Veterinary Services of the visited country to reflect on the possible improvement of different aspects of the control and eradication programme for the disease concerned. The country visited may amend the programme according to what it is suggested by the Task Force, or it may choose other approaches, also in consideration of social and economic factors that may influence the success of the measures adopted, and which are not in the remit of the Task Force.

The report including the conclusions and recommendations are based on the information provided by the country visited and on the situation found during the visits on the spot. Further developments of the country’s situation may be the subject of a following visit aimed to get updated information and new feedback from the competent authorities.

The reports of the Task Force are published on the following website: http://ec.europa.eu/food/funding/animal-health/national-veterinary-programmes_en

More precisely, the objective of this Task Force was, after the 2016 multi-country outbreak of human salmonellosis caused by Polish eggs, to provide a technical support to the Polish authorities to improve their Salmonella control programmes by asking experts from other Member States to evaluate the implementation of these programmes and to formulate recommendations to improve their efficacy and efficiency in order on one hand to prevent reoccurrence of such outbreak and on the other hand to help Poland reaching the EU targets for all poultry populations as soon as possible.

The first day of the meeting comprised presentations by the Competent Authorities on the implementation of the Salmonella eradication programmes in poultry production, breeding flocks of Gallus gallus, laying hens, broilers and turkeys, and subsequent discussions. The second day covered visits to the routine official laboratory in Warsaw and the Polish National Reference Laboratory (NRL) for Salmonella in Pulawy, as well as a visit to a farm and packing centre. The third and final day of the visit encompassed shared findings, preliminary conclusions and recommendations.
A. Main findings

1) *Salmonella* Control Programmes

During the first day of the meeting, issues pertaining to the implementation of the *Salmonella* control programmes by the veterinary services in Poland were discussed, as well as the role of the National Reference Laboratory (NRL) and private diagnostic laboratories.

The State Veterinary Services of Poland operates at three administrative levels:

- Central administrative level at the State Veterinary Services Headquarter in Warszawa,
- Regional Veterinary Inspectorates in each of Poland’s 16 regions (Voivodeships), and
- District Veterinary Inspectorates in 305 of Poland’s 317 districts.

The Chief Veterinary Officer has oversight for the National *Salmonella* Control Programmes, all five of which are multiannual with the exception of that for laying hens. The former lengthy national approval process has been reduced somewhat, however budgets still require agreement with the Ministry of Finance and programmes have to be technically approved by Minister of Agriculture and Rural Development.

Each regional office has a dedicated budget for the SCPs, and oversees implementation at district level. FBO sampling is undertaken either by the FBOs themselves or by private veterinarians employed by FBOs.

**Enforcement** measures for non-compliance with FBO testing requirements were changed from October 2016, from court proceedings to a fine based system. In addition, FBOs in breach of testing requirements may be designated with an ‘unknown’ status which denotes that they cannot sell their produce as table eggs. These measures have helped to increase compliance and awareness of the SCP.

**Routine confirmatory sampling** under the programme has been abolished in fattening turkeys from 2016 onwards and from 2017 in broilers. For breeders and breeding turkeys, confirmatory sampling is only undertaken in exceptional cases using risk analysis after FBO’s samples identify a positive result. After the outbreak, the CA decided to check via official controls all flocks in the farms of laying hens instead one flock per farm and per year as stated in the EU Regulation. We consider this good practice to detect more positive flocks in the holdings, and this helps to resolve differences between the number of positive results in FBO samples and in official samples.

In terms of **compensation** for positive flocks of laying hens, this will no longer be payable after 2017. There were some concerns that confirmatory sampling was necessary to exclude false positive test results, given the belief that in some cases producers were manipulating the system to draw down compensation, so this new measure will be positive for a greater implementation of the programme (reducing false positives and increasing the biosecurity measures so as to be in line with the EU regulations on confirmatory sampling).

Plans are being implemented in the **NRL** to enhance diagnostic capabilities i.e. to identify *Salmonella* strains in-house within a number of weeks rather than outsourcing this process which can take up to three months. This will help identify potential pathways for the spread of disease, potentially enabling the CA to contain or restrict future outbreaks.

