



submitted for obtaining EU financial contribution

Annex IV: Programme for the surveillance of Avian Influenza in poultry and wild birds

Member States seeking an EU financial contribution for national programmes for eradication, control and surveillance of animal diseases and zoonosis shall submit online this document completely filled out by the 31 May of the year preceding its implementation (part 2.1 of Annex I to the Single Market Programme Regulation).

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- 6) You are invited to submit your programmes in English.

Document version number: 2022 1.0

Member state : IRELAND

Disease Avian Influenza

This program is multi annual :

Request of Union co-financing from beginning : To end of

Request year for multiannual programme :

1. Contact data

Name Phone

Email Your job type within the CA :

Submission Date

28/11/2022 15:00:54

Submission Number

1669647657140-18861



ANNEX 4 : Standard requirements for the submission of surveillance programmes for avian influenza in poultry and wild birds

2. Description and implementation of the surveillance programme in poultry

2.1.1 Designation of the authorities in charge of supervising coordinating and implementing the programme. Please describe in details who designs, who implements, and who monitors the programme in poultry. (Roles of central authority, local authorities, vets, farmers, labs, hunting associations, etc.)

(max. 32000 chars) :

The Department of Agriculture, Food and the Marine (DAFM) is the competent authority in Ireland with responsibility for the design, management, co-ordination, implementation and monitoring of the Avian Influenza (AI) surveillance programme in poultry. Within DAFM, the National Disease Control Centre (NDCC) designs and coordinates the programme.

In poultry, the programme is implemented by DAFM technical staff working in both Regional Veterinary Offices who carry out on-farm sampling and the DAFM Veterinary Public Health Implementation Service who carry out sampling of poultry at slaughter plants. DAFM technical staff transport the samples to the Central Veterinary Research Laboratory (CVRL), Ireland's National Reference Laboratory located at Backweston Campus, Celbridge, Co. Kildare where they are subjected to testing for Avian influenza. Test details and results are collated by the CVRL and provided to the NDCC in order to monitor the programme and for reporting purposes.

The NDCC is also responsible for supervising and coordinating surveillance in wild birds. In wild birds, trained DAFM staff based in Regional Veterinary Offices (RVOs) and National Parks and Wildlife Service (NPWS) staff collect moribund and dead wild birds for avian influenza surveillance. Such birds are submitted to Ireland's network of Regional Veterinary Laboratories (RVLs) for sampling. All samples are tested in the CVRL.

2.1.2 Description of System in place for the registration of holdings

(max. 32000 chars) :

The registration of all poultry establishments in Ireland with DAFM is a national legislative requirement in accordance with Statutory Instrument No. 114/2014 - Control on places where poultry are kept Regulations 2014. The requirement to register applies to all poultry premises, from large commercial poultry establishments to premises with only 1 or 2 birds such as hobby or "backyard" poultry flocks. Registration can be achieved by online application or by contacting the local Regional Veterinary Office. Information on registering poultry and a link to the online registration form is publicly available on DAFM's website at <https://www.gov.ie/en/service/984df6-poultry-register/> A register of poultry premises in Ireland is maintained on DAFM's Animal Health Computer System (AHCS).

DAFM keeps its poultry register under review, for example in 2019 letters were issued to all persons on the register (both commercial and non-commercial flocks) asking them to confirm whether they still

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kept poultry and to provide updated and additional information on their flocks.

2.1.3 Design (risk based surveillance, or surveillance based on representative sampling taking into account criteria in Annex II of Commission Delegated Regulation (EU) 2020/689.

Provide justification for the choice of the design. Please refer also explicitly to the objectives of the surveillance programme as mentioned in section 2 of Annex II Commission Delegated Regulation (EU) 2020/689.

(max. 32000 chars) :

Ireland's avian influenza surveillance programme is based on representative sampling, which takes into account criteria in Annex II of Commission Delegated Regulation (EU) 2020/689 and is built on a comprehensive approach including different components of surveillance activities complementing each other in poultry and wild bird populations. The programme is carried out from 1st January to 31st December each year with sampling and serological testing carried out for the purpose of detecting the presence of antibodies to avian influenza. The national strategy in relation to AI surveillance is to prevent establishment of disease by monitoring for the presence and early detection of the virus, through active and passive surveillance of domestic poultry and wild birds.

Ireland's surveillance programme is consistent with the objectives listed in section 2 (1) of Annex II to Commission Delegated Regulation (EU) 2020/689 in its efforts towards the early detection of HPAI should this Member State have an incursion of the disease into its poultry population. Mandatory reporting of any suspicion of disease is a legal requirement and forms part of Ireland's early warning system. All suspect cases are immediately investigated by DAFM to either confirm or rule out disease. The objective of early detection of HPAI in wild birds as detailed in Section 2(2) of CDR (EU) 2020/689, is met by Ireland's passive surveillance of wild birds which instructs that all moribund and dead wild birds on our Target wild bird species for Avian Influenza Surveillance PDF document (attached) which are reported to DAFM and are suitable for collection, are submitted where possible to DAFM's network of Regional Veterinary Laboratories for sampling purposes. All samples from such birds are submitted to the CVRL for avian influenza testing.

An early warning system for unusual mortalities in wild birds is in place with Birdwatch Ireland, National Parks and Wildlife Service, and the National Association of Regional Game Councils. In addition, DAFM operates an Avian Influenza telephone hotline and the Avian Check app which is a dedicated app for the reporting of wild birds for avian influenza surveillance which allows reporting of dead wild birds by these groups or members of the public. Accurate recording of the location of wild birds found as well as individual bird information provides information for the assessment of risk for virus spread following findings of HPAI in wild birds. This allows increased levels of monitoring and heightened vigilance by National Parks and Wildlife rangers in areas surrounding where cases of HPAI in wild birds have been confirmed.

Risk mitigation measures can be introduced by DAFM as a result of early detection in wild birds such as enhanced biosecurity legislation for poultry owners (Statutory Instrument No. 593/2021) which was introduced on 17 November 2021 following the detection of HPAI H5N1 in wild birds in Autumn 2021. Restrictions on the assembly of Live Birds Regulations (Statutory Instrument No. 592/2021) were also introduced on this date as a risk mitigation measure against the spread of avian influenza. These pieces

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of national legislation were subsequently withdrawn in May 2022, again based on risk assessment.

Avian influenza surveillance in the poultry population will be carried out throughout the year. However, the time period for sampling some categories of poultry will coincide with seasonal production e.g. fattening geese which are traditionally reared and slaughtered for the Christmas market are more likely to be sampled in the last few months of the year. A higher level of confidence in detection of duck and goose positive establishments is applied due to the evidence that infected duck and goose establishments are less likely than gallinaceous poultry to be detected by passive surveillance or early detection systems. Ireland has a low number of fattening geese and duck flocks as shown in the tables detailing the numbers of 'Poultry Establishments and Sampling Targets' (attached). As a result, it is Ireland's aim to sample all commercial flocks for avian influenza on an annual basis. This policy not only ensures that we maintain the high levels of confidence in our testing programme but also fulfils the objective detailed in Section 2(3) CDR(EU) 2020/689 which aims to detect HPAI in poultry species which generally do not show significant clinical signs. The fact that Ireland's aim is to test all geese and duck flocks negates the need for a risk-based complementary surveillance for HPAI in such poultry species as detailed in Section 5 CDR (EU) 2020/689.

