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

Survey programme for Avian Influenza

Malta

Approved* for 2014 by Commission Decision 2013/722/EU

* in accordance with Council Decision 2009/470/EC
Instructions to complete the form:

1) In order to fill in and submit this form you must have at least the

Adobe Reader version 8.1.3

or higher otherwise you will not be able to use the form.

Your version of Acrobat is: 10.104

2) Please provide as much information as possible, in addition to those required by fields marked with an asterisk (*) which are mandatory. Should you need clarifications on some of the information requested, please contact SANCO-BO@ec.europa.eu.

3) To verify your data entry while filling your form, you can use the "verify form" button at the top of each page.

4) When you have finished filling the form, verify that your internet connection is active and then click on the submit notification button below. If the form is properly filled, the notification will be submitted to the server and a Submission number will appear in the corresponding field.

5) IMPORTANT: Once you have received the Submission number, save the form on your computer.

6) If the form is not properly filled, an alert box will appear indicating the number of incorrect fields. Please check your form again and try to re-submit it according to steps 4), 5) and 6). Should you still have any difficulties, please contact SANCO-BO@ec.europa.eu.

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1. Identification of the programme

   Member state: MALTA

   Disease: avian influenza in poultry and wild birds

   Request of Union co-financing for the period:
   FROM 2014 TO 2014

1.1 Contact

   Name: Dr. Anthony Grupetta
   Phone: 0035625905168
   Fax.: 0035625905182
   Email: cvo.mrae@gov.mt

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
2.1.2  **System in place for the registration of holdings**

There are two Legal notices regulating registration of egg-laying farms. The Poultry Breeding Stock Regulations LN 50 of 1997 requires that any person breeding any poultry is obliged to hold a licence issued by the CA. The Egg Marking Standard Regulations LN 345/2003, on the other hand, require that all eggs sold at retail level, excluding those sold directly to the consumers on farm, have to be marked by a unique identity number. The unique number that is printed on the eggs is correlated with the farms unique registration number. The unique identity mark for eggs is issued by the competent authority, which is the VRD. Therefore all commercial egg-laying farms have to be registered with the CA for such an identity number to be issued. There is only one central CA and there are no regional offices owing to the size of the territory. Each registered farm is given a unique registration number. The registration number is made up of three or four letters and a three digit number. The letters indicate if it is a layer, broiler or mixed farm in Malta or Gozo eg. PLM stands for Poultry layer Malta, PLG - Poultry Layer Gozo while PBLM stands for Poultry Broiler Layer Malta. The licence of the registered farms is renewed annually by the CA. If no rearing was carried out on the farm for a period of 12 months, the licence is not renewed. All data relevant to the licensed egg-laying farms are kept on the National Livestock database of the CA. Details of the individual batch code number, number of different batches of birds, the size and date of hatch of each batch. The batch code number also identifies if the birds were hatched locally or brought in as day-olds or as point of lay pullets. As from 2011, details of vaccination (identification of batch, type and batch number of vaccine) are to be included as well with all other farm records.
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(max. 32000 chars):

As Malta is not in a position to carry out a sufficiently evidence based assessment of risk pathways for infection of poultry flocks in its territory, surveillance programme based on a representative sample as outlined in Annex 1 of Commission Decision 367/2010 will be adopted.

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

(max. 32000 chars):

There are no poultry parent stock flocks on the Islands of Malta and Gozo. There are two registered hatcheries on the Island of Malta. Hatching Regulations LN48 of 1997, lays down the provisions that regulate the national hatchery establishments.

Hatching eggs are imported from EU member states, primarily from France, Italy, Netherlands and Belgium. All consignments are imported with the official Intra Trade Certificate issued according to Council Directive 539/90. The number of egg-laying hatching eggs imported are always on the decline. Day-old chicks and layer pullets are also imported from EU countries, mainly from Italy. In fact the number of layer pullets imported have been increasing. The egg-laying poultry industry has been on the decline these past few years. Five holdings closed down definitaly during 2010 since flocks were found infected with the targeted serovars. Another issue that is affecting the industry is the introduction of enriched cages which is a heavy financial burden for the smaller holdings.

