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

Survey programme for Avian Influenza

Latvia

Approved* for 2013 by Commission Decision 2012/761/EU

* in accordance with Council Decision 2009/470/EC
1. Identification of the programme

Member state: LATVIA

Disease: avian influenza in poultry and wild birds

Request of Community co-financing from beginning of: 2013 to end of 2013

1.1 Contact

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Phone: +371 67095240
Fax: +371 67322727
Email: edvins.olsevskis@pvd.gov.lv

2. Description and implementation of the surveillance programme in poultry

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

(max. 32000 chars):

The Food and Veterinary Service (FVS) of the Republic of Latvia is a state administrative institution headed by the CVO and supervised by the Ministry of Agriculture. The FVS consists of the central body placed in Riga and territorial structural units (the local level) – 10 territorial offices and one city office. The central body coordinates activities of the local level and ensure 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. The State authorised veterinarians report to the respective local veterinary office. Food and Veterinary Service is responsible for implementation of AI surveillance programme.
2.1.2 System in place for the registration of holdings

(max. 32000 chars):

Regulation of Cabinet of Ministers No 650, 16 August, 2011 “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 (Repealing Regulation of Cabinet of Ministers No 712, 16 December, 2003 “Order of registration of animals, herds and holdings and identification of animals”). This regulation is harmonised with Council Directives 92/100/EEC and 90/427/EEC.

All laboratory tests will be done by institute of Food Safety, Animal Health and Environment - "BIOR" which is National Reference laboratory for avian influenza in Latvia.

Sampling in commercial poultry flocks will be carried out during autumn (September-October). Backyard poultry flocks will be sampled during spring (April-May) and autumn (September -October).

2.1.3 Design (risk based or surveillance based on representative sampling)

(max. 32000 chars):

Method used for poultry disease surveillance will be surveillance based on representative sampling.

2.1.3.1 Short description of predominant poultry population and types of poultry production

(max. 32000 chars):

Predominant poultry population in the territory of Latvia is laying hens, and actually there are two poultry production types - broilers (for meat) and laying hens for egg production. Commercial poultry farms Republic of Latvia selling live poultry or their products. Total number of laying hens is slightly above two million birds.
2.1.3.2 Criteria and risk factors for risk based surveillance

(max. 32000 chars):

Food and Veterinary Service is responsible for implementation of AI surveillance programme in whole territory of Latvia taking into account the risk factors - e.g. 1) the location of the poultry holding in proximity to wet areas, 2) free range production, 3) presence of more than one poultry species. The inspectors of FVS will take samples in commercial poultry farms. Veterinarians will take blood samples from poultry in backyard flocks.

(1) Including maps showing target sampling sites identified as being particularly at risk for the introduction of avian influenza virus, taking into account criteria set out in point 4 of Annex I to Commission Decision 2010/367/EC.

2.2 Target populations

(max. 32000 chars):

Laying hens, free range laying hens in backyard flocks, chicken breeders, ducks, geese.

(2) including MS specific exceptional circumstances as described in Annex I point 3 of Commission Decision 2010/367/EU)
2.2.1 **POULTRY HOLDINGS** *(a)* (except ducks, geese and farmed game birds (waterfowl e.g. mallards) to be sampled)

Serological investigation according to Annex I to Commission Decision 2010/367/EU

<table>
<thead>
<tr>
<th>NUTS (2) (b)</th>
<th>Total number of holdings(c)</th>
<th>Total number of holdings to be sampled</th>
<th>Number of samples per holding</th>
<th>Total number of tests</th>
<th>Method of laboratory analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>LV007*</td>
<td>1</td>
<td>1</td>
<td>145</td>
<td>145</td>
<td>HI test for H5/H7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1</td>
<td>1</td>
<td>145</td>
<td>145</td>
<td></td>
</tr>
</tbody>
</table>

*Holdings or herds or flocks or establishments as appropriate.*

*(b)* Refers to the location of the holding of origin. In case NUTS (Nomenclature of Territorial Units for Statistics) can not be used, region as defined in the programme by the Member States is requested.