In order to optimise efficiency and also to avoid unnecessary entry of persons onto poultry establishments, sampling is, whenever possible combined with sampling under Ireland's Poultry Health Programme (PHP).

Objective 4 in Section 2 CDR (EU) 2020/689 aims to detect circulating Low Pathogenicity Avian Influenza Virus (LPAIV) that may spread easily between poultry flocks in view of their potential to mutate to HPAI. Ireland suggests that our prescribed sampling targets as detailed in 'Poultry Establishments and Sampling Targets' attached, are suitably robust to detect subclinical infections with LPAI in gallinaceous birds (namely chickens, turkeys, guinea fowl, pheasants, partridges and quails) of subtypes H5 and H7 thereby complementing early detection systems and subsequently mitigating the risk of possible mutation of these viruses to HPAI. Should a positive LPAI result be returned, NDCC would initiate supplementary testing of flocks in the area, taking risk factors at establishment level such as the kept species, presence of several poultry species and biosecurity practices and housing conditions into account as detailed in Section 6 CDR (EU) 2020/689.

The testing of all moribund/dead wild birds reported to DAFM will also serve to detect the presence of LPAIV. The information gathered on this testing will contribute to the increased knowledge on HPAI and LPAIV posing a potential zoonotic risk. All testing for avian influenza will be carried out at the CVRL and any positive results will then be sent to the Community Reference Laboratory (EURL) for Avian Influenza.

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

Please provide also a table with the number of poultry holdings and birds existing for each poultry type, and map with the geographic distribution and density of poultry holdings. (If not available, please explain)

(max. 32000 chars) :

The Animal Health Computer System (AHCS) operated by the Department of Agriculture, Food and the Marine contains information on all registered poultry flocks in Ireland. The system which registers the

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capacity of commercial enterprises is currently being reviewed with the intention of collating more detailed information on poultry categorisation numbers in the future. As poultry numbers are highly variable on commercial units for example due to seasonal and production cycle factors, for the purposes of the current avian influenza surveillance programme, we are using a combination of current flock registration data obtained from AHCS, data obtained from a DAFM led nationwide data collection questionnaire to poultry owners in 2019, and with more specific categorisation data from egg production records from DAFM. Estimated numbers of live poultry per category including backyard flocks are detailed in the attached Poultry Establishment and Sampling Targets pdf . As per Table 1 in the attached document, based on capacity numbers Caged Laying Hens, Free Range Laying Hens and Chicken Breeders have the largest population figures, followed closely by Broilers kept in free range production. However, as per the same table , it can be seen that the largest number of commercial establishments are in Free Range Laying Hens (212), Chicken Breeders (120) and Fattening Turkeys (110). Please note that broilers (not kept under free range production) are not a targeted poultry population for AI surveillance purposes.

The number of backyard poultry in Ireland is estimated to be approximately 276,000 birds contained within 5062 registered flocks according to a nationwide survey held in 2019 with registered poultry owners. It is a legal requirement that all poultry establishments are registered with DAFM even if they only have 1 bird. 58% of backyard flocks have 10 birds or less. Only 11% of flocks have greater than 30 birds (See Table 3). According to this survey, 2928 flocks have less than 10 birds, 1,554 flocks have 11- 30 birds, 248 flocks have 31-50 birds and 311 flocks have in excess of 50 birds. A poultry density map displaying the geographical location of these flocks is in the attached Poultry Population Density Ireland pdf.

As displayed in Table 2, a total of 604 commercial poultry establishments are involved in ten categories of production. Application of the Nomenclature of Territorial Units for Statistics (NUTS) 3 to the number of establishments per poultry category figures in the table referred to above, provides a geographical indication of the distribution and density of commercial poultry production in Ireland.

It can also be seen from this data that the largest number of poultry establishments are present in the Border Region IE041. A map illustrating Poultry Population Density Ireland pdf is also attached. This shows areas of the country that are densely populated with poultry based on capacity numbers of poultry establishments.

2.1.3.2 Criteria and risk factors for risk based surveillance (1) Please describe the risk factors as regard the criteria set in Annex II of Commission Delegated Regulation (EU) 2020/689.

(max. 32000 chars) :

Ireland is applying surveillance based on representative sampling taking into account criteria in Annex II of Commission Delegated Regulation (EU) 2020/689 as detailed in 2.1.3. Target sampling populations for representative sampling are set out in the attached 'Poultry Establishments and Sampling Targets' PDF which demonstrate a spatial representation using NUTS 3 level regions whilst also taking into account poultry density of production in each region.

(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 Annex II of Commission Delegated Regulation (EU) 2020/689.

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2.2 Target populations

Please explain:

- 1) *The strategy of selection of the holdings to be sampled. (Random, risk based, geographic distribution)*
- 2) *The number of holdings sampled, with regard to the minimum requirements set in Annex II section 9 to Commission Delegated Regulation (EU) 2020/689.*
- 3) *The number of samples taken in each holding with regard to the minimum requirements set in Annex II section 9 to Commission Delegated Regulation (EU) 2020/689.*

(max. 32000 chars):

Ireland is using a representative sampling method. Establishments are selected for sampling based on geographic distribution with a proportionate number of samples taken from each NUTS 3 region relative to the number of registered poultry establishments of each poultry category located within. Sampling targets, have been predetermined in order to give a minimum of 95% confidence of detecting at least one infected establishment if the prevalence of infected establishments is 5%. A table which details the number of establishments to be sampled considering the minimum requirements set out in Annex II Section 9 of Commission Delegated Regulation (EU) 2020/689 can be found in the attached 'Poultry Establishments and Sampling Targets' PDF document.

In line with the sampling and laboratory testing methods set out in Section 9 of CDR (EU) 2020/689 the time period for sampling coincides with seasonal production for each poultry production category e.g. broilers which are consistently produced all year round are sampled throughout the year. In turkeys, fattening geese and fattening ducks which are traditionally reared and slaughtered for the Christmas market, production cycle and sampling coincides with the higher avian influenza risk period from November onwards each year. DAFM staff are instructed to collect 20 samples from each poultry establishment during a sampling event. According to information collected by DAFM, there is an average of two houses of poultry located on each poultry premises in Ireland. It is therefore more efficient to instruct our poultry bleeding staff, or sample collectors at slaughter plants, to take 20 samples from each establishment (in other words 10 samples per house), rather than deliberating on the number of samples to be taken per establishment in each individual case.