The VRD is the CA and hatcheries are legally obliged to report the number of hatching eggs imported, submitting a copy of import/trade documents. The competent authority then prints out a “hatch report” which is passed on to the hatchery. This form is returned to the competent authority once the particular batch of eggs have been hatched and sold with the details of all the farms, which are the destination of chicks sold.

There is no central egg-packing plant. The farmers can either sell the eggs produced directly to shops, supermarkets or egg-collectors, who in turn would deliver to shops / supermarkets. All farmers pack their own egg produce. The majority pack the eggs manually, only a few producers have automation for grading, stamping and packing.

Layer farms are registered in terms of the Egg Marketing Standard Regulations LN 345 of 2003 under Chapter 427 -The Product Safety Act. In accordance to this law each individual egg-laying farm is given a unique identity number that has to be printed on all the eggs produced on that farm and sold to shops, supermarkets or egg-collectors. This legislation excludes eggs sold directly to the consumer. The CA is responsible for issuing the unique identity number. Egg laying farms are therefore registered with the CA, whereby a unique registration number is given to the farm, following registration then the unique marking number for the eggs is issued.

Control at retail level falls under a different Ministry, the Ministry of Health.

Until 2010, operators were requested to send in monthly reports to the CA-Animal Health and Welfare Unit. One of the reports involves details that include the daily production of eggs, number of live birds,
number of deaths and quantity of feed consumed. The second report is a sales report where the farmer
is declaring the quantity of eggs sold supported by fiscal receipts. Since 2011, all registered holdings
have been given an official register with all the data requested as described above which has to be filled
in by the operator. The register will be replaced every three years.

There are currently thirty-three (33) operational layer farms (6 are found on the island of Gozo),
compared to the forty-one operational in 2010. In 2012, the total number of animals was 196,141.

STRUCTURE OF LAYER FARMS:
To date, there are no free-range farms and all the birds are kept in cages on more than one tier, usually
up to a maximum of five tiers. All cage houses have manure belts.
The majority of farms operate on a first-in, first-out basis. Malta has a constant problem of space, so it
is uncommon to find large houses. The vast majority of holdings are made up of a number of houses
having small capacities. The houses are usually in close proximity of one another. The birds kept in one
house are considered as an individual epidemiological unit in accordance to the Regulation.

NUMBER OF FLOCKS:
The number of houses that are used may vary slightly. In 2012 there were 38 holdings, taking in account
the different houses; this amounts to a total of 66 flocks on the Islands.

Broilers
Malta and the smaller sister island of Gozo are considered as one region for the surveillance and control
of disease. The Competent Authority responsible for the Salmonella Control Programme at farm level,
feed level, primary production and manufacturing level excluding retail, falls under the Veterinary
Regulation Directorate (VRD) under the Agriculture and Fisheries Regulation Department within Ministry
for Resources and Rural Affairs –

Registration of Farms:
There are no breeding flocks of Broilers in Malta at present. Broiler farms are registered with the CA. The operators book the number of birds or day-olds for the next rearing from the hatcheries who import hatching eggs and day-olds. The farmers do not import any day-olds for themselves but all book through the hatcheries. There is no association of poultry breeders and the industry is made up of a quite a number of small farms, all operating individually. The number of birds reared has decreased by about 500,000 between 2010 and 2011. In 2011, there were 74 operational holdings compared to 89 holdings in 2010.