*(c)* Total number of holdings of one category of poultry in concerned NUTS 2 region.
Standard requirements for the submission of surveillance programmes for avian influenza

Category: laying hens

<table>
<thead>
<tr>
<th>NUTS (2) (b)</th>
<th>Total number of holdings (c)</th>
<th>Total number of holdings to be sampled</th>
<th>Number of samples per holding</th>
<th>Total number of tests</th>
<th>Method of laboratory analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>LV003*</td>
<td>17</td>
<td>17</td>
<td>100</td>
<td>100</td>
<td>Haemagglutination-inhibition-test (HI)</td>
</tr>
<tr>
<td>LV005*</td>
<td>12</td>
<td>12</td>
<td>60</td>
<td>60</td>
<td>Haemagglutination-inhibition-test (HI)</td>
</tr>
<tr>
<td>LV007*</td>
<td>9</td>
<td>9</td>
<td>50</td>
<td>50</td>
<td>Haemagglutination-inhibition-test (HI)</td>
</tr>
<tr>
<td>LV008*</td>
<td>11</td>
<td>11</td>
<td>110</td>
<td>110</td>
<td>Haemagglutination-inhibition-test (HI)</td>
</tr>
<tr>
<td>LV009*</td>
<td>15</td>
<td>15</td>
<td>300</td>
<td>300</td>
<td>Haemagglutination-inhibition-test (HI)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>64</td>
<td>64</td>
<td>620</td>
<td>620</td>
<td></td>
</tr>
</tbody>
</table>

(a) Holdings or herds or flocks or establishments as appropriate.
(b) Refers to the location of the holding of origin. In case NUTS (Nomenclature of Territorial Units for Statistics) cannot be used, region as defined in the programme by the Member States is requested.
(c) Total number of holdings of one category of poultry in concerned NUTS 2 region.

Category: backyard flocks

Delete this category

Add a new row
Standard requirements for the submission of surveillance programmes for avian influenza

<table>
<thead>
<tr>
<th>NUTS (2) (b)</th>
<th>Total number of holdings (c)</th>
<th>Total number of holdings to be sampled</th>
<th>Number of samples per holding</th>
<th>Total number of tests</th>
<th>Method of laboratory analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole territory of Latvia*</td>
<td>0</td>
<td>185</td>
<td>3</td>
<td>555</td>
<td>Haemagglutination-inhibition-test (HI)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>0</td>
<td>185</td>
<td>3</td>
<td>555</td>
<td></td>
</tr>
</tbody>
</table>

(a) Holdings or herds or flocks or establishments as appropriate.
(b) Refers to the location of the holding of origin. In case NUTS (Nomenclature of Territorial Units for Statistics) cannot be used, region as defined in the programme by the Member States is requested.
(c) Total number of holdings of one category of poultry in concerned NUTS 2 region.

Add a new row

Add a category

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Poultry</strong></td>
<td><strong>65</strong></td>
<td><strong>250</strong></td>
<td><strong>768</strong></td>
<td><strong>1 320</strong></td>
</tr>
</tbody>
</table>
### DUCKS, GEESE AND FARMED GAME BIRDS (WATERFOWL e.g. MALLARD) HOLDINGS (a) to be sampled.

**Serological investigation according to Annex I to Commission Decision 2010/367/EU**

<table>
<thead>
<tr>
<th>NUTS (2) (b)</th>
<th>Total number of duck and geese holdings</th>
<th>Total number of duck and geese holdings to be sampled</th>
<th>Number of samples per holding</th>
<th>Total number of tests</th>
<th>Method of laboratory analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>LV009*</td>
<td></td>
<td>2</td>
<td>2</td>
<td>40</td>
<td>Haemagglutination-inhibition-test (HI)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>2</td>
<td>2</td>
<td>40</td>
<td></td>
</tr>
</tbody>
</table>

(a) Holdings or herds or flocks or establishments as appropriate.