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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

Targets for year **2023**

Category : laying hens

delete this category

In the column "Total number of samples", please put 0 if the same samples have already been counted for another laboratory analysis (example : for HI-H5 and HI -H7 test, only 1 sample should be counted)

NUTS (2) (b)	Total number of holdings(c)	Total number of holdings to be sampled	Number of samples per holding	Total number of samples	Total number of tests	Method of laboratory analysis	
IE04	28	22	20	440	440	HI-test (H5)	X
IE04	28	22	20	0	440	HI-test (H7)	X
IE05	8	6	20	120	120	HI-test (H5)	X
IE05	8	6	20	0	120	HI-test (H7)	X
IE06	8	7	20	140	140	HI-test (H5)	X
IE06	8	7	20	0	140	HI-test (H7)	X
Total					1 400		
						Add a new row	

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- (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) 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.

Category : free range laying hens

delete this category

In the column "Total number of samples", please put 0 if the same samples have already been counted for another laboratory analysis (example : for HI-H5 and HI -H7 test, only 1 sample should be counted)

NUTS (2) (b)	Total number of holdings(c)	Total number of holdings to be sampled	Number of samples per holding	Total number of samples	Total number of tests	Method of laboratory analysis	
IE04	140	35	20	700	700	HI-test (H5)	X
IE04	140	35	20	0	700	HI-test (H7)	X
IE05	38	11	20	220	220	HI-test (H5)	X
IE05	38	11	20	0	220	HI-test (H7)	X
IE06	34	8	20	160	160	HI-test (H5)	X
IE06	34	8	20	0	160	HI-test (H7)	X
Total					2 160		

Add a new row

- (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) 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.

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Category : chicken breeders

delete this category

In the column "Total number of samples", please put 0 if the same samples have already been counted for another laboratory analysis (example : for HI-H5 and HI -H7 test, only 1 sample should be counted)

NUTS (2) (b)	Total number of holdings(c)	Total number of holdings to be sampled	Number of samples per holding	Total number of samples	Total number of tests	Method of laboratory analysis	
IE04	53	23	20	460	460	HI-test (H5)	X
IE04	53	23	20	0	460	HI-test (H7)	X
IE05	46	21	20	420	420	HI-test (H5)	X
IE05	46	21	20	0	420	HI-test (H7)	X
IE06	21	10	20	200	200	HI-test (H5)	X
IE06	21	10	20	0	200	HI-test (H7)	X
Total					2 160		
Add a new row							
<p>(a) Holdings or herds or flocks or establishments as appropriate.</p> <p>(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</p> <p>(c) Total number of holdings of one category of poultry in concerned NUTS 2 region.</p>							

Category : turkey breeders

delete this category

In the column "Total number of samples", please put 0 if the same samples have already been counted for another laboratory analysis (example : for HI-H5 and HI -H7 test, only 1 sample should be counted)

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NUTS (2) (b)	Total number of holdings(c)	Total number of holdings to be sampled	Number of samples per holding	Total number of samples	Total number of tests	Method of laboratory analysis	
IE04	9	9	20	180	180	HI-test (H5)	X
IE04	9	9	20	0	180	HI-test (H7)	X
Total					360		
						Add a new row	
<p>(a) <i>Holdings or herds or flocks or establishments as appropriate.</i></p> <p>(b) <i>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</i></p> <p>(c) <i>Total number of holdings of one category of poultry in concerned NUTS 2 region.</i></p>							

Category : fattening turkeys

delete this category

In the column "Total number of samples", please put 0 if the same samples have already been counted for another laboratory analysis (example : for HI-H5 and HI -H7 test, only 1 sample should be counted)

NUTS (2) (b)	Total number of holdings(c)	Total number of holdings to be sampled	Number of samples per holding	Total number of samples	Total number of tests	Method of laboratory analysis	
IE04	75	37	20	740	740	HI-test (H5)	X
IE04	75	37	20	0	740	HI-test (H7)	X
IE05	14	6	20	120	120	HI-test (H5)	X
IE05	14	6	20	0	120	HI-test (H7)	X
IE06	21	10	20	200	200	HI-test (H5)	X
IE06	21	10	20	0	200	HI-test (H7)	X
Total					2 120		

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Add a new row

- (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) 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.

Category : broilers (only when at risk)

delete this category

In the column "Total number of samples", please put 0 if the same samples have already been counted for another laboratory analysis (example : for HI-H5 and HI -H7 test, only 1 sample should be counted)

NUTS (2) (b)	Total number of holdings(c)	Total number of holdings to be sampled	Number of samples per holding	Total number of samples	Total number of tests	Method of laboratory analysis	
IE04	19	11	20	220	220	HI-test (H5)	X
IE04	19	11	20	0	220	HI-test (H7)	X
IE05	50	29	20	580	580	HI-test (H5)	X
IE05	50	29	20	0	580	HI-test (H7)	X
IE06	3	2	20	40	40	HI-test (H5)	X
IE06	3	2	20	0	40	HI-test (H7)	X
Total					1 680		

Add a new row

- (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) 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.

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Add a category

Totals	Total number of tests	Total number of samples
Total poultry 2023	9 880	4 940

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

Targets for year **2023**

Category : duck breeders

delete this category

In the column "Total number of samples", please put 0 if the same samples have already been counted for another laboratory analysis (example : for HI-H5 and HI -H7 test, only 1 sample should be counted)

NUTS (2) (b)	Total number of duck and geese holdings	Total number of duck and geese holdings to be sampled	Number of samples per holding	Total number of samples	Total number of tests	Method of laboratory analysis
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IE05	1	1	20	20	20	HI-test (H5)	X
IE05	1	1	20	0	20	HI-test (H7)	X
IE06	3	3	20	60	60	HI-test (H5)	X
IE06	3	3	20	0	60	HI-test (H7)	X
Total					160		

Add a new row

(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

Category : fattening ducks

delete this category

In the column "Total number of samples", please put 0 if the same samples have already been counted for another laboratory analysis (example : for HI-H5 and HI -H7 test, only 1 sample should be counted)

NUTS (2) (b)	Total number of duck and geese holdings	Total number of duck and geese holdings to be sampled	Number of samples per holding	Total number of samples	Total number of tests	Method of laboratory analysis	
IE04	10	10	20	200	200	HI-test (H5)	X
IE04	10	10	20	0	200	HI-test (H7)	X
IE05	5	5	20	100	100	HI-test (H5)	X
IE05	5	5	20	0	100	HI-test (H7)	X
IE06	5	5	20	100	100	HI-test (H5)	X
IE06	5	5	20	0	100	HI-test (H7)	X
Total					800		

Add a new row

(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 : geese breeders

delete this category

In the column "Total number of samples", please put 0 if the same samples have already been counted for another laboratory analysis (example : for HI-H5 and HI -H7 test, only 1 sample should be counted)

NUTS (2) (b)	Total number of duck and geese holdings	Total number of duck and geese holdings to be sampled	Number of samples per holding	Total number of samples	Total number of tests	Method of laboratory analysis	
IE05	1	1	20	20	20	HI-test (H5)	X
IE05	1	1	20	0	20	HI-test (H7)	X
IE06	2	2	20	40	40	HI-test (H5)	X
IE06	2	2	20	0	40	HI-test (H7)	X
Total					120		