Hatcheries:
There are two registered hatcheries on the Island of Malta. However one of these is responsible for
supplying the vast majority of farms and also imports day-olds for the farms. Hatching Regulations LN48 of 1997 lays down the provisions that regulate the national hatchery establishments. Hatching eggs are imported from EU member states, primarily from France, Italy, Netherlands and Belgium. All consignments are imported with the official Intra Trade Certificate issued according to Council Directive 539/90.
The hatcheries are legally obliged to the report to the VRD, as competent authority, the number of hatching eggs imported, submitting a copy of import/trade documents. The Animal Health Unit authority then prints out a “hatch report” which is passed on to the hatchery. This form is returned to the competent authority once the particular batch of eggs have been hatched and sold. This hatch report includes a list of farms which are the destination of chicks sold. From this documentation, staff at the Animal Health section record all relevant data on the National Livestock database (Intratrace). A movement document is issued by the competent authority and given to the farmer. This document follows the flock up to the slaughterhouse, where the slaughterhouse fills in the number of birds slaughtered. The movement document is then returned to the CA. A new movement document for a new batch of birds is only issued after a three-week resting period between rearing of different batches.

Structure of Broiler holdings:
The number of birds reared has decreased by about 500,000 between 2010 and 2011. In 2011, there were 74 operational holdings compared to 89 holdings in 2010 (798 flocks). Holdings are family-run and are generally part-time businesses. There are no free-range farms on Malta / Gozo. All broilers are bred in closed houses, kept on bedding. The houses are generally situated very close to each other. A holding with a capacity of 5000 - 6000 can be divided up into three houses (therefore flocks).

The slaughter age of the broilers can vary slightly depending on the market demand such as a seasonal request for capons in December, however, on average the animals are slaughtered between 5 – 6 weeks. The general rule is an all-in-all-out system with a three-week resting period between flocks.

Total amount of birds reared in 2012 was around 2,612,987. 73 operational, with 581 flocks in all.

The operators have individual agreements with the slaughterhouses to whom they sell their birds. There are four slaughter houses all located on the Island of Malta. Generally each slaughter house maintains working relationships with the same number of operators. The slaughterhouses would then sell the produce to retail outlets (butcher shops, supermarkets).

2.1.3.2  Criteria and risk factors for risk based surveillance(1)

As Malta is not in a position to carry out a sufficiently evidence based assessment of risk pathways for infection of poultry flocks in its territory, surveillance programme based on a representative sample as outlined in Annex 1 of Commission Decision 367/2010 will be adopted.

(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 (2)**

(2) including MS specific exceptional circumstances as described in Annex I point 3 of Commission Decision 2010/367/EU)

An evidence based assessment of risk pathways for infection of poultry flocks in the Maltese territory, has not been carried out.

The only target populations present in the Maltese Islands as set out in point 3 Annex 1 of Commission Decision 367/2010 are laying hens (a) the other varieties of poultry listed (b to l) are not reared on a commercial level.

All target populations, that is, laying hens will be sampled. This will be carried out when flocks are sampled for salmonella according to the Salmonella National Control Programme.

There are currently 33 operational holdings with layers on the Maltese islands.

On the bases of Annex 1 of Commission Decision 367/2010, point 5 (representative sampling method), table 1(Number of poultry holdings to be sampled in each poultry production category) all 38 holdings will be sampled.

In line with point 5.2 of Annex 1 of Commission Decision 367/2010, between 10 and 20 samples will be collected from each of the houses.

The only Target Populations present in the Maltese Islands as set out in point 3 Annex 1 of Commission Decision 367/2010 are laying hens (a) the other varieties of poultry listed (b to l) are not reared on a commercial level.
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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

In case of multiannual programme, please provide targets on annual basis. If your targets differ between different implementation years please provide separate tables per year in attachment.

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>Malta</td>
<td>33</td>
<td>33</td>
<td>20</td>
<td>660</td>
<td>ELISA test</td>
</tr>
<tr>
<td>Malta</td>
<td>0</td>
<td>0</td>
<td>20</td>
<td>20</td>
<td>agar gel immune diffusion test</td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
<td>33</td>
<td>40</td>
<td>680</td>
<td></td>
</tr>
</tbody>
</table>

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

(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.