(b) Refers to the location of the holding of origin. In case NUTS (2) code can not be used, region as defined in the programme by the Member State is requested.

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**Category:** fattening geese

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**Category:** fattening ducks

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**Category:** fattening geese

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**Category:** fattening ducks

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**Category:** fattening geese

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**Category:** fattening ducks

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**Category:** fattening geese

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**Category:** fattening ducks

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**Category:** fattening geese

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**Category:** fattening ducks

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**Category:** fattening geese

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**Category:** fattening ducks

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**Category:** fattening geese

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**Category:** fattening ducks

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**Category:** fattening geese

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**Category:** fattening ducks

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**Category:** fattening geese

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**Category:** fattening ducks

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**Category:** fattening geese

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**Category:** fattening ducks

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**Category:** fattening geese

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**Category:** fattening ducks

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**Category:** fattening geese

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**Category:** fattening ducks

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**Category:** fattening geese

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## Standard requirements for the submission of surveillance programmes for avian influenza

**NUTS (2) (b)**

<table>
<thead>
<tr>
<th>NUTS (2) (b)</th>
<th>Total number of duck and geese holdings</th>
<th>Total number of duck and geese holdings to be sampled</th>
<th>Number of samples per holding</th>
<th>Total number of tests</th>
<th>Method of laboratory analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>LV007*</td>
<td>1</td>
<td>1</td>
<td>20</td>
<td>20</td>
<td>Haemagglutination-inhibition-test (HI)</td>
</tr>
<tr>
<td>LV009*</td>
<td>1</td>
<td>1</td>
<td>20</td>
<td>20</td>
<td>Haemagglutination-inhibition-test (HI)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2</strong></td>
<td><strong>2</strong></td>
<td><strong>40</strong></td>
<td><strong>40</strong></td>
<td></td>
</tr>
</tbody>
</table>

(a) Holdings or herds or flocks or establishments as appropriate.
(b) Refers to the location of the holding of origin. In case NUTS (2) code can not be used, region as defined in the programme by the Member State is requested

**Add a new row**

**Add a category**

| ducks and geese | 4 | 4 | 80 | 80 |
2.3 Sampling procedures, sampling periods and frequency of testing

(max. 32000 chars):
The aim of the surveillance program is to survey for avian influenza commercial and back yard flocks and holdings. Duration of program is from 1st January 2013 till 31st December 2013.

2.4 Laboratory testing: description of the laboratory tests used and follow up investigations

Description of the used serological tests: (max 32000 chars)
Serological testing for sera of all categories of poultry will be carried out. The haemaglutination – inhibition test (HI) (according to Commission decision...
Standard requirements for the submission of surveillance programmes for avian influenza

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2006/437/EC approving Diagnostic Manual for avian influenza, Chapter VIII, 4th August, 2006) will be used.

3. Description and implementation of the surveillance programme in wild birds

3.1.1 Designation of the central authority in charge of supervising and coordinating the departments responsible for implementing the programme and relevant collaborating partners (e.g. epidemiologists, ornithologists, nature bird observation and hunter organisations).

(max. 32000 chars):

The Food and Veterinary Service (FVS) of the Republic of Latvia is a state administrative institution headed by the CVO and supervised by the Ministry of Agriculture. The FVS consists of the central body placed in Riga and territorial structural units (the local level) – 10 territorial offices and one city office. The central body coordinates activities of the local level and ensure 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. The State authorised veterinarians report to the respective local veterinary office. FVS is responsible for implementation of AI surveillance programme, however good collaboration is established between FVS and ornithologists (Ornitology laboratory of Latvian University) who also reports on dead wild birds found.
3.1.2  **Description and delimitation of the geographical and administrative areas in which the programme is to be applied**

(max. 32000 chars):

Passive surveillance of wild birds will be implemented in a whole territory of Latvia.

3.1.3  **Estimation of the local and/or migratory wildlife population**

(max. 32000 chars):

Data is not available.