Add a new row

(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

Category : fattening geese

delete this category

In the column "Total number of samples", please put 0 if the same samples have already been counted for another laboratory analysis (example : for HI-H5 and HI -H7 test, only 1 sample should be counted)

NUTS (2) (b)	Total number of duck and geese holdings	Total number of duck and geese holdings to be sampled	Number of samples per holding	Total number of samples	Total number of tests	Method of laboratory analysis	
IE04	2	2	20	40	40	HI-test (H5)	X
IE04	2	2	20	0	40	HI-test (H7)	X
IE05	5	5	20	100	100	HI-test (H5)	X
IE05	5	5	20	0	100	HI-test (H7)	X
IE06	3	3	20	60	60	HI-test (H5)	X

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IE06	3	3	20	0	60	HI-test (H7)	X
Total					400		
Add a new row							
<p>(a) <i>Holdings or herds or flocks or establishments as appropriate.</i></p> <p>(b) <i>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</i></p>							

Add a category

Totals	Total number of tests	Total number of samples
Total ducks and geese and farmed game birds 2023	1 480	740

TOTALS for Poultry (2.2.1) + Ducks and Geese (2.2.2) and farmed game birds for year :

2023

Poultry + Ducks/Geese /farmed game birds	Total number of tests
Grand Total	11 360
Grand Total ELISA	0
Grand Total agar	0
Grand Total HI tests (H5)	5 680
Grand Total HI tests (H7)	5 680
Grand Total Virus Isolation test	0

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Grand Total PCR test	0
Grand Total Samplings	5 680

2.3 Sampling procedures, sampling periods and frequency of testing taking into account criteria set out in Annex II of Commission Delegated Regulation (EU) 2020/689.

For each poultry category please detail the place of sampling (holding or slaughterhouse), the period and frequency of the testing, and who is in charge of the sampling.

(max. 32000 chars):

Poultry samples in Ireland are taken collectively as part of the following surveillance programmes, consistent with the sampling and laboratory testing methods as described in Section 9 of Annex II CDR (EU) 2020/689:

Samples are taken by DAFM veterinary inspectors or technical agricultural officers either at the slaughterhouse or on farm for H5 and H7 serological tests between 1st January and 31st December each year depending on the category of production. On farm sampling is carried out on breeding stock and commercial layers. Where possible, commercial turkeys, and ducks will be sampled at the time of slaughter. From time to time, fattening stock may be sampled on farm. Certain poultry categories such as fattening turkeys will be sampled coinciding with seasonal production. In cases where an establishment is sampled more than once, different flocks will be chosen at each sampling.

The Poultry Health Programme (PHP) is a DAFM surveillance programme to support trade in poultry, and to comply with Commission Delegated Regulation (EU) 2020/688. The PHP tests for avian influenza by serology and also includes testing for Mycoplasma and Salmonella. Under the PHP samples are taken from flocks at set intervals depending on the category of poultry and the stage of production. In order to ensure that the same flock is not tested repeatedly for avian influenza under this system, staff receiving the samples at DAFM's Central Veterinary Laboratory monitor the holdings sampled at 6 monthly intervals to ensure that the same holding is not tested more than once during that period. In the event that the same holding is tested twice within the same year, the sampling interval combined with the average lifespan of certain categories of the poultry (such as broilers), should ensure that a different flock is being tested on each occasion.

It should be noted that in all cases a proportion of samples from each holding submitted for testing under the PHP are tested for avian influenza H5 & H7,

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irrespective of whether they are counted as part of the co-funded avian influenza programme or not which increases the likelihood of detecting circulating H5 or H7 viruses for the duration of the annual programme.

2.4. Laboratory testing: description of the laboratory tests used.

Please describe the tests to be used and their purpose (screening test or confirmatory test or follow-up investigations) for each category of poultry.

Please explain the number of tests calculation for each poultry category, and if it is in line with Annex II to Commission Delegated Regulation (EU) 2020/689.

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

All Avian Influenza testing is carried out at the National Reference Laboratory (NRL) at the Virology Division, Central Veterinary Research Laboratory (CVRL), Department of Agriculture, Food and the Marine (DAFM), Backweston Campus, Stacumny Lane, Celbridge, Co. Kildare, Ireland. All test methods are set out by the European Union Reference Laboratory (EURL) Istituto Zooprofilattico Sperimentale delle Venezie, Viale dell'Università, 10 - 35020 - Legnaro (PD) in Italy. In addition, the EURL provides technical support and antigen reagents.

Laboratory testing will be carried out in accordance with Regulation (EU) 2016/429 and the relevant details and guidance made available on the websites of the EURL and of the Commission. Consistent with the requirements of Section 9 CDR (EU) 2020/689, laboratory testing will be carried out by either virological methods or serological methods or both methods as appropriate.

Wild birds which are sampled for avian influenza surveillance undergo an AI MP PCR test. Any positive AI MP PCR tests are then subjected to additional PCR tests (PCR H5 and PCR H7) and pathotyping assays and, if required, virus isolation tests.

The target number of flocks to be sampled for the annual H5 H7 EU surveillance programme is set out by the CDR (EU) 2020/689. Poultry sampling targets are calculated based on a 95% confidence of detecting at least one infected establishment if the prevalence of infected establishments is 5%. Sampling of poultry establishments is stratified throughout Ireland per NUTS 3 regions which provides a geographical representation of the number of poultry flocks in Ireland. There are only a small number of commercial duck and geese establishments in Ireland. The number of duck, goose and mallard holdings to be sampled are calculated to detect one infected poultry holding where the prevalence of infected poultry holdings is at least 5% with a 99% confidence interval. However, as ducks and geese are less likely than gallinaceous poultry to show clinical signs of AI, DAFM aims to include all commercial duck and

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geese establishments in the annual surveillance programme. The targets are detailed in the 'Poultry Establishments and Sampling Targets' PDF as attached.

DAFM staff are instructed to sample on average 10 birds per house from each targeted establishment resulting in an average of 20 samples collected per establishment in accordance with the objectives of Annex II CDR (EU) 2020/689. Serological screening will be carried out using the Haemagglutination Inhibition (HI) test for poultry (including turkeys, ducks and geese). A separate HI-H5 and HI-H7 test will be carried out on each sample:

- The H5 strains used for H5 HI test screening: Teal/England/7394-2805/06 (H5N3), and for H5 HI confirmation: Chicken/Scotland/59 (H5N1).
 - When ducks and geese are tested, both, the Teal/England/7394-2805/06 (H5 N3) and, Turkey/Italy/7898/2014(H5N8) will be used in all cases in accordance with the recommendations of the EURL. The addition of the H5N8 antigen in ducks and geese for HI testing, was recommended by the former EURL, Weybridge UK, due to the occurrence of highly pathogenic avian influenza of the subtype H5N8 in 2014/2015.
 - The H7 strains used for H7 HI screening: Turkey/England/647/77 (H7N7), and for H7 HI confirmation: African Starling/983/79 (H7N1).
- Under Ireland's National Poultry Health Programme (PHP), samples are tested using the Agar Gel Immunodiffusion test (AGID). In the event that an AGID tests positive, an ELISA test would be applied. If this ELISA test is positive, then H5 and H7 HAI tests are applied as above. In parallel if ELISA confirms the AGID results, an official investigation into the flock is carried out by DAFM and further sampling and testing would occur.