<table>
<thead>
<tr>
<th>Category</th>
<th>Region 1</th>
<th>Region 2</th>
<th>Region 3</th>
<th>Region 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Poultry</td>
<td>33</td>
<td>33</td>
<td>40</td>
<td>680</td>
</tr>
</tbody>
</table>

2.2.2 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
In case of multiannual programme, please provide targets on annual basis.
If your targets differ between different implementation years please provide separate tables per year in attachment.

Category: Not applicable

<table>
<thead>
<tr>
<th>NUTS (2) (b)</th>
<th>Total number of duck and goose holdings</th>
<th>Total number of duck and goose 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>malta</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0 ma</td>
<td>X</td>
</tr>
<tr>
<td>Total</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</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
### 2.3 Sampling procedures, sampling periods and frequency of testing
Standard requirements for the submission of surveillance programmes for avian influenza

(version : 2.22)

(max. 32000 chars):

The testing period will run from January to December 2014. All target populations, that is, laying hens will be sampled. This will be carried out when flocks are sampled for salmonella.

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

Description of the used serological tests: (max 32000 chars)

- The initial screening of the blood samples will be carried out at the National Veterinary Laboratory of the Veterinary and Phytosanitary Regulation Department using the IDEXX ELISA kits.
- Any positive samples to the ELISA screening test will be sent to the Community Reference Laboratory for avian influenza in Weybridge, UK where further testing using Haemagglutination-inhibition-tests for H5 and H7 antibodies will be carried out.
- Virus isolation and PCR on faecal and tracheal samples from wild birds shall be carried out by the Community Reference Laboratory for avian influenza in Weybridge, UK. Virus isolation and PCR have been chosen as test methods due to the type of birds available for sampling. The origin of these samples are illeagly hunted wild birds where blood sampling would not be a viable option.

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).

The Veterinary and Phytosanitary Regulation Department, Albertown, Marsa is responsible for the programme. The National Veterinary Laboratory is responsible for testing and dispatch of samples to the CRL.

- Sampling shall take place between January and December 2014.

The targeted population are local and migratory wild birds.

There are several non-Government organizations involved in both hunting and conservation, namely The Federation for Hunting and Conservation – Malta (FKNK), Birdlife Malta and Nature trust. The collaboration with hunting associations, bird conservation groups, bird parks and bird sanctuaries will be maintained. This will ensure a continuous supply of samples from migratory wild bird species for active and passive surveillance.

In the Maltese Islands there are two establishments that function as a bird park and as a falconry center. Close contact with these centers is maintained as the presence of the captive birds in these establishments may act as an attraction to migrating bird species.

There are also two main bird sanctuaries one in Mistra, the Simar reserve, and one in Mellieha, the Ghadira reserve, which are run by local conservation groups where wild birds may aggregate. Samples from these parks are also taken through collaboration with the conservation groups involved. Due to the banning of the spring hunting season the number of bird activity appears to be on the increase in certain areas.

The VRFCCD also has in place a help line through which the public can notify the division with regards to any wild birds found dead in the countryside or the coastline.

3.1.2 Description and delimitation of the geographical and administrative areas in which the programme is to be applied
Standard requirements for the submission of surveillance programmes for avian influenza

(max. 32000 chars):

- The surveillance programme will apply to the Islands of Malta and Gozo;

- The two islands are going to be considered as one region

3.1.3 Estimation of the local and/or migratory wildlife population

(max. 32000 chars):

There are no statistics of the local and/or migratory wildlife population, the following data is based on the number of hunted or trapped birds:

Anas acuta 13 Rallus aquaticus 19 Carduelis caduelis 497
Anas clauropea 14 Fulica atra 64 Carduelis chloris 2494
Anas crecca 62 Pluvialis apricaria 1192 Carduelis spinus 296
Anas Penelope 22 Pluvialis squatarola 59 Coccothraustes coccothraustes 94
Anas platyrhynchos 38 Vanellus vanellus 97 Fringilla coelebs 3746
Anas querquedula 6 Gallinago gallinago 121 Serinus serinus 1599
Anas strepera 29 Lymnocryptes minimus 39 Sturnus vulgaris 25348
Anser anser 21 Philomachus pugnx 41 Turdus philomelos 39263
Anser fabalis 29 Scolopax rusticola 1504 Turdus viscivorus 324
Aythya farina 6 Columba palumbus 31 Turdus pilarios 834
Aythya fuligula 7 Streptopelia turtur 36675 Carduelis cannabina 14362
Mergus serrator 9 Alauda arvensis 24022 Gallinula chloropus 77
Coturnix coturnix 18792 Turdus iliacus 543 Turdus merula 573
3.2 Design, criteria, risk factors and target population