It has been suggested by the CA that the **outbreak** was due to multiple causes / sources of contamination rather than one source, which may explain why no single source of contamination for the outbreak has been identified. The CA requested the experts to provide protocols for epidemiological investigations from their own CAs to compare with theirs and possibly help improving diagnostic investigations and ensure best practice.
Based on the **National Feed Control Plan**, all feed production plants are covered by the programme. In 2016, 2,700 checks were undertaken, with 62 *Salmonella* positives reported, none of which were linked to the establishments affected by the outbreaks. For 2017, the annual target has been increased to 3,200.

2) **Visit at the Polish National Reference Laboratory (NRL) for *Salmonella* in Pulawy**

The laboratory was found fully competent for testing *Salmonella* in samples of various origins (feed, food, primary production) and is fully equipped to fulfil their tasks. In terms of the Ring Trials organised by the NRL, those laboratories which did not fully meet the enhanced standards were not involved in testing samples related to the outbreak.

However some discrepancies exist between FBO samples tested by private laboratories and official samples undertaken by official laboratories (percentage of positivity of official samples higher than that of FBO samples). After a discussion between the CA and the Task Force experts, it was considered that this difference may have been caused by the mistreatment of samples – e.g. growth inhibition (this was observed in the regional laboratory in Warsaw in a non-related sample) – hampering the detection of *Salmonella* or by incorrect reporting of test results by private laboratories.

3) **Visit at the routine official laboratory in Warsaw**

The laboratory was found fully competent for testing *Salmonella* in samples of various origins (feed, food, primary production); they are fully equipped to fulfil their tasks.

4) **Visit at the laying hen farm and packing centre**

**Flock identification**

Under the SNCP, flock identification is of considerable importance given that flocks are defined as epidemiological units under the programme. In order to calculate clearly defined EU targets and prevalence rates, it is essential to be able to identify the number of flocks, both positive and the total number of flocks in the country. In the farm visited, flock identification was not entirely clear, and there was some ambiguity concerning the traceability of the samples between the flocks and the laboratory reports.

**Vaccination**

Vaccination is not currently mandatory in laying hens in Poland, but is undertaken at the discretion of the FBO. In the case where a vaccinated flock was sampled, it is necessary to register the name of vaccine and identify whether a live or inactivated strain was used, in order that the testing laboratory can distinguish between field strains and vaccine strains, thus avoiding false positive test results and ensuring compliance with the Regulation (EU) No 1177/2006. In the farm visited, this information was not always mentioned on the documents accompanying the samples sent to the laboratories.

**Sampling and Laboratory Report**

Some anomalies were identified in the laboratory report in terms of the age of birds, incorrect sampling date, and incorrect house on the farm. In addition, it was unclear from the report how many samples were taken on the farm, how many samples were analysed in the laboratory and the subsequent number of results.

**Compliance with SCP**

In the farm visited the frequency of FBO sampling in some flocks in 2015 was not in line with the EU legislation, i.e. did not meet the requirement to sample every 15 weeks. Furthermore, a positive result of SE was identified in April 2015 through official controls. However the additional two flocks on site were not subsequently checked via official controls as laid down in EU legislation.
Miscellaneous

Several points were found on the farm visited where there is room for improvement: classification of documents, biosecurity.

B. Final Conclusions and Recommendations

1) Salmonella Control Programmes

The Salmonella control programmes (as submitted for EU cofinancing) are in general well drafted, covering all relevant aspects of the EU regulations. However, they should be updated to reflect the changes already implemented or to be implemented (e.g. confirmatory sampling policy, compensation rules, and official sampling frequency in poultry holdings).

Centralised data capture: the competent authorities advised that they are in the process of developing a **centralised database** for recording both official and FBO sampling results at a national level. This will enable routine checks on sampling levels at regional and national levels, based on the relevant bird populations and a more cohesive approach to national reporting at EU level. It will also enable the identification of discrepancies between the proportion of positives identified through official and FBO sampling.

Despite the multi country outbreak caused by Polish eggs, the **Polish egg industry** is still not convinced of the necessity to fully and correctly implement Salmonella control programmes. No initiative from their side has been received by the Polish administration. As this situation was already found in the previous task force meeting in Poland in 2009, the Polish CA should intensify its efforts to convince all stakeholders of the importance of these Salmonella control programmes.