Vaccination against avian influenza is prohibited in Ireland except under licence for specific captive birds located in confined establishments e.g. zoos.

All positive serological findings in all poultry (including ducks and geese) are officially investigated as suspect HPAI by the competent authority (DAFM) at the establishments concerned, as defined in Article 9.1 (b) of Commission Delegated Regulation 2020/689. Following a positive test result for AI by a serological screening method, a subtype H5 H7 HAI method is applied. In parallel with these additional tests an official farm investigation and further sampling is carried out.

A standard set of samples are taken from poultry in accordance with Annex I of Commission Delegated Regulation 2020/687 and include:

- 20 tracheal or oropharyngeal swabs
- 20 cloacal swabs
- 20 blood samples
- 5 dead/sick/euthanised birds for tissue collection.

Swabs and tissue samples are collected in Viral Transport Media (VTM) . Methods for Virus identification in swabs and tissues are as follows:

- 1st Test: AI M-gene PCR: Real Time Reverse Transcription Polymerase Chain Reaction (rRT-PCR) M gene to test for the presence of Avian Influenza RNA.
- 2nd Test: HA-gene PCR (H5, H7): If AI M-gene PCR is positive, real time PCR is performed for the H5- and H7- genes.

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- 3rd Test: Pathotyping (Sequencing of HA-Cleavage site): If HA-gene PCR is positive for H5 or H7 subtypes, further characterisation is carried out by using conventional PCR and nucleotide sequencing to determine if they are highly pathogenic or low pathogenic. The portion of the HA gene coding for the cleavage site region of the haemagglutinin of H5 and H7 subtypes is determined in-house by Sanger sequencing. In addition, characterization of neuraminidase gene is determined by rRT-PCR of the NA gene sequence.
- 4th Test: Virus isolation: Additionally, VI is carried out on embryonated fowl eggs on all positive samples at the CVRL (DAFM).
- 5th Test: IVPI: If required, Virus isolates are also sent to the AI/ND European Reference Laboratory (EURL), for further sequencing and for Intravenous Pathogenicity Index (IVPI) testing .

The methods for virus identification in swabs and tissues from ducks and geese is the same as those described above for poultry.

The conclusions of these tests will be reported to the Commission and the EURL. The results will be submitted quarterly in the format as laid down by the Commission. Samples found positive for H5 or H7 in poultry will be reported to the Commission. Samples found to be positive for HPAI will be notified immediately in accordance with CIR (EU) 2020/2002 via the Animal Disease Information System.

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

3.1.1 *Designation of the authorities in charge of supervising, coordinating, and implementing the programme and relevant collaborating partners (e.g. epidemiologists, ornithologists, nature bird observation and hunter organisations).*

Please describe in detail who designs, who implements, and who monitors the programme in wild birds.

Please detail the system in place to detect the dead wild birds; please explain who delivers the wild birds to the laboratory.

(max. 32000 chars) :

DAFM is in charge of supervising, co-ordinating and implementing the risk based passive surveillance programme for wild birds. DAFM has a well-established early warning system in place for unusual mortalities in wild birds with the National Parks and Wildlife Service (NPWS), Birdwatch Ireland and

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the National Association of Regional Game Councils. DAFM maintains regular contact with these groups. DAFM also provides specific annual training on avian influenza to the NPWS in the form of workshops for field staff during which they are updated on the current situation with avian influenza as well as given advice on occupational health aspects of dealing with dead wild birds, particularly if there is a heightened risk of avian influenza in the island of Ireland.

DAFM engages the expertise of ornithologists from Birdwatch Ireland to tailor the target list to include only species of birds that are found in Ireland. A copy of the list Target wild bird species for Avian Influenza Surveillance PDF is attached. This list is regularly updated through monitoring of reported wild bird confirmed cases to ADIS and tailoring this list for species that could be found in Ireland. Dead, moribund or sick birds are typically reported to DAFM by one of the stakeholders mentioned above or by members of the public. DAFM has a dedicated Avian Influenza Hotline number for reporting dead wild bird as well as the recently launched Avian Check Wild Bird App whereby members of the public can report the presence of a moribund/dead bird. On receipt of a notification of a dead wild bird, those that are on the list of target species are collected, sampled and tested for avian influenza. Collection and delivery to the laboratory of dead wild birds is carried out either by DAFM staff from Regional Veterinary Offices or by staff from the NPWS. Sampling and testing of birds is carried out by DAFM's own laboratory services. Test results are collated and provided to the National Disease Control Centre for programme submission.

3.1.2 Description and delimitation of the geographical and administrative areas in which the programme is to be applied

max. 32000 chars) :

Ireland is a small island and has an abundance of coastal and inland waterways and therefore it is prudent that our wild bird surveillance programme implemented as a passive surveillance scheme across the entire country. Any moribund or dead individual or group of wild birds listed on the Target wild bird species for Avian Influenza Surveillance PDF are collected by trained DAFM staff and submitted for avian influenza surveillance throughout the year. There are 16 DAFM Regional Veterinary Offices located throughout Ireland which collect wild birds within their own regions. Birds are transported to one of 6 DAFM Regional Veterinary Laboratories for sampling which are located in Cork, Limerick, Kilkenny, Athlone, Sligo and Backweston, Celbridge, Co. Kildare. Samples are then transported from the DAFM RVL to the CVRL located in Backweston, Celbridge, Co. Kildare where they are tested for avian influenza.

Certain geographical areas where migratory waterfowl can be found in large numbers are monitored closely with the assistance of stakeholders such as

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the NPWS and Birdwatch Ireland e.g. Wexford Wildfowl Reserve.

3.1.3 Estimation of the local and/or migratory wildlife population

Please provide main species, number of birds, migratory routes, geographic distribution or risk areas.

(max. 32000 chars):

Please provide main species, number of birds, migratory routes, geographic distribution or risk areas.

Annual monitoring of the distribution and abundance of wintering waterbirds is carried out in the Republic of Ireland by the Irish Wetland Bird Survey (I-WeBS). This monitoring programme, which commenced during the winter of 1994/95, is funded by the National Parks and Wildlife Service (Department of Culture, Heritage and the Gaeltacht) and coordinated by the I-WeBS Office based at BirdWatch Ireland. I-WeBS monitors coastal wetland sites along with inland lakes, turloughs, rivers and callows. Together with data from a number of species-specific surveys, I-WeBS provides the principal tool used in the monitoring and conservation of wintering waterbird populations in Ireland and the wetlands upon which they rely.