The objectives of the programme are to maintain vigilance for the appearance of strains of Avian Influenza in local and migratory wild bird species through active and passive surveillance. Around 380 species have been recorded in the islands. About 50 are winter visitors, 112 more or less regular migrants and the rest rare or irregular migrants or vagrants. The presence of birds in summer months is rather low with the peak of activity attained in spring and autumn. Although there is a consistent migration of birds throughout the islands in both seasons, weather conditions greatly affect the numbers of migrants. On some days during migration the islands may experience a large influx of birds, while at other times there may be very little movement in evidence. The migrants include both species that winter south of the Sahara and those that go no further than the Mediterranean basin. During late summer, herons, raptors, waders, hirundines, several warblers and chats are present on the island. These increase dramatically in September and October. In November the migration of trans-Saharan migrants is over and replaced by influxes of the wintering species, some waterfowl and plovers, finches and other passerines.

In spring a similar progression, but in reverse order, can be observed between early March and late May. Hoopoes, Marsh Harriers, Grey and Night Herons and Swallows and Martins in transit are amongst the first to appear in Spring. They are followed by small passerines such as Subalpine, Great Reed and Icterine Warblers and later by Golden Orioles, Bee Eaters, Woodchat Shrikes and the occasional Roller.

Wild ducks and other migratory birds shall be sampled by means of cloacal swabs, tracheal swabs and/or faecal samples, which shall be sent to the CRL in Weybridge for testing by means of PCR and viral isolation. The collaboration with hunting associations, bird conservation groups, bird parks and bird
sanctuaries will be maintained. This will ensure a continuous supply of samples from migratory wild bird species for active and passive surveillance. In the Maltese Islands there are two establishments that function as a bird park and as a falconry center. Close contact with these centers is maintained as the presence of the captive birds in these establishments may act as an attraction to migrating bird species. There are also two main bird sanctuaries one in Mistra, the Simar reserve, and one in Mellieha, the Ghadira reserve, which are run by local conservation groups where wild birds may aggregate. Samples from these parks are also taken through collaboration with the conservation groups involved. Due to the banning of the spring hunting season the number of bird activity appears to be on the increase in certain areas. The VRFCDD also has in place a help line through which the public can notify the division with regards to any wild birds found dead in the countryside or the coastline.

(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**

In case of multiannual programme, please provide targets on annual basis. If your targets differ between different implementation years please provide separate tables per year in attachment.

<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>Malta</td>
<td>species in annex 2 part 2</td>
<td>10</td>
<td>10</td>
<td>20 X</td>
</tr>
</tbody>
</table>
3.3 Sampling procedures and sampling periods

Wild ducks and other migratory birds shall be sampled by means of cloacal swabs or tracheal swabs, which shall be sent to the CRL in Weybridge for testing by means of PCR and viral isolation.

3.4 Laboratory testing: description of the laboratory tests used

- Virus isolation and PCR on faecal, cloacal and tracheal samples from wild birds shall be carried out by the Community Reference Laboratory for avian influenza in Weybridge, UK.
- Swabs will be dispatched by express courier to the CRL under suitable conditions to ensure the survival of the virus if this is present in the sample.
4. Description of the epidemiological situation of the disease in poultry during the last five years

In 2002 an EU funded epidemiological survey was carried out on the poultry population of Malta and Gozo. Sampling was carried out at slaughter houses in most of the cases. All the 139 farms tested were negative. In total 1680 samples were tested in 2002.

