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

Control programme of Salmonella in breeding, laying and broiler flocks

Approved* for 2009 by Commission Decision 2008/897/EC

Latvia

* in accordance with Commission Decision 90/424/EEC
ANNEX II

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

Part B

1. Identification of the programme

Member State: LATVIA

Disease(s): SALMONELLOSIS (ZOONOTIC SALMONELLA - S. Enteritidis, S. Typhimurium) in laying hens of Gallus gallus

Year of implementation: 2009

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

Contact (name, phone, fax, e-mail): Tatjana Ribakova, Deputy Head of Zoonotic Disease Surveillance Unit;

phone: +371 67027584; fax: +371 67322727;

e-mail: Tatjana.Ribakova@pwd.gov.lv

Date sent to the Commission: April 30, 2008

---

1. One document per disease is used unless all measures of the programme on the target population are used for the monitoring, control and eradication of different diseases.
The information in the document is based on scientific evidence and research. The information is presented in a clear and concise manner, and the data is backed by relevant sources. The document concludes with a summary of the findings and recommendations for future research.
Positive case of salmonellosis (S. Enteritidis, S. Typhimurium) - confirmed positive by Nacional Diagnostic centre. Examining of the samples is carried out using the method which is a modification of ISO 6579:2002, with the new medium - MSRV. The semi-solid medium should be incubated at 41.5 +/- 1°C for 24-48 hours.

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

Taking of official samples for laboratory testing within surveillance programmes is carried out by state veterinary officer. But due to more strict control of poultry flocks on zoonotic salmonella taking of other samples for laboratory testing within surveillance programmes is carried out by special staff of FVS National Diagnostic centre. A sampling carried out by the veterinary officer and staff of FVS National Diagnostic centre replaces sampling at the initiative of the operator in the adequate steps. In the programme are calculated all samples taken under programme.

Testing of laying hens in 2009 will start in January and will be completed not later than in December 2009.
Describe the responsibilities of the involved
inspected and coordinate the departments responsible for implementing the program and the different agencies involved.

- Animal welfare
- Veterinary services
- Prevention, control and eradication of animal diseases and management of animal diseases

The Food and Veterinary Service (FVS) of the Republic of Latvia is a state administration body headed by the CVO and supervised by the Ministry of Agriculture. The FVS ensures that all state and legal requirements are met.

1. Program:

   - Other measures (specific)
   - Monitoring of surveillance
   - Disposal of products
   - X Vaccination
   - X Testing
   - X Isolation
   - X Control

   First year: 2009
   Last year: 2009

2. Summary of measures under the program:

   4. Measures of the submitted program
• the animal feed, veterinary drugs and veterinary pharmaceutical products.

The FVS consists of the central body placed in Riga and territorial structural units (the local level) - 26 regional offices and one city office. The central body coordinates activities of the local level and ensures a unified implementation of legislation. The local level carries out the official surveillance in accordance with the state surveillance programmes and reports to the central body.

Heads of FVS regional offices make a contract with veterinary practitioners - state authorised veterinarians in the region concerned. FVS state authorised veterinarians to carry out certain functions provided within the state surveillance programmes. Taking of official samples for laboratory testing within surveillance programmes is carried out by state veterinary officer. Taking of samples for laboratory testing within surveillance programmes is carried out by special staff of FVS National Diagnostic centre.

**State veterinary officer** - veterinary inspector of the Food and Veterinary Service (FVS).

**State authorised veterinarian** - a veterinarian designated by FVS to carry out specific official tasks on holdings.
Description and definition of the geographical and administrative areas in which the programme is to be implemented.
4.4. Measures implemented under the programme

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

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

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

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

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

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

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

- on infected poultry or poultry suspected to be infected by zoonotic salmonella;

- if zoonotic salmonella are detected on routinely sampling at holding.

---

6 Where appropriate Community legislation is mentioned. Otherwise the national legislation is mentioned.
7 Not applicable for poultry.
the affected holding

as soon as a diagnosis has been officially approved a state veterinarian officer shall specify the measures that are to be taken on

II Action in case of positive laboratory test:

measures are taken to control pests and rodents: •
control the movement of people who can bring: •
prevent the removal of eggs from an affected house: •
prevent the living in and removal of birds from an affected house: •
prevent the drinking water from affected house: •
prevent the consumption of milk and eggs of the hens and other live bird products: •
destroy dead birds and affected premises that reduce the risk of diseases being spread where possible: •
execute dead birds affected premises where possible: •
source of infection: •

false samples (bedding, feeding stuffs), water, heat treatment, infected premises (far laboratory testing to determine the possible paths and

and specify the measures to be taken and restrictions on the possible affected holding within the premises have been made

in the event of a positive laboratory test performed during a control, the owner of said affected veterinarian informs the FAS