3.2  **Design, criteria, risk factors and target population**

(max. 32000 chars):

Anseriformes (water fowl) and Charadriiformes (shorebirds and gulls) will be the main sampling targets to assess if they carry LPAI viruses of H5 and H7
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subtypes (which would in any case also detect HPAI H5N1 and other HPAI, if present). Samples will be taken in a frame of passive surveillance. Found dead and suspected wild birds - mainly Anseriformes (water fowl) and Charadriiformes (shorebirds and gulls) will be the main sampling targets species.

(3) Areas at risk (wetlands in particular where links with high density poultry populations), previous positive findings as referred to in point 2 of Part 1 of Annex II to Commission Decision 2010/367/EC should be taken into account and if possible complemented by a map.

3.2.1 WILD BIRDS focussed on target species

Investigations according to the surveillance programme set out in Part 2 of Annex II to Decision 2010/367/EC

<table>
<thead>
<tr>
<th>NUTS (2) code/region (a)</th>
<th>Wild birds to be sampled (b)</th>
<th>Total number of birds to be sampled</th>
<th>Estimated total number of samples to be taken for active surveillance (c)</th>
<th>Estimated total number of samples to be taken for passive surveillance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole territory of Latvia*</td>
<td>Wild birds moribund and found dead</td>
<td>20</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>0</td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

(a) Refers to the place of collection of birds/samples. In case NUTS 2 (Nomenclature of Territorial Units for Statistics) can not be used, region as defined in the programme by the Member State is requested. Please fill-in these values directly in the field.

(b) General description of the wild birds are intended to be sampled in the framework of the active and passive surveillance.

(c) Voluntary, to be included for information purposes, not eligible for cofinancing.
3.3 Sampling procedures and sampling periods

Sampling in frame of passive surveillance in wild birds will be carried out during all period set in programme.

3.4 Laboratory testing: description of the laboratory tests used

Real-time RT-PCR (HA2 region of the H7 gene and N1 gene (according to VLA, 6th February, 2007), M gene and H5 gene (according to Commission decision 2006/437/EC approving Diagnostic Manual for avian influenza, Chapter VI; 4th August, 2006)) and Virus isolation test in embryonated fowls’ eggs (according to Commission decision 2006/437/EC approving Diagnostic Manual for avian influenza, Chapter VIII, 4th August, 2006) will be used for monitoring of wild birds.

4. Description of the epidemiological situation of the disease in poultry during the last five years

AI has not been registered in Latvia in poultry.
5. **Description of the epidemiological situation of the disease in wild birds during the last five years**

(max. 32000 chars):

HPAI in wild birds is not registered in Latvia. In 2006 in a frame of AI surveillance program 44, in 2007-27, in 2008 -1 and in 2009 - 18, 2010 - 19, 2011 - 43 wild ducks were found positive to LPAI (other than H5 and H7)

6. **Measures in place as regards the notification of the disease**

(max. 32000 chars):

Animal owners must immediately notify to veterinarian on animal death, aborts, simultaneous affection of several animals and any case, which arise suspicions that animal are affected by infectious disease (Chapter XI, Article 59, and point 8.a of the Law of Veterinary medicine).

Regulation of Cabinet of Ministers No 127, 21 February, 2012 “Regulation on registrable and notifiable infectious diseases under state control and information to be provided to the Food and Veterinary Service (Repealing Order No 241, 21.09.2001 issued by Food and Veterinary Service determines the list of diseases (including AI) immediately notified to the Central Authority of Food and Veterinary Service and FVS Order No.6, 08.01.2009.).

Regulation of Cabinet of Ministers No 405, 19 June, 2007 “Order of avian influenza prophylaxis and eradication” and FVS Order No 79, 19.07.2010. “Instruction on eradication of avian influenza” determines measures to be taken in case of AI suspicion and confirmation (in line with Council directive
7. Costs

7.1 Detailed analysis of the costs

7.1.1 Poultry

Cost of HI test to subtypes H5 and H7 is 13.03 Euro. Testing of one bird to H5 and H7 = 13.03 Euro.