Surveillance programme 2003
No AI surveillance was carried out in 2003

Surveillance programme 2004
A total of 38 poultry holdings were sampled and tested in 2004. A total of 341 birds were tested using IDEXX ELISA. Thirty of the sera were sent to the CRL for confirmatory tests. None of the holdings or samples tested were positive.

Surveillance programme 2005
A total of 63 poultry farms in Malta and 9 farms in Gozo were tested during the surveillance programme carried out during 2005. The blood samples were tested locally using the IDEXX kit for avian Influenza. Samples from 33 holdings in Malta and 3 in Gozo gave positive results. These were sent to the CRL for AI in Weybridge, UK for confirmation using the haemagglutination-inhibition tests for H5/H7. All samples resulted negative to the confirmatory test.

Surveillance programme 2006
The surveillance of poultry flocks was similar to that for the year 2005. An intensification of the number of samples from poultry holdings has been undertaken. The number of holdings sampled in 2006 was 71, while the number of birds sampled was 1239.
Surveillance programme 2007

In 2007, 74 layer holdings were sampled. A total of 709 samples were collected and tested during this year.

None of the samples tested in 2007 tested positive for Avian Influenza.

Surveillance programme 2008

In 2008 layer holdings were sampled and tested using IDEXX ELISA kits. A total of 276 samples were collected and tested during this year.

None of the samples tested in 2008 tested positive for Avian Influenza.

Surveillance programme 2009

The surveillance of poultry flocks was similar to that of the previous years. Layer flocks were sampled and tested by the National Veterinary Laboratory using IDEXX ELISA kits. The number of samples collected and tested in 2009 was 683.

Surveillance programme 2010

In 2010, 44 layer holdings were sampled and tested using IDEXX ELISA kits. A total of 1800 samples were collected and tested during this year.

None of the samples tested in 2010 tested positive for Avian Influenza.

Surveillance programme 2011
In 2011, 38 layer holdings were sampled and tested using IDEXX ELISA kits. A total of 1800 samples were collected and tested during this year.

None of the samples tested in 2011 tested positive for Avian Influenza.

In 2012, 33 layer holdings were sampled and tested using IDEXX ELISA kits. A total of 1218 samples were collected and tested during this year.

None of the samples tested in 2012 tested positive for Avian Influenza.

5. *Description of the epidemiological situation of the disease in wild birds during the last five years*

*(max. 32000 chars):*

Surveillance programme 2005

32 samples were taken from wild birds. Apart from organ samples from two dead birds found on a cargo ship originating from Taiwan, which were tested by viral isolation, all other samples were sera from wild ducks. All samples were sent to the CRL in Weybridge, UK and resulted negative.

Surveillance programme 2006

In 2006 the number of wild ducks and other migratory birds sampled by means of cloacal swabs and/or faecal samples, and sent to the CRL in Weybridge for testing by means of PCR and viral isolation was 90. A number of other wild and semi captive ducks, 36, were tested by serology.
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Surveillance programme 2007

A number Wild ducks and other migratory birds were also sampled by means of cloacal swabs, tracheal swabs and/or faecal samples, which were then sent to the CRL in Weybridge for testing by means of PCR and viral isolation.

Surveillance programme 2009

A number of wild birds (19) were sampled by means of cloacal swabs, tracheal swabs and/or faecal samples, which were sent to the CRL in Weybridge for testing by means of PCR and viral isolation. The collaboration with hunting associations, bird conservation groups, bird parks and bird sanctuaries has been maintained. All samples tested negative.

Surveillance programme 2010 and 2011

In the previous years the main source of wild bird samples originated from birds shot during the spring migration. Due to the clamping down by the Maltese Authorities on this practice, during 2010, no samples of wild birds were collected and tested during 2010 and 2011.