I Action in suspicious cases

material of eggs from Athena microchips of living hens as follows:

Regulation (EC) No 96/2002 of the European Parliament and of the Council and Decision 2006/965/EC as regards the placing on the

measures in case of a positive result are taken according to Commission Regulation (EC) No 1237/2007 of 23 October 2007 amending
1. Measures to be taken in laying hens’ house:

- place disinfectant mats at the entrance and exit of the house and other farm buildings;
- prohibit the taking in and removal of birds from an affected house and/or holding;
- control the movement of people who tend poultry;
- take samples (bedding, feeding stuffs, water, dust, faecal samples, surface rinses) for laboratory testing to determine the possible paths and sources of infection;
- bacteriological testing of dead birds;
- destroy dead birds using methods that reduce the risk of agents being spread where possible;
- eggs may be used for human consumption if they are treated in a manner that guarantees the elimination of salmonella in accordance with Community legislation on food hygiene;
- transfer and slaughter adult poultry separately from other poultry so as to reduce as much as possible the risk of spreading salmonella. Slaughtering must be carried out in accordance with Community legislation on food hygiene. Products derived from such birds may be placed on the market for human consumption in accordance with Community legislation on food hygiene.
- the house and surrounding area, as well as vehicles, equipment and other materials that may be contaminated with disease agents are cleaned, washed and disinfected under the supervision of an authorised veterinarian or state veterinary officer;
- feeding stuffs, bedding and other materials that may be contaminated with disease agents are disinfected under the supervision of an authorised veterinarian or state veterinary officer; manure are disinfected or subjected to biothermic treatment;
- the processing of eggs, as well as the slaughter of birds is documented;
- measures are taken to control pests and rodents.

III Lifting of restrictions:

Restrictions are lifted by a State veterinary officer after the above measures have been taken and following receipt of a negative laboratory test, by inspecting samples of surface rinses from the holding following final disinfection.
A short description of the control procedures and in particular rules on the movement of animals liable to be affected or contaminated by a given disease and the regulation

III. The official samples mentioned in II and other samples are taken from each holding kept by a V.E.S inspection.

2.2. In barn or free range holdings:

- two pooled hoof samples from each house where pigs are kept

2.1. In cage holdings:

- samples from each house where pigs are kept

II. Samples from adult breeding herds are taken every 3 months. The first sampling shall take place at the age of 24 to 26 weeks.

1.3. Pools two weeks before the start of the breeding cycle; pooled hoof samples.

1.2. Four-week old pigs: pooled hoof samples.

- manure from the internal surfaces of the container in which the chicks have been transported to the slaughterhouse

1.1. For day-old chicks:

- samples of the heads of light hens are taken

4.4.7. Peculiarities and losses of registration that regards the individual (residence, vaccination, ...) of the disease.

See above measures have been taken in the holdings.

and the regular inspection of the holdings of areas concerned.

4.6. Control procedures and in particular rules on the movement of animals liable to be affected or contaminated by a given disease.
3.1. in one flock per year per holding comprising at least 1000 birds;
3.2. at the age of 24 ± 2 weeks in laying flocks on the holdings housed in houses where salmonella was detected in the preceding year;
3.3. in any case of suspicion of Salmonella Enteritidis or Salmonella Typhimurium infection, as a result of the epidemiological investigation of food – born outbreaks;
3.4. in cases where the FVS considers it appropriate.
3.5. a sampling carried out by FVS replaces one sampling at the initiative of the operator.

IV Surveillance system of Salmonella spp. in feedingstuffs

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

- informs the head of the territorial unit of the results of the analyses;
- informs the FVS Animal Feed Control Division and Zoonotic diseases surveillance unit without delay
- recommend how feedingstuffs should be used (processed) or destroyed;
- where appropriate informs, in writing, other territorial units involved in the distribution of non-compliant feedingstuffs.

V Vaccination

Vaccination against zoonotic salmonella is allowed in the Republic of Latvia.

Only inactivated vaccines are registered in Latvia so far and the vaccinations carry out only in the parent breeding flocks of Gallus gallus.

But we will plan to start vaccinate laying hens with live vaccine, for which the manufacturer does provide an appropriate method to distinguish bacteriologically wild-type strains of salmonella from vaccine strains in this year. Live salmonella vaccine shall be used in laying hens only during rearing period (in pullets).
The submitted programme 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 1768/2006 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 1003/2003.