Some 72 regularly-occurring waterbird species occur in Ireland during winter comprising 40 species within the 'wildfowl and allies' category (swans, geese, ducks, and their allies such as divers, grebes and cormorants), 22 wading bird species (including Oystercatcher, Golden Plover, Lapwing and Curlew), and 10 gull species. Waterbird counts are taken at approximately 700 sites annually. The total number of waterbirds wintering in Ireland was estimated at 757,910 waterbirds for the period 2011/12 – 2015/16. For this same time period, a total of 47 sites supported numbers of international importance and a further 85 sites supported numbers of national importance, both of these representing significant aggregations of waterbirds. Waterbirds wintering in Ireland include wild fowl (swans, geese, ducks, divers, grebes and cormorant), waders (includes oystercatcher, plover, lapwing, sandpiper, curlew and woodcock) and gulls. The following sites held the most waterbirds (over 20,000 wintering waterbirds and therefore of international importance): Cork Harbour, Dublin Bay, Dundalk Bay, Lough Swilly, and Wexford Harbour and Slob. Most wintering waterbird species in Ireland are migratory and arrive between July and early November. The majority of species that occur in Ireland migrate from breeding grounds in the north and north-west (principally Canada, Greenland and Iceland) or from the north-east (Scotland and northern continental Europe, including Scandinavia, Russia and Siberia). Ireland's geographic position places it along an important migratory route - the East Atlantic Flyway - with birds travelling from northern breeding grounds to Ireland and to other important wintering areas further south. Species that use this flyway include the Light-bellied Brent Goose and Greenland White-fronted Goose. The breeding origin of most waterbird species wintering in Ireland, are countries in northerly (Arctic) latitudes, but Ireland does support small numbers of some species during the breeding season. These are considered as partial migrants (some remain all year in Ireland, whilst others migrate further south in winter).

During winter, there is regular movement of waterbirds between roosting and feeding sites. Many swans and geese fly up to 20 km to wetland roosts at night. Large-scale movements also occur, which are directly related to weather conditions. In particular during cold snaps, species move from inland wetlands to larger riverine or coastal locations, which are less likely to freeze. In cold weather periods in Europe, a number of species from northern Europe and Britain move west to Ireland, while cold conditions in Ireland result in some species moving south to France and Iberia.

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Ireland also has a population of raptors (birds of prey) as detailed on the attached Target wild bird species for Avian Influenza Surveillance. Avian influenza has been detected in 3 raptor species in Ireland in recent years - White-tailed Sea Eagle, Common Buzzard and Peregrine Falcon.

3.2 Design, criteria, risk factors and target population(3)

(max. 32000 chars):

Wild bird surveillance is implemented as a passive surveillance programme, with the aim of collection, laboratory submission and testing of all moribund/dead wild birds on the Target wild bird species for Avian Influenza Surveillance list.

Heightened vigilance is employed during the higher risk period of November-April when Ireland tends to have an influx of migratory wild birds during the winter months. The NDCC continually monitors avian influenza prevalence in other countries, both inside and outside Europe which gives an indication of risk levels of incursion of disease. In addition, attention is given to weather patterns which may displace migratory wild birds.

The risk factors used to determine wild birds for sampling under the avian influenza passive surveillance plan are:

1. Birds that are on the targeted list of birds for avian influenza surveillance produced by EFSA based on surveillance data for the period 2005-2017 and amended to include birds found in Ireland by Birdwatch Ireland and the National Parks and Wildlife Service (NPWS). A copy of the list of Target wild bird species for Avian Influenza Surveillance PDF is attached.

In the event that an individual wild bird or group of wild birds are reported to DAFM for avian influenza testing, DAFM staff check this list before collecting and submitting the bird to the laboratory for testing. This list is also published on the DAFM website so that it can be accessed by bird enthusiasts and members of the public.

2. Only dead or moribund birds are submitted for sampling as these groups are at a higher risk of being affected by avian influenza viruses.

Ireland has an abundance of well-established wetland areas which attract migratory wild birds every year from late October onwards. In order to maximise the number of birds of targeted species surveyed for avian influenza, DAFM co-operates closely with other government agencies and private entities such as the National Parks and Wildlife Service (NPWS), Birdwatch Ireland and the National Council of Regional Game Councils. NPWS who have a network of trained staff throughout the country who monitor the resident and migratory wild bird population and Birdwatch Ireland is the largest ornithology group

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in the country. DAFM meets with these groups regularly particularly during times of heightened risk. DAFM also provides specific training to NPWS staff on avian influenza every year including updating them on the current situation with the disease in Ireland and in Europe as well as information on the occupational risk with handling dead wild birds in the event that avian influenza has been confirmed in Ireland. These actions ensure that these groups are aware of the avian influenza risk and the need for ongoing monitoring of at risk species of birds.

DAFM also implements an awareness programme for poultry flock owners and members of the public during the high risk wild bird migratory season regarding the disease situation in Ireland and in Europe as well as the biosecurity measures which can be taken to prevent contact with wild birds. This ensures that information on avian influenza and the risk associated with wild birds is disseminated widely and that DAFM's early warning system for the disease operates effectively.

(3) Areas at risk (wetlands in particular where links with high density poultry populations), previous positive findings as referred to in Annex II to Commission Delegated Regulation (EU) 2020/689 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 conformity with Annex II to Commission Delegated Regulation (EU) 2020/689

Targets for year

2023

NUTS (2) code/region (a)	Total number of wild birds to be sampled	Estimated total number of wild birds to be samples for passive surveillance	Type of test	Number of tests	
IE04 & IE05 & IE06	500	500	PCR test	500	X
IE04 & IE05 & IE06	50	0	Virus isolation test	50	X

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Total	550	500	550
Add a new row			
<p>(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.</p>			

	Total number of tests
Total number of tests	550
Total Virus isolation tests	50
Total PCR tests	500
Total Other tests	0
Total number of wild birds to be sampled for passive surveillance	500

3.3 Sampling procedures and sampling periods

Please also explain which samples are taken from wild birds

max 32000 chars :

Dead wild birds are usually collected by a trained Official Veterinarian based at an Regional Veterinary Office or NPWS staff. Carcasses are submitted for sampling to the RVL where post mortem examination is carried out. Tissues (intestine, lung and brain) are taken from each wild bird. In cases where several dead wild birds are found, oropharyngeal swabs and cloacal swabs are also taken. Pooling of up to 5 swabs from birds of the same species collected at the same time and place will be permitted in the laboratory. Where pooled samples are taken, it will be ensured that individual samples can be retested for further analysis where required. Samples will then be transported to the CVRL in transport medium at 4°C within 48 hours where they are tested for avian influenza.

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3.4 Laboratory testing: description of the laboratory tests used .

Please explain also which laboratory do the tests for the wild birds, and which, and how many tests are planned for each wild bird

max 32000 chars :

All avian influenza testing is carried out at the Central Veterinary Regional Laboratory (CVRL), Stacumny Lane Backweston, Celbridge, Co. Kildare which is the National Reference Laboratory for avian influenza testing in Ireland. The European Union Reference Laboratories (EURL) provides technical support and reagents (antigens and positive serum). Laboratory testing will be carried out in accordance with Regulation (EU) 2016/429 and the relevant details and guidance made available on the websites of the (EURL) and of the Commission.