2) Laboratories

Mistreatment of samples or incorrect laboratory test result reports can have short term economic benefits for FBOs and private laboratories. This may be minimised by a reorganisation of FBO sampling. One recommendation is to introduce an independent organisation responsible for taking FBO samples (some suggestions included private veterinary practices or laboratory staff). For FBO samples to be brought to private laboratories, it is proposed also that two sets of samples should always be taken, one to be analysed by the private laboratory appointed by the FBO, the other sample to be brought to the relevant regional official laboratory for being randomly tested

3) Farm and Packing Centre

**Sampling and Laboratory Report**

An improved **homogenous national sampling sheet** would help ensure traceability between the samples, sampled flock and report from the lab. This should include identification of the flock, sampling date, number, quantity and type of samples taken in the farm, vaccinated flock and the type of vaccine, etc.

**Flock Identification**

A homogenised approach to flock identification on a national basis would help to improve clarity and traceability. One possible way to identify the flocks would be: Identification of the

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1 In its comments to the draft report, the Polish CA indicates that sending samples to two laboratories at the same time and performing additional tests generate costs and, as this is not required by the EU law, it would create an unequal treatment compared to other Member states.

2 In its comments to the draft report, the Polish CA indicates that some modifications to the current SCP sampling sheets for official and FBO samples are underway to implement.
farm, followed by house number and the date of entry of the house (Ex.: PL3XXXX 01 042017).

4) Outbreak – General Recommendations

18 farms located in different regions, even in different districts, tested positive for strains of SE, possibly with a common source. As no positive results for S. Enteritidis were found in the monitoring of the breeding establishments from which laying hens were delivered to infected holdings, breeding farms could not be so far identified as a common source of infection. Another possible source of Salmonella could have been feed. However, the compound feed industry is an international industry. Ingredients risky for Salmonella, ingredients rich in protein, are often imported in Europe and distributed and used in the production of compound feed used in many countries, in compound feed for both cattle, pigs and poultry, including breeders, broilers and laying hens. Most feed is heat-treated, however, time and temperature are not always controlled and in addition, re-contamination of processed feed is rather common. Although the monitoring of Salmonella in feed does not appear to be performed in a systematic way in Poland and in some other EU member states, feed is not the likely source of the outbreak strains of Salmonella as only samples from laying hens were Salmonella positive, and no samples from broilers or other animals than poultry.

From epidemiological studies in Europe, it appeared that human cases with the outbreak strain in other EU countries than Poland were linked to consumption of Polish eggs. So the relevant strains most likely had its source in Poland. To conclude: as the source of infection of infected farms still needs to be identified, other possible sources than breeders and feed can be mentioned:

- Salmonella vaccine. All flocks were vaccinated with a vaccine containing a non-typed strain of SE. Although the vaccine strain is unable to grow on Salmonella detection media, a specific batch of vaccine could have been contaminated with a strain that is able to grow on such media. MLVA typing of the vaccine strain has not been done yet.
- Persons visiting the 18 farms.
- Transport vehicles only visiting the 18 farms.

A warm thank you is extended to the Polish hosts for their great hospitality and willingness to share information. The effort of arranging this meeting is greatly appreciated.

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3 EFSA in its rapid outbreak assessment recommended Poland to conduct "further checks on the S. Enteritidis status of the hatcheries and breeding flocks, especially those linked to S. Enteritidis positive farms"
Annex I

PARTICIPANTS

Task Force Salmonella Sub-Group - members

- Chair of the Task Force Salmonella sub group:
  Clare Faulkner (central administration) Ireland
- Gema Lopez Orozco (central administration) Spain
- Rob De Jonge (Salmonella EURL) Netherlands

European Commission

- Christian Boesinger Unit D4 "Food safety programme, emergency funding" of DG SANTE