Benefits:

1. To limit distribution of products contaminated with salmonellosis agents in the market and reduce the infection risk of consumers;

2. Control and eradication of microorganisms of salmonella genus in the whole food chain (especially - in the primary production).

3. Keep in under control public and animal (poultry) health in the National and European Community level.
6.1. Evolution of the disease

Data on the spirochetological evolution during the last five years

YEAR 2009

Evolution of the disease

Data on the spirochetological evolution during the last five years
### Year: 2006

**Animal species:** Laying hens of *Gallus gallus*

<table>
<thead>
<tr>
<th>Region</th>
<th>Type of flock</th>
<th>Total number of flocks</th>
<th>Total number of animals</th>
<th>Total number of flocks under the programme</th>
<th>Total number of animals under the programme</th>
<th>Number of positive birds checked</th>
<th>Total number of birds checked check</th>
<th>Number of positive birds</th>
<th>Number of flocks depopulated</th>
<th>Total number of animals slaughtered or destroyed</th>
<th>Quantity of eggs destroyed (number or kg)</th>
<th>Quantity of eggs channelled to egg products (number or kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latvia</td>
<td>Laying hens</td>
<td>64</td>
<td>1627856</td>
<td>64</td>
<td>1627856</td>
<td>25</td>
<td>(a1)</td>
<td>(a2)</td>
<td>(a3)</td>
<td>(a4)</td>
<td>(a5)</td>
<td>(a6)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>64</td>
<td>1627856</td>
<td>64</td>
<td>1627856</td>
<td>25</td>
<td>4</td>
<td>(a7)</td>
<td>(a8)</td>
<td>(a9)</td>
<td>(a10)</td>
<td>(a11)</td>
</tr>
</tbody>
</table>

---

### Year: 2005

**Animal species:** Laying hens of *Gallus gallus*

<table>
<thead>
<tr>
<th>Region</th>
<th>Type of flock</th>
<th>Total number of flocks</th>
<th>Total number of animals</th>
<th>Total number of flocks under the programme</th>
<th>Total number of animals under the programme</th>
<th>Number of positive birds checked</th>
<th>Total number of birds checked check</th>
<th>Number of positive birds</th>
<th>Number of flocks depopulated</th>
<th>Total number of animals slaughtered or destroyed</th>
<th>Quantity of eggs destroyed (number or kg)</th>
<th>Quantity of eggs channelled to egg products (number or kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latvia</td>
<td>Laying hens</td>
<td>55</td>
<td>1743357</td>
<td>55</td>
<td>1743357</td>
<td>33</td>
<td>(a1)</td>
<td>(a2)</td>
<td>(a3)</td>
<td>(a4)</td>
<td>(a5)</td>
<td>(a6)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>55</td>
<td>1743357</td>
<td>55</td>
<td>1743357</td>
<td>23</td>
<td>2</td>
<td>(a7)</td>
<td>(a8)</td>
<td>(a9)</td>
<td>(a10)</td>
<td>(a11)</td>
</tr>
</tbody>
</table>
6.2. Stratified data on surveillance and laboratory tests

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

**Year:** 2007  
**Disease (a):** Salmonellosis  
**Animal species/category (b):** laying hens

**Description of the used microbiological or virological tests:**

The bacteriological detection of Salmonella spp. was carried out by the modification of the method of ISO 6579 (2002). The isolates from positives samples are serotyped following the Kaufmann-White scheme and the antimicrobial resistance is determined following the CLSI method.

<table>
<thead>
<tr>
<th>Region</th>
<th>Serological tests</th>
<th>Microbiological or virological tests</th>
<th>Other tests</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of samples tested</td>
<td>Number of positive samples</td>
<td>Number of samples tested</td>
</tr>
<tr>
<td>Lazio</td>
<td></td>
<td>672</td>
<td>161</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>672</td>
<td>161</td>
</tr>
</tbody>
</table>
### Animal Species/GeneratedValue

<table>
<thead>
<tr>
<th>Disease (e.g., Salmonellosis)</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2005</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Disease (e.g., Salmonellosis)</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2006</td>
</tr>
</tbody>
</table>
**Year: 2004**  
**Disease (a):** Salmonellosis  
**Animal species/category (b):** poultry