DAFM staff will aim to take 3 tissue samples from each wild bird submitted to the Regional Veterinary Laboratory where possible, which will result in 3 Matrix Protein PCR tests being applied by the CVRL for each wild bird submitted for avian influenza surveillance.

Any positive Matrix Protein PCR tests are then subjected to additional PCR tests (PCR H5 and PCR H7) and virus isolation tests also. H5 and H7 subtypes will be subjected to characterisation (nucleotide sequencing) to determine whether they are highly pathogenic or low pathogenic at the CVRL.

Characterisation of neuraminidase will be carried out at the CVRL. Any new isolates which are detected in the year undergo virus isolation at the CVRL and are also sent to the EURL for further studies.

4. *Short description of the epidemiological situation of the disease in poultry during the last five years*

max 32000 chars :

During 2021, a total of six outbreaks of HPAI H5N1 were confirmed on poultry premises in Ireland between the dates of 20 November and 20 December. All six outbreaks occurred in the poultry dense area of counties Cavan and Monaghan in the North-East of the country. No epidemiological links were identified between the outbreaks. The source of infection is considered to have most likely resulted from spread by wild birds, as several wild birds had been confirmed to have been infected within the surrounding area. All outbreaks were confirmed by Real-Time Polymerase Chain Reaction (PCR) and gene sequencing in the CVRL. All outbreaks which occurred during 2021 in poultry were confirmed to be HPAI subtype H5N1.

In 2020, a single outbreak of avian influenza subtype H5N8 was confirmed in a small backyard turkey flock on December 10th, in County Wicklow. This represented the first outbreak of a notifiable subtype of avian influenza in Ireland since 2012 when low pathogenic avian influenza H5N3 was detected in a small flock of game birds. Prior to 2020, the most recent outbreak of highly pathogenic avian influenza in Ireland occurred in 1983. An entire backyard

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turkey flock comprising 127 birds were presented for slaughter at a local plant on 9th December 2020. Some of the turkeys were displaying clinical signs of avian influenza including swollen heads and coughing. The entire flock was killed, and samples were submitted to the CVRL for avian influenza testing. Avian influenza H5N8 was confirmed on 10th December 2020. Pathogenicity could not be determined due to low viral loads in the birds. However, avian influenza was detected in brain tissue from two of the birds and as a result, high pathogenicity avian influenza was strongly suspected. There were no further outbreaks of avian influenza and Ireland regained its official OIE self-declared disease freedom status on March 15th, 2021.

During 2020 there were a small number of outbreaks of Low Pathogenic Avian Influenza H6N1 in poultry flocks in County Monaghan. The low pathogenic avian influenza H6N1 subtype was not a notifiable subtype to the European Commission as defined in Council Directive 2005/94/EC (which was the relevant legislation at that time). The first LPAI H6N1 outbreak was confirmed on the 09/03/2020. To the end of June 2020 there were 14 confirmed outbreaks of LPAI H6N1 and 5 suspicions where disease was ruled out. The majority of the outbreaks occurred within a small area of approximately 12 km² in County Monaghan.

DAFM immediately investigates all suspicions of avian influenza. Flocks investigated for avian influenza in 2018 (1), 2019 (2), 2020 (41), 2022 (31) and 2022 (4 up to May 20th) all returned negative result for HPAI with the exception of the single outbreak confirmed on 10th December 2020, and the 6 outbreaks which occurred between 20 November and 20 December 2021.

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

(max. 32000 chars):

Avian influenza was confirmed in wild birds in Ireland in 4 of the last 5 years between 2018 and 2022. Details of the dates, locations, species and Avian Influenza subtype confirmed is presented in 'Avian Influenza Positive Wild Birds 2018 to 2022 Maps and Tables' pdf attached.

In 2018, 153 wild birds were tested for avian influenza. 3 birds returned a positive result for HPAI H5N6.

In 2019, 78 wild birds were submitted for avian influenza surveillance with all tests returning a negative result.

On 10th November 2020, HPAI H5N8 was first detected in a peregrine falcon in Limerick. A total of 23 positive wild bird cases of H5N8 were confirmed during the last two months of 2020 throughout Ireland. Although, pathogenicity testing was inconclusive for three of the birds due to the presence of low viral loads, the remaining 20 cases were confirmed to be highly pathogenic. A total of 165 wild birds were submitted for avian influenza surveillance in 2020.

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During 2021, a total of 307 wild birds were submitted for avian influenza sampling and testing. This testing returned 5 positive results of H5N8 and 2 further cases of HPAI H5N3. 67 cases of H5N1 were also confirmed.

During 2022 (up to 1 April), a total of 45 wild birds were submitted for avian influenza testing, 17 of which were confirmed with positive results for H5N1.

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

Please explain also briefly the measures implemented in case of suspicion or confirmation of the disease

(max. 32000 chars):

Poultry: Avian influenza is a notifiable disease in Ireland in accordance with national legislation (Statutory Instrument No.130 of 2016), meaning that anyone who suspects the disease is legally obliged to notify DAFM without delay. DAFM implements an ongoing awareness programme for avian influenza particularly during the high risk period for the disease to ensure flock owners are aware of the presenting signs of avian influenza and of their obligation to report suspicions. Awareness initiatives encourage farmers to report any unusual increase in illness or mortality in their flocks to their private veterinary practitioner or local Regional Veterinary Office, and to make use of their local Regional Veterinary Laboratory to aid with diagnosis of disease conditions.

Wild Birds: DAFM has an early warning system in place for reporting of unusual mortalities in wild birds with Birdwatch Ireland, NPWS, and the NARGC. This early warning system ensures DAFM is informed if there is any increase in numbers of dead wild birds or large wild bird die offs in the country. DAFM also implements training programmes for staff at NPWS in conjunction with medical doctors on avian influenza which includes various occupational health measures such as seasonal flu vaccination and training on how to use appropriate personal protective equipment should they be involved in an outbreak of AI in the wild bird population. Members of the public are encouraged to report any moribund or dead wild birds and can contact a dedicated Avian Influenza hotline phone number or use the Avian Check App to report sick or dead wild birds. DAFM also has a dedicated avian influenza webpage which provides a wide range of information, advice and publications on AI for poultry industry stakeholders and other interested groups.

In the event of a confirmed case of avian influenza as defined in Annex I of Commission Delegated Regulation (EU) 2020/689 in a wild bird, notification will be made to the Animal Disease Information System (ADIS) by the NDCC within 24 hours of confirmation. An immediate notification will also be submitted by the NDCC to the OIE within 24 hours of the first case of an avian influenza subtype in the country and follow up reports submitted for all subsequent similar cases in accordance with Chapter 1.1 of the OIE Terrestrial Code.