Polish competent authority

- Krzysztof Jażdżewski Deputy CVO
- Karolina Florek Animal Health and Welfare Office
- Agnieszka Przygoda Dobrzyńska Animal Health and Welfare Office
- Iwona Zawinowska Food Safety Office
- Joanna Gołębiewska Food Safety Office
- Monika Zakrzewska Dytman Food Safety Office
- Katarzyna Karczmarz Food Safety Office
- Anna Majewska Laboratory Unit
- Monika Skowron Regional Veterinary Inspectorate
- Anna Duras Regional Veterinary Inspectorate
- Mr Mariusz Rawa Regional Veterinary Inspectorate

National Reference Laboratory

- Dariusz Wasyl Department of Microbiology
# Annex II

**TASK FORCE FOR THE MONITORING OF ANIMAL DISEASE ERADICATION:**  
*Salmonella* **SUB-GROUP:**  

**Agenda**

5-7 April 2017  
Warsaw, Poland

## Day 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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| 09:00 | Welcome and introduction  
Presentation of the subgroup on *Salmonella* Task-Force |
| 09:15 | Implementation of the *Salmonella* control programme by the Veterinary Services in Poland: organisation of the services, official sampling, official controls on biosecurity and good hygiene practices, supervision of the laboratories, monitoring of the FBO and official sampling, implementation of trade restrictions, of depopulation measures, confirmatory sampling policy, interferences between *Salmonella* sampling and use of antimicrobials, official controls on feed, measures on birds from infected flocks, etc. |
| 10:15 | Discussions |
| 10:30 | National Reference Laboratory  
Role in the *Salmonella* programmes (coordination of routine laboratories, proficiency testing, etc.) |
| 11:30 | Discussions |
| 11:45 | Private diagnostic laboratories under the programmes |
| 12:15 | Discussions |
| 12:30 | Lunch break |
| 14:00 | Implementation of *Salmonella* Control Programme in breeding flocks of *Gallus gallus*: sampling (FBO, official), biosecurity, confirmatory sampling, trade restrictions, vaccination, hatcheries supervisions, etc. |
| 14:30 | Discussions |
| 14:45 | Implementation of *Salmonella* Control Programme in laying flocks of *Gallus gallus*: sampling (FBO, official), biosecurity, confirmatory sampling, trade restrictions, vaccination, packing centres supervisions, etc. |
| 15:15 | Discussions |
| 15:30 | Break |
| 15:45 | Implementation of *Salmonella* Control Programme per poultry sector: broiler flocks: sampling (FBO, official), biosecurity, food chain information, etc. |
| 16:15 | Discussions |
| 16:30 | Implementation of *Salmonella* Control Programme per poultry sector: breeding turkeys: sampling (FBO, official), biosecurity, confirmatory sampling, trade restrictions, vaccination, hatcheries supervisions, etc.  
Fattening turkeys: sampling (FBO, official), biosecurity, food chain information, etc. |
| 17:00 | Discussions |
| 17:30 | Close of day 1 |

## Day 2

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8.00</td>
<td><strong>Team 1:</strong> departure to laying hen farm in Podkowa Leśna.</td>
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<tr>
<td>9.00-12.00</td>
<td>Visit to the farm and packing centre</td>
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<td>12.00</td>
<td>Return to Warsaw</td>
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<tr>
<td>Time</td>
<td>Activity</td>
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<tr>
<td>8.00</td>
<td><strong>Team 2</strong>: departure to ZHW in Warsaw (routine laboratory)</td>
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<td>8.30-10.00</td>
<td>Visit to the lab</td>
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<tr>
<td>10.00</td>
<td>Departure to the National Reference Laboratory in Pulawy (PIW-PIB) (135 km)</td>
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<tr>
<td>12.00-13.30</td>
<td>Visit to the lab</td>
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<tr>
<td>13.30-14.00</td>
<td>Lunch break</td>
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<tr>
<td>14.00-16.00</td>
<td>Return to Warsaw</td>
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<tr>
<td>16.00</td>
<td>Arrival to Warsaw</td>
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<tr>
<td>Afternoon</td>
<td>Task Force members meeting: preparation of the day 3 meeting</td>
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**Day 3**

<table>
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<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>9:00</td>
<td>Sharing findings, preliminary conclusions and recommendations Discussions</td>
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<tr>
<td>12:00</td>
<td>Closure of the meeting</td>
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