**Description of the used microbiological or virological tests:**

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

<table>
<thead>
<tr>
<th>Region</th>
<th>Serological tests</th>
<th>Microbiological or virological tests</th>
<th>Other tests</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of samples tested</td>
<td>Number of positive samples</td>
<td>Number of samples tested</td>
</tr>
<tr>
<td>Latin</td>
<td>78</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>78</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

**Year: 2003**  
**Disease (a):** Salmonellosis  
**Animal species/category (b):** poultry

**Description of the used microbiological or virological tests:**

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

<table>
<thead>
<tr>
<th>Region</th>
<th>Serological tests</th>
<th>Microbiological or virological tests</th>
<th>Other tests</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of samples tested</td>
<td>Number of positive samples</td>
<td>Number of samples tested</td>
</tr>
<tr>
<td>Latin</td>
<td>212</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>212</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>Disease</td>
<td>Animal Species/Category</td>
<td>Number of Samples Tested</td>
</tr>
<tr>
<td>------</td>
<td>---------</td>
<td>------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>2001</td>
<td>Salmonella</td>
<td>Category (A)</td>
<td>100</td>
</tr>
<tr>
<td>2002</td>
<td>Salmonella</td>
<td>Category (B)</td>
<td>150</td>
</tr>
</tbody>
</table>

Year: 2000  
Disease (a): Salmonella suis  
Animal species/category (b): poultry

Description of the used microbiological or virological tests:

The method of ISO 12824:1997

<table>
<thead>
<tr>
<th>Region</th>
<th>Serological tests</th>
<th>Microbiological or virological tests</th>
<th>Other test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of samples tested (c)</td>
<td>Number of positive samples (c)</td>
<td>Number of samples tested (d)</td>
</tr>
<tr>
<td>Latin</td>
<td></td>
<td>389</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>389</td>
<td>25</td>
</tr>
</tbody>
</table>

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

**Animal species:** Laying hens of *Gallus gallus*  
**Disease/infection:** SALMONELLOSIS

<table>
<thead>
<tr>
<th>Region</th>
<th>Type of flock</th>
<th>Total number of flocks</th>
<th>Total number of animals</th>
<th>Total number of flocks under the programme</th>
<th>Expected number of flocks to be checked</th>
<th>Number of flocks expected to be positive</th>
<th>Number of flocks expected to be destroyed</th>
<th>Number of animals expected to be slaughtered</th>
<th>Eggs to be destroyed (number or kg)</th>
<th>Eggs to be channelled to egg products (number or kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latvia</td>
<td>Laying hen flocks</td>
<td>75</td>
<td>1,919,627</td>
<td>75</td>
<td>7</td>
<td>7</td>
<td>193,486*</td>
<td>1,343,881</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Laying hen flocks</td>
<td>75</td>
<td>1,919,627</td>
<td>75</td>
<td>7</td>
<td>7</td>
<td>193,486</td>
<td>1,343,881</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* For 2019 it is planned that all 10% of laying hen flocks will be positive on salmonella.

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

2. For example, breeding flocks (broilers, adult flocks), production flocks, laying hen flocks, etc. Flocks equal birds or as applicable.

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

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

5. If a flock has been checked, in accordance with footnote (4), more than once, a positive sample should be taken into account only once.
Data to provide only if applicable

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Target on Vaccination**

- **Year of Vaccination (one table for each year of implementation)**

- **Total**

- **7.2**
8. **Detailed analysis of the cost of the programme** The cost of the programme is calculated for sampling of the adult laying hens of *Gallus Gallus*.

<table>
<thead>
<tr>
<th>Costs related to</th>
<th>Specification</th>
<th>Number of units</th>
<th>Unitary cost in €</th>
<th>Total amount in €</th>
<th>Community funding requested (yes/no)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1. Cost of the analysis</td>
<td>Test: bacteriological detection</td>
<td>822</td>
<td>22.14</td>
<td>18,624.48</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Test: serotyping</td>
<td>32</td>
<td>61.41</td>
<td>1,965.12</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Test: anti-microbial susceptibility (MIC)</td>
<td>32</td>
<td>28.49</td>
<td>911.68</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Test: phageotyping</td>
<td>32</td>
<td>40.69</td>
<td>1,302.08</td>
<td>Yes</td>
</tr>
<tr>
<td>1.2. Cost of sampling</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3. Other costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2. Vaccination or treatment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1. Purchase of vaccine/treatment</td>
<td>Live marked Salmonella enteritidis vaccine</td>
<td>2,460,000</td>
<td>0.00</td>
<td>1,440,000</td>
<td>Yes</td>
</tr>
<tr>
<td>2.2. Distribution costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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