7.1.2 Wild birds

Cost of RT PCR (M gene) – 42.38 Euro
Cost of RT PCR (H5, H7, N1) – 41.19 Euro
Cost of virus isolation test – 119.76 Euro
### 7.2 Summary of the costs

#### 7.2.1 Poultry surveillance

**Detailed analysis of the cost of the programme - poultry**

<table>
<thead>
<tr>
<th>Methods of laboratory analysis</th>
<th>Number of tests</th>
<th>Unitary test cost (per method) in €</th>
<th>Total cost (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELISA test</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>agar gel immune diffusion test</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Hemagglutination-inhibition-test (H1) for H5 (specify number of tests for H5)</td>
<td>1 400</td>
<td>6.51</td>
<td>9114</td>
</tr>
<tr>
<td>Hemagglutination-inhibition-test (H1) for H7 (specify number of tests for H7)</td>
<td>1 400</td>
<td>6.51</td>
<td>9114</td>
</tr>
<tr>
<td>Virus isolation test</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PCR test</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other please specify here</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
### Standard requirements for the submission of surveillance programmes for avian influenza

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<table>
<thead>
<tr>
<th>Sampling</th>
<th>Number of samples</th>
<th>Unitary cost in €</th>
<th>Total cost (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samples</td>
<td>1 400</td>
<td>0.5</td>
<td>700</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other measures</th>
<th>Number of samples</th>
<th>Unitary cost in €</th>
<th>Total cost (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other please specify here</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Total poultry Testing + Sampling + Other measures**  
4 200  
18 928,00 €
### 7.2.2 Wild bird surveillance

#### Detail analysis of the cost of the programme - wild birds

<table>
<thead>
<tr>
<th>Methods of laboratory analysis</th>
<th>Number of tests</th>
<th>Unitary test cost (per method) in €</th>
<th>Total cost (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virus isolation test</td>
<td>3</td>
<td>119.76</td>
<td>359.28</td>
</tr>
<tr>
<td>PCR test</td>
<td>20</td>
<td>42.38</td>
<td>847.6</td>
</tr>
<tr>
<td>RT PCR for H5, H7 and N1</td>
<td>5</td>
<td>41.19</td>
<td>205.95</td>
</tr>
<tr>
<td>Other please specify here</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other please specify here</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

#### Sampling

<table>
<thead>
<tr>
<th>Samples</th>
<th>Total cost (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of samples</th>
<th>Unitary cost in €</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>5</td>
</tr>
</tbody>
</table>
### Standard requirements for the submission of surveillance programmes for avian influenza

**version : 2.2**

<table>
<thead>
<tr>
<th>Other measures</th>
<th>Number</th>
<th>Unitary cost in €</th>
<th>Total cost (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other please specify here</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Add a new row**

<table>
<thead>
<tr>
<th>Total wild birds</th>
<th>Number</th>
<th>Unitary cost in €</th>
<th>Total cost (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Testing + Sampling + Other measures</td>
<td>48</td>
<td></td>
<td>1,512,83 €</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grand Total</th>
<th>Number</th>
<th>Unitary cost in €</th>
<th>Total cost (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poultry + Wild birds</td>
<td>4248</td>
<td></td>
<td>20,440,83 €</td>
</tr>
</tbody>
</table>
Attachments

IMPORTANT:
1) The more files you attach, the longer it takes to upload them.
2) This attachment files should have one of the format listed here: zip, jpg, jpeg, tiff, tif, xls, doc, bmp, pna.
3) The total file size of the attached files should not exceed 2 500Kb (+- 2.5 Mb). You will receive a message while attaching when you try to load too much.
4) IT CAN TAKE SEVERAL MINUTES TO UPLOAD ALL THE ATTACHED FILES. Don't interrupt the uploading by closing the pdf and wait until you have received a Submission Number!
5) Zip files cannot be opened (by clicking on the Open button). All other file formats can be opened.