Poultry: In the event of a suspicion of avian influenza in poultry, the requirements of CDR (EU) 2020/687 as regards rules for the prevention and control of certain listed diseases will be implemented in line with DAFM's specific written procedures. In summary this will involve the following actions:

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- An Official Veterinarian (OV) will visit the suspect establishment and carry out a clinical examination of the suspect animal or animals based on a specific protocol.
- In the event that disease cannot be ruled out on clinical grounds, samples will be taken from the suspect animal or animals and from in contact animals or a representative sample of animals on the establishment based and submitted for analysis.
- While awaiting the results of the laboratory tests the suspect establishment is placed under official restriction so that movement of susceptible animals, animal products and by-products is prohibited.
- Susceptible animals are isolated inside their living quarters on the suspect establishment, where possible.
- A census of all animals and animal products on the suspect establishment is carried out including numbers of each species and categories of susceptible, dead & sick animals.
- A temporary control zone may be established around the suspect premises within which similar restrictions to those implemented in the suspect establishment will be put in place on all other establishments.
- Specific biosecurity measures will be put in place on the establishment to prevent the possible spread of disease from the establishment.
- An epidemiological inquiry will be initiated by the OV as to the possible origin and spread of the disease.

If highly pathogenic avian influenza (HPAI) is confirmed, the following measures will be implemented on the infected establishment in line with CDR (EU) 2020/687:

- All poultry will be killed, and their carcasses destroyed immediately and in line with relevant EU legislation.
- All egg and poultry products must also be destroyed.
- The meat from poultry from the establishment, which were killed within the period presumed to cover the incubation of the disease, will also be traced and destroyed, as will hatching and table eggs laid in the incubation period.
- A protection zone with a radius of 3km around the site of infection and a surveillance zone with a minimum radius of 10 km around the protection zone will be established. Within the protection zone the following measures will be implemented:
 - Identification of all poultry and other bird establishments
 - Periodic documented clinical inspections (& sampling if necessary) of all commercial poultry establishments
 - On-farm biosecurity measures
 - Active monitoring of wild birds
 - Awareness campaigns for bird owners, hunters and bird watchers
 - Ban on assembly of birds
 - Ban on hunting wild birds
 - Movement controls on poultry, etc.

In the event of a confirmed outbreak of avian influenza as defined in Annex I of Commission Delegated Regulation (EU) 2020/689 in poultry a notification will be made to the Animal Disease Information System (ADIS) by the NDCC within 24 hours of confirmation. The OIE will also be notified within 24 hours in accordance with Article 1.1.3 of Chapter 1.3 of the OIE Terrestrial Code of an outbreak of avian influenza in poultry as defined in Chapter 10.4 of the OIE Terrestrial Code.

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7. Costs

7.1 Detailed analysis of the costs

7.1.1 Poultry including ducks, geese and farmed game birds

Please also check the consistency between the numbers mentioned in tables 2.2.1, 2.2.2, 7.2.1, and the information provided in box 2.3 and 2.4. Please comment also the cost-efficiency aspects of the programme

(max. 32000 chars):

In 2020, Ireland confirmed a single outbreak of avian influenza in poultry with no secondary outbreaks illustrating the efficiency of our surveillance and control programmes. During the unprecedented avian influenza epizootic during the 2021/2022 season, Ireland had a total of 6 outbreaks of HPAI H5N1 in poultry, none of which were found to have an epidemiological link between them. The early detection of avian influenza in wild birds informed DAFM's decision to introduce national legislation including enhanced biosecurity measures and a ban on the assembly of live birds which helped to mitigate against the spread of disease. The information provided by the surveillance programme thereby informed national policy decisions in relation to disease prevention and control measures which helped to reduce the risk of spread and was a cost-effective way of minimising disease spread.

7.1.2 Wild birds

Please also check the consistency between the numbers mentions in tables 3.2.1, 7.2.2 and the information provided in box 3.3 and 3.4.

(max. 32000 chars):

The surveillance programme for the sampling of wild birds in accordance with the recommended list of susceptible species is coordinated annually by the Department of Agriculture with the cooperation of members of the public and other State bodies such as the National Parks and Wildlife Service.

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C. Financial information

1. Identification of the implementing entities - financial circuits/flows

Identify and describe the entities which will be in charge of implementing the eligible measures planned in this programme which costs will constitute the reimbursement/payment claim to the EU. Describe the financial flows/circuits followed.

Each of the following paragraphs (from a to e) shall be filled out if EU cofinancing is requested for the related measure.

a) Implementing entities - **sampling**: who perform the official sampling? Who pays? (e.g. authorised private vets perform the sampling and are paid by the regional veterinary services (state budget); sampling equipment is provided by the private laboratory testing the samples which includes the price in the invoice which is paid by the local state veterinary services (state budget))

(max. 32000 chars):

Official sampling is carried out by staff of the Department of Agriculture, Food and the Marine, both on farm and in slaughterplants. The Department of Agriculture, Food and the Marine pay for the sampling, and all associated equipment (State budget).

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b) Implementing entities - **testing**: who performs the testing of the official samples? Who pays?
(e.g. regional public laboratories perform the testing of official samples and costs related to this testing are entirely paid by the state budget)

(max. 32000 chars):

Testing of the official samples is carried out by full-time staff of the Department of Agriculture, Food and the Marine (DAFM) based in the Central Veterinary Research Laboratory in Backweston. DAFM pays for the testing.

c) Implementing entities - **compensation**: who performs the compensation? Who pays?
(e.g. compensation is paid by the central level of the state veterinary services,
or compensation is paid by an insurance fund fed by compulsory farmers contribution)

(max. 32000 chars):

Compensation is paid for by the Department of Agriculture, Food and the Marine. The amount of compensation would be determined by DAFM officials based on market value tables.

d) Implementing entities - **vaccination** : who provides the vaccine and who performs the vaccination? Who pays the vaccine? Who pays the vaccinator?
(e.g. farmers buy their vaccine to the private vets, send the paid invoices to the local state veterinary services which reimburse the farmers of the full amount and the vaccinator is paid by the regional state veterinary services)

(max. 32000 chars):

The Department of Agriculture, Food and the Marine would provide the vaccine and any vaccination programmes would be authorised and controlled by DAFM staff in the National Disease Control Centre.

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e) Implementing entities - **other essential measures**: who implements this measure? Who provides the equipment/service? Who pays?

(max. 32000 chars):

DAFM is responsible for the implementation and payment of any other essential measures. Equipment may be hired by DAFM if required.

2. Source of funding of eligible measures

All eligible measures for which cofinancing is requested and reimbursement will be claimed are financed by public funds.

yes

no

3. Additional measures in exceptional and justified cases

In the "*Guidelines for the Union co-funded veterinary programmes*", it is indicated that in exceptional and duly justified cases, additional necessary measures can be proposed by the Member States in their application.

If you introduced these type of measures in this programme, for each of them, please provide detailed technical justification and also justification of their cost:

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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, xlsx, doc, docx, ppt, pptx, bmp, pna, 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!
- 5) Only use letters from a-z and numbers from 1-10 in the attachment names, otherwise the submission of the data will not work.

List of all attachments

		Attachment name	File will be saved as (only a-z and 0-9 and -_):	File size
			Total size of attachments :	