Surveillance programme 2012

As in the previous years the main source of wild bird samples originated from birds shot, mostly illegally, during the spring migration. Some of these birds are recovered by the Administrative Law Enforcement Unit of the Maltese Police and handed over to the division. During 2013 seven birds were sampled, these included ::
1 yellow legged gull
2 cory's shearwater
2 grey herons
2 greater flamingoes
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6. Measures in place as regards the notification of the disease

The Veterinary Service Act, Chapter 437 Articles 5, 6,7,8,9 16, 18, 19, 35 and 37 and the second, third and fifth schedule of the Act, lay down Local legislation that deals with the notification of Avian Influenza.

7. Costs

7.1 Detailed analysis of the costs

7.1.1 Poultry

The ELISA tests used for testing of poultry, are purchased from IDEXX is calculated at 2 Euro per sample. Laboratory personnel has not been included since staff also carries out other duties namely related to the salmonella control programme.

A number of samples will be sent to the CRL in the U.K to be tested by other methods such as PCR, HI, AGIDT and virus isolation. Any positive ELISA samples will be sent to the CRL in the UK for confirmatory analysis.
7.1.2 Wild birds

(max. 32000 chars):

Any samples collected from wild birds will be sent to the CRL in the U.K to be tested by other methods such as PCR, HI and virus isolation.
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7.2 Summary of the annual costs: 2014

7.2.1 Poultry surveillance

Detailed analysis of the cost of the programme - poultry

In case of multiannual programme, please provide estimations on annual basis. If your cost estimations differ between different implementation years please provide separate tables per year in attachment.

<table>
<thead>
<tr>
<th>Laboratory testing</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>660</td>
<td>2</td>
<td>1320</td>
</tr>
<tr>
<td>agar gel immune diffusion test</td>
<td>20</td>
<td>6.5</td>
<td>130</td>
</tr>
<tr>
<td>Haemagglutination-inhibition-test (H5)</td>
<td>20</td>
<td>6.5</td>
<td>130</td>
</tr>
<tr>
<td>Haemagglutination-inhibition-test (H7)</td>
<td>20</td>
<td>6.5</td>
<td>130</td>
</tr>
<tr>
<td>Virus isolation test</td>
<td>20</td>
<td>70</td>
<td>1400</td>
</tr>
<tr>
<td>PCR test</td>
<td>20</td>
<td>30</td>
<td>600</td>
</tr>
</tbody>
</table>
### Standard requirements for the submission of surveillance programmes for avian influenza

**version : 2.22**

<table>
<thead>
<tr>
<th>Other please specify here</th>
<th>0</th>
<th>0</th>
<th>0</th>
</tr>
</thead>
</table>

#### Sampling

<table>
<thead>
<tr>
<th></th>
<th>Number of samples</th>
<th>Unitary cost in €</th>
<th>Total cost (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samples</td>
<td>1 860</td>
<td>0.5</td>
<td>930</td>
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</table>

#### Other measures

<table>
<thead>
<tr>
<th>Other please specify here</th>
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<th>0</th>
<th>0</th>
</tr>
</thead>
</table>

#### Total poultry

**Testing + Sampling + Other measures**

<table>
<thead>
<tr>
<th></th>
<th>2 420</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>4 640,00 €</td>
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</tbody>
</table>
Standard requirements for the submission of surveillance programmes for avian influenza

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>20</td>
<td>70</td>
<td>1400</td>
</tr>
<tr>
<td>PCR test</td>
<td>20</td>
<td>30</td>
<td>600</td>
</tr>
<tr>
<td>Other please specify here</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<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>20</td>
<td>3</td>
<td>60</td>
</tr>
</tbody>
</table>

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

**version : 2.22**

<table>
<thead>
<tr>
<th></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>
<tr>
<td>Total wild birds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Testing + Sampling + Other measures</td>
<td>60</td>
<td></td>
<td><strong>2 060,00 €</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>2680</td>
<td></td>
<td><strong>6 700,00 €</strong></td>
</tr>
</tbody>
</table>
Standard requirements for the submission of surveillance programmes for avian influenza

version : 2.22

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: .jpg, jpeg, tiff, tif, xls, doc, bmp, png, pdf.
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!