

Food Programmes for eradication, control and surveillance of animal diseases and zoonoses

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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- 5) For simplification purposes you are invited to submit multi-annual programmes.
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Member state : PORTUGAL			
Disease Avian Influenza			
This program is multi annual : no			
Request of Union co-financing from beginning :	2023	To end of	2023
Request y	ear for multiann	nual programme :	2023
1. Contact data			
Name	Phone		
Email	Your job type within the CA	.:	
Submission Date	9	Submission Nun	nber
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Document version number: 2022 1.0

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 General Directorate of Food and Veterinary (DGAV) is responsible for the implementation of programme, defining objectives, strategies and action guidelines as well as coordinating all those involved on its execution in each region.

At central level, Epidemiology and Animal Health Unit (DESA) is in charge of designing, supervising, monitoring and evaluating the programme. DESA also carries out data collection and analysis and submits the programme's annual and semi-annual reports to the European Commission and EFSA, respectively.

At regional level, the local Food and Veterinary Regional Departments of DGAV (DSAVR) on the Mainland or the Regional Directions of Agriculture (DRA) in the Autonomous Regions of Madeira and Açores implement the programme, carrying out sampling and delivering samples to the laboratory, National Institute of Agrarian and Veterinary Research (INIAV).

All laboratory testing is carried out by INIAV, which is the national reference laboratory (NRL) for avian influenza and results are regularly sent to DGAV.

Monthly, DESA collects, completes, verifies and validates data (request forms and analytical results) received from INIAV in a database and monitors the implementation of the surveillance programme. The average timing of samples' delivery to the laboratory, the laboratory average response timing and the quality of the information that complements the sample (request forms) are also assessed by DESA. Additionally, DESA verifies and validates the monthly technical information and invoices sent by INIAV, regarding the number of tests carried out under the programme in the Mainland.

There are regular contacts between DESA and DSAVR/DRA for the purpose of correcting any deviations to the targets established in the programme and for assessing any particular difficulties of local services regarding the programme implementation in the field.

Whenever changes to the number of existing holdings justify it, the number of holdings to be testing is also updated by DESA.

Intervention areas of the DSAVR/DRA are shown in ANNEX_1.

2.1.2 Description of System in place for the registration of holdings

(max. 32000 chars) :

The licensing system of livestock production, including poultry production, NREAP, is described by Decree-Law nº 81/2013 of 14th June and is applicable to all commercial poultry establishments. Noncommercial holdings (up to 100 birds) are excluded from licensing under NREAP but are registered in the

National System for Animal Information and Registration (SNIRA) as foreseen in Decree-Law 142/2006 of 27th July. Licensing commercial poultry establishments are also registered in SNIRA. All registered poultry establishments are assigned an individual alphanumeric code which identifies each establishment within the national territory; this code is preceded by the letters PT and followed by a letter after a slash identifying the animal type ("V" in case of poultry). This registry contains data pertaining the establishment's keeper, its location, species and number of birds by production type.

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 refere 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) :

For 2023, programme's objectives are in compliance with section 2 of part I of annex II to Delegated Regulation (EU) 2020/689:

1. Early detection of highly pathogenic avian influenza (HPAI) in poultry;

2. Early detection of HPAI in wild birds;

3. Detection of HPAI in poultry species which generally do not show significant clinical signs;

4. Detection of circulating low pathogenic avian influenza viruses (LPAIV) that may easily spread between poultry flocks in particular in areas with a high density of poultry establishments in view of their potential to mutate to HPAI in order to:

(a) identify clusters of infection with LPAIV; and

(b) monitor the risk of spread of LPAIV by movements of poultry and by fomites in certain production systems at risk.

5. Contribution to increased knowledge on HPAI and LPAIV posing a potential zoonotic risk. Total number of tests foreseen for 2023:

- ELISA - a total of 2600 tests will be carried out in the following poultry categories: laying hens, free range laying hens and fattening turkeys.

-HI: this testing will be performed only in case of positive ELISA results; an expected value of 2% ELISA tests results was considered.

-RT-PCR: a total of 344 tests will be carried out in the following poultry categories: duck breeders, fattening ducks, game birds gallinaceous, game birds waterfowl and quails.

Regarding wild birds, virus subtyping by sequencing is also foreseen. The n° of assays foreseen is 4% of all birds sampled.

The programme will include three components as required by sections 3, 4, 5 and 6 of part I of annex II to Delegated Regulation (EU) 2020/689:

1. an early detection system for the detection of highly pathogenic avian influenza (HPAI) in wild birds and poultry,

2. a risk-based complementary surveillance for HPAI in poultry species which generally do not show significant clinical signs and

3. a risk-based surveillance in order to identify clusters of establishments infection with low pathogenic avian influenza virus (LPAI) and with continuous spread of LPAI.

The early detection system for the detection of HPAI in poultry will be based on detection of clinical signs of disease, increased mortality rates, decreased feed and water consumptions and changes in

production.

Risk-based surveillance will be implemented for the following components of the programme as required by sections 4, 5 and 6 of of part I of annex II to Delegated Regulation (EU) 2020/689: 1. Detection of HPAI in poultry species which generally do not show significant clinical signs; 2. Detection of circulating low pathogenic avian influenza viruses (LPAIV) that may easily spread between poultry flocks in particular in areas with a high density of poultry establishments.

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) :

Although there are poultry establishments all over the country, most are located in Centro and Lisboa e Vale do Tejo as these regions hold 85.8% of the Portuguese production. Please see ANNEXES 2 and 3.

Breeders:

There are no poultry genetic selection farms in Portugal, hence, there is no grandparent stock. Thus, parent stock day old chicks, from companies selling most known poultry strains, come from the intra-EU market.

The chicks are housed in breeding establishments and, after the rearing phase, start laying at 24-26 weeks old till 64 weeks old. The eggs are sent directly to hatcheries where they are incubated on appropriate machines for 21 days.

Laying hens:

This production sector is characterized by the existence of a large number of medium-sized companies. However, the production is almost entirely linked to packing centres, which eases the organization of the production chain. Although not widespread, there is a strong tendency to vertical integration. The largest national companies have already adopted the system partially, that is, they select holdings for chick rearing as well as for keeping laying hens and have their own feed production, breeding holdings and egg packing centres. The chicks are reared up to 24 weeks old and then lodged in the production establishment for laying. The normal laying period is 52 weeks. Indoor laying hens, either on batteries or on the ground, are responsible for 74.4% of table eggs' production. The remaining 25.6% are produced by free range laying hens, mainly in Centro region.

Broilers:

The structure of broilers' production is based on a vertical integration model and is heavily industrialized. There is a strong concentration of broilers' production in just over a dozen operators/integrations, which hold almost all of the national production (95%). The total capacity of broilers accommodation is over 36 million birds. Day-old broiler chicks are originated almost entirely from national chicken breeders establishments. Most broilers establishments are indoor intensive production facilities (81%) and the remaining 19% are free range broilers. For the intensively reared broilers, slaughter typically occurs at 5-6 weeks, when birds are between 1.700 kg and 1.950 kg of live weight. For the particular traditional market of barbecue chicken, a slightly shorter production cycle (4 weeks) is carried out. Flocks may be subjected to various thinning previous to the transport of the totality of birds for slaughter. The first thinning occurs when the chicks have about 23 days old and the last when they have about 42 days old.

In the free range production system, part of the day-old chicks is acquired in the intra-Community market (30%). The normal production cycle extends to 81-84 days and there may be also some thinning before complete slaughter of the flock.

Turkeys:

Currently, there are no turkey breeders establishments in Portugal. Operators acquire hatching eggs or day-old chicks in the intra-Community market for subsequent rearing and fattening. According to the model of integration in place, the integrator (slaughterhouse and processing industry) provides the integrated (farmer) the feed, prophylactic, disinfection and hygiene products and veterinary and technical assistance, advice on maintenance and improvement of facilities. The system in place is intensive, "all in/all out" and after depopulation, the necessary measures of hygiene and disinfection are applied. Light or medium breeds are most frequently used. The production cycle extends up to 12-14 weeks for females (average weight between 5 kg and 6 kg) and up to 16-20 weeks for males (average weight exceeding 10 kg).

Ducks – Breeding and fattening:

Duck production is not very important in Portugal and is mainly located in Lisboa and Vale do Tejo region where 2 breeding ducks and 14 fattening ducks establishments are located. The latter are essentially reared intensively for meat. There also 2 fattening ducks farms in Alentejo and other 2 in Centro.

Farmed game birds (waterfowl):

In Portugal there are only 2 farmed waterfowl game birds establishments: 1 in Norte and 1 in Lisboa and Vale do Tejo.

Farmed game birds (gallinaceous):

There are 32 holdings of gallinaceous farmed game birds in the national territory; these poultry establishments are essentially located in Norte (11), Centro (6; one keeps both pheasants and partridges) and Lisboa e Vale do Tejo (9). The distribution of the remaining 5 establishments is: 3 in Alentejo, 2 in Algarve and 1 in Madeira.

Quails: There are 19 quail production establishments in Portugal: 1 in Centro, 17 in Lisboa e Vale do Tejo and 1 in Centro.

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) :

Risk based surveillance will be implemented according to annex II to Commission Delegated Regulation 2020/689.

Avian influenza is a notifiable disease and all increased mortalities and other signs of serious disease or significantly decreased production rates in poultry, with an undetermined cause, have to be reported and are duly investigated by DGAV/DRA. This early detection system is implemented throughout the whole country and includes all poultry categories.

Risk-based complementary surveillance for HPAI in poultry species which generally do not show significant clinical signs as well as risk-based surveillance in order to identify clusters of Low Pathogenic Avian Influenza (LPAI) infected establishments will be implemented according to sections 5 and 6 of Annex II of Commission Delegated Regulation (EU) 2020/689.

Direct and indirect contacts between wild birds and poultry are the main factors associated to introduction of avian influenza virus in poultry establishments. Please see ANNEX_4 - map of higher risk areas for introduction of avian influenza virus in Portugal. This map includes only the Mainland for the autonomous regions are remote areas in the Atlantic Ocean and not usually included in Eurasian wild bird migration routes associated to avian influenza virus introduction into the European Union Territory. Besides this risk factor, areas with high density of poultry establishments, mostly located in Centro and Lisboa e Vale do Tejo regions, will also be targeted due to greater risk regarding the dissemination of infection in the event of an avian influenza outbreak. Sampling will be focused on the most frequently affected as well as the longer-lived and larger production cycle poultry categories, namely ducks, laying hens (including free range), gallinaceous and waterfowl game birds, quails and turkeys which are considered to be at higher risk of infection.

(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.

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) :

Under this programme, poultry species and categories included in section 7 Annex II of Commission Delegated Regulation (EU) 2020/689 will be sampled: breeding ducks, fattening ducks, game birds waterfowl, quails, laying hens (including free range), fattening turkeys and game birds gallinaceous.

Risk based sampling will be carried out focusing on establishments located in the municipalities and parishes located in higher risk areas for the introduction of avian influenza virus and/or in the municipalities at higher risk for disease dissemination, that is, those with higher density of poultry establishments.

- Risk-based complementary surveillance for Highly Pathogenic Avian Influenza in poultry species which generally do not show significant clinical signs, according to point 2 of section 7 of Annex II of Commission Delegated Regulation (EU) 2020/689:

For duck breeders, fattening ducks, game birds waterfowl and quails, the number of establishments to be sampled was calculated considering an estimated prevalence of 5% and 99% confidence level: Duck breeders – 2 establishments located at higher risk areas;

Fattening ducks – 18. Of which 6 are located at higher risk areas;

Game birds waterfowl – 2, one is located at a higher risk area;

Quails - 19

- Risk- based surveillance in order to identify clusters of Low Pathogenic Avian Influenza infected

establishments

Sampling will be carried out according to point 3 of section 7 of Annex II of Commission Delegated Regulation (EU) 2020/689. All establishments located areas of higher risk for the introduction of avian influenza virus will be sampled. In the remaining territory, sampling will be focused in areas of higher poultry density and an estimated prevalence of 5% and 95% confidence level was considered. The number of establishments to be tested is the following:

Poultry establishments located at areas of higher risk for the introduction of avian influenza virus:
Laying hens – 4;

- Free range laying hens – 2;

- Fattening turkeys – 13;

- Farmed game gallinaceous – 7

Poultry establishments not located at areas of higher risk for the introduction of avian influenza virus:
Laying hens – There are 110 establishments not located at higher risk areas. A total of 57 establishments will be sampled.

- Free range laying hens – There are 40 establishments not located at higher risk areas. A total of 38 establishments will be sampled;

- Fattening turkeys – There are 129 establishments not located at higher risk areas. A total of 53 establishments will be sampled;

- Farmed game gallinaceous – There are 26 establishments not located at higher risk areas and all will be sampled.

For the following poultry categories, 10 samples per sampling event will be taken: laying hens, free range laying hens, fattening turkeys, farmed game gallinaceous and quails.

For duck breeders, fattening ducks and farmed game waterfowl, 20 samples per sampling event will be taken.

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	
PT11-Norte	10	4	20	80	80	ELISA test	X
PT16-Centro	68	34	20	680	680	ELISA test	X
PT17-Lisboa e Vale do Tejo	23	19	20	380	380	ELISA test	X
PT18-Alentejo	1	0	20	0	0	ELISA test	X
PT15-Algarve	0	0	20	0	0	ELISA test	X
PT30-Açores	8	0	20	0	0	ELISA test	X
PT30-Madeira	4	0	20	0	0	ELISA test	X
All regions	0	0	0	0	23	HI-test (H5)	X

All regior	ns	0	0	0	0	23	HI-test (H7)	X
	Total					1 186	j	
							Add a new row	
(a) (b) (c)	Holdings or herds or flocks or establishments as appropriate. 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 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	
PT11-Norte	3	3	20	60	60	ELISA test	X
PT16-Centro	27	27	20	540	540	ELISA test	X
PT17-Lisboa e Vale do Tejo	6	6	20	120	120	ELISA test	X
PT18-Alentejo	4	4	20	80	80	ELISA test	X
PT15-Algarve	0	0	20	0	0	ELISA test	X
PT20-Açores	0	0	20	0	0	ELISA test	X
PT30-Madeira	2	0	0	0	0	ELISA test	X
All regions	0	0	0	0	16	HI-test (H5)	X
All regions	0	0	0	0	16	HI-test (H7)	X
Total					832		

(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 : fattening turkeys

delete this category

Add a new row

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	
PT11-Norte	2	0	10	0	0	ELISA test	X
PT16-Centro	39	20	10	200	200	ELISA test	Х
PT17-Lisboa e Vale do Tejo	98	45	10	450	450	ELISA test	Х
PT18-Alentejo	3	1	10	10	10	ELISA test	Х
PT15-Algarve	0	0	10	0	0	ELISA test	Х
PT20-Açores	0	0	10	0	0	ELISA test	Х
PT30-Madeira	0	0	10	0	0	ELISA test	Х
All regions	0	0	0	0	13	HI-test (H5)	Х
All regions	0	0	0	0	13	HI-test (H7)	Х
Total			//////////////////////////////////////		686		
						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 : Quails

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	
PT11-Norte	0	1	10	0	0	PCR test	Х
PT16-Centro	1	1	10	10	2	PCR test	X
PT17-Lisboa e Vale do Tejo	17	17	10	170	34	PCR test	X
PT18-Alentejo	0	0	10	0	0	PCR test	X
PT15-Algarve	0	0	10	0	0	PCR test	X
PT20-Açores	0	0	10	0	0	PCR test	X
PT30-Madeira	1	1	10	10	2	PCR test	X
Total					38		
						Add a new row	
	flocks or establishments as a of the holding of origin. In a		Territorial Units for Statistics) can not be used, region a	s defined in the progra	amme by the Member States is requested	1

(c) Total number of holdings of one category of poultry in concerned NUTS 2 region.

Category : farmed game birds (gallinaceous)

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	
PT11-Norte	11	11	10	110	22	PCR test	Х
PT16-Centro	7	7	10	70	14	PCR test	X
PT17-Lisboa e Vale do Tejo	9	9	10	90	18	PCR test	Х
PT18-Alentejo	3	3	10	30	6	PCR test	X
PT15-Algarve	2	2	10	20	4	PCR test	Х
PT30-Madeira	1	1	10	10	2	PCR test	Х
PT20-Açores	0	0	10	0	0	PCR test	Х
Total					66		
						Add a new row	
	flocks or establishments as c						

(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.

Add a category

Totals	Total number of tests	Total number of samples
Total poultry 2023	2 808	3 120

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	
PT11-Norte	0	0	40	0	0	PCR test	X
PT16-Centro	0	0	40	0	0	PCR test	X
PT17-Lisboa e Vale do Tejo	2	2	40	40	8	PCR test	X
PT18-Alentejo	0	0	40	0	0	PCR test	X
PT15-Algarve	0	0	40	0	0	PCR test	X
PT20-Açores	0	0	40	0	0	PCR test	X
PT30-Madeira	0	0	40	0	0	PCR test	X



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	
PT11-Norte	0	0	60	0	0	PCR test	Х
PT16-Centro	2	2	60	120	24	PCR test	Х
PT17-Lisboa e Vale do Tejo	14	14	60	840	168	PCR test	Х
PT18-Alentejo	2	2	60	120	24	PCR test	Х
PT15-Algarve	0	0	60	0	0	PCR test	X
PT20-Açores	0	0	60	0	0	PCR test	Х
PT30-Madeira	0	0	60	0	0	PCR test	X
Total		///////////////////////////////////////			216		
					A	dd a new row	

(a) Holdings or herds or flocks or establishments as appropriate.
(b) Defense to the location of the holding of origin. In gase NUTE (2) and can not be used region of definition of the holding of the holdi

(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 : farmed game (waterfowl e.g. mallards)

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	
PT11-Norte	1	1	20	20	4	PCR test	X
PT16-Centro	0	0	0	0	0	PCR test	X
PT17-Lisboa e Vale do Tejo	1	1	60	60	12	PCR test	X
PT18-Alentejo	0	0	0	0	0	PCR test	X
PT15-Algarve	0	0	0	0	0	PCR test	Х
PT20-Açores	0	0	0	0	0	PCR test	Х
PT30-Madeira	0	0	0	0	0	PCR test	X
Total					/16		
					A	dd 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

Add a category

Totals	Total number of tests	Total number of samples
Total ducks and geese and farmed game birds 2023	240	1 200

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	3 048
Grand Total ELISA	2 600
Grand Total agar	0
Grand Total HI tests (H5)	52
Grand Total HI tests (H7)	52
Grand Total Virus Isolation test	0
Grand Total PCR test	344
Grand Total Samplings	4 320

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) :

Sampling will be carried out throughout the year. For the following poultry categories, 10 samples per sampling event will be taken: laying hens, free range laying hens, fattening turkeys, farmed game gallinaceous and quails.

For duck breeders, fattening ducks and farmed game waterfowl, 20 samples per sampling event will be taken.

Sampling will be carried out at regional level by official veterinarians of the Food and Veterinary Regional Departments of DGAV (DSAVR) on the Mainland or of the Regional Directions of Agriculture, taking into account the seasonality of certain poultry productions, namely game birds.

The following frequency of sampling according to poultry category will be carried out:

- Laying hens and free range laying hens – twice a year, 4 to 6 months apart;

- Fattening turkeys - once a year;

- Farmed game gallinaceous – once a year;

- Farmed game waterfowl twice a year outside higher risk areas and 3 times a year in higher risk areas;
- Duck breeders twice a year, 4 to 6 months apart;
- Fattening ducks 2 or 3 times per year;
- Quails once a year.

Sampling may take place either at the poultry establishment or at a slaughterhouse.

The frequency of testing may be adjusted according to the epidemiological situation. Hence, it may be higher if outbreaks of HPAI or clusters of LPAI outbreaks are detected.

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)

ELISA assays shall be used as screening tests for the following poultry categories:

-Laying hens;

-Free range laying hens;

-Fattening turkeys;

In case of positive ELISA results, samples will be further tested by HI. If HI results are positive, oropharyngeal and/or cloacal swabs will be collected in suspected flocks and RT-PCR tests shall be carried out. Should the presence of virus be confirmed, sequencing analysis will also be carried out.

RT-PCR assays shall be used as screening tests for the following poultry categories:

- Duck breeders;

- Fattening ducks;

-Game birds gallinaceous;

-Game birds waterfowl;

-Quails.

These samples will be pooled, up to a maximum of 5 samples from the same flock and sampling event. Should the presence of virus be confirmed, sequencing analysis will also be carried out.

For the following poultry categories, 10 samples per sampling event will be taken: laying hens, free range laying hens, fattening turkeys, farmed game gallinaceous and quails. For duck breeders, fattening ducks and farmed game waterfowl, 20 samples per sampling event will be taken.

The number of tests for each poultry category was based on the method previously used for representative sampling (Commission Decision 2010/367) as indicated in paragraph 1 of Section 9 of Annex II to Commission Delegated Regulation (EU) 2020/689.

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) :

As for poultry, DGAV is responsible for the programme, defining the objectives, strategies and action guidelines and coordinating involved people and organizations on the actions to be implemented in each region. At central level, DESA will establish, supervise, monitor and evaluate the programme. The collection of samples from wild birds, coordinated regionally by the DSAVR/DRA is performed mostly by official veterinarians of the local veterinary

services, field workers of the Institute for Nature Conservation and Forestry, IP (ICNF), by special brigades of the National Republican Guard and Police Force and by the municipality veterinarians. Nature conservation organizations, bird ringing teams, hunters and ornithologists may also collaborate in the sample collection.

It is the responsibility of the DSAVR/DRA to articulate with other entities in the field to ensure the correct implementation of the programme, delivery of the samples to INIAV and the correct filling of the request forms that accompany the samples. Control and supervision procedures are the same as described for poultry.

All mass mortality events of wild birds have to be notified to DGAV, either at central or local level. Personnel of the organizations involved (please see above) regularly carries out routine rounds in protected natural areas and in rural areas where dead wild birds can be found. Also, wounded, diseased and or dead wild birds entering wild bird rescue centres can also be sampled.

Upon detection of dead or injured wild birds, local DSAVR/DRA services are contacted and sampling is carried out by official veterinarians. The DSAVR/DRA services are responsible for the delivery of samples to INIAV, I.P, the national reference laboratory for animal health, where testing is performed. An app called ANIMAS (https://animas.icnf.pt/) for reporting wild animals mortality events, publicly accessible, was created by DGAV in collaboration with ICNF and reports registered herein are evaluated by DGAV and, if necessary, official sampling is carried out.

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

max. 32000 chars) :

Sampling will be performed preferably in the higher risk areas for the introduction of AI virus (Please see ANNEX_4) but always dependent on other factors such as mortality detected and human resources on the field.

Considering that migratory wild birds from North America are occasionally found in the Autonomous Region of Açores and that wild birds from Africa may be found near the Autonomous Region of Madeira, these regions are also included in the programme.

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) :

According to EFSA's Scientific Opinion on Avian Influenza (EFSA Journal 2017;15(10):4991), the wild bird migratory routes mostly associated to the risk of introduction of HPAI virus into the European Union territory are Northeastern and Eastern routes and Portugal is geographically located outside the usual pathways of these routes. However, being part of the southern and northwestern flyways, HPAI virus introduction by wild birds originating from Africa, eastern mediterranean or northern Europe is possible.

Please see ANNEX_5 for data regarding estimation of wild birds population based on the last available data of the report under article 12 of Directive 2009/147/EC (Birds Directive).

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

(max. 32000 chars) :

Wild birds, in particular migratory water birds, that have been shown to be at a higher risk of becoming infected with and transmitting the HPAI virus, the so called "target species" according to EFSA's Scientific Opinion (2017) will be specifically targeted. Areas close to the sea, lakes and waterways, especially when close to zones of high density of poultry holdings, will be targeted. Additionally, a small number of samples was foreseen for the autonomous regions of Açores and Madeira in order to allow some degree of monitoring regarding the possibility of introduction of HPAI virus through other migratory pathways, namely from North America or Africa, which may reach these non-contiguous territories.

Samples will also be taken wherever and whenever significant increases of morbidity and mortality in wild birds occur. Sampling will be carried out in injured, diseased or dead birds. Additional investigations may be carried out in wild birds in the areas in case of detection of HPAI outbreaks in poultry and/or wild birds or in neighbouring areas. Close cooperation will be established with ICNF and epidemiologists and ornithologists taking into account the migratory routes, bird populations, habitat and surveillance results from previous years.

Wild birds sampling will be performed by field teams from DGAV (DSAVR) and DRA, ICNF, the protection service of nature and environment (SEPNA), as well as by municipality veterinarians and other technicians belonging to non-governmental organizations and hunters' organizations. All wild birds' samples will be tested by RT-PCR assays, either individually or pooled. Whenever possible samples will be pooled up to a maximum of 5

samples of the same species, collected at the same time and location. The number of tests will also depend on the type of analytical matrix collected: tissue, oropharyngeal swab and/or cloacal swab. When both swabs are collected in the same bird, two RT-PCR tests will be carried out, one for each swab and these may be pooled samples as previously explained. Hence, the number of tests is quite variable, depending also on the detected mortality and the epidemiological situation and can therefore be different than foreseen. The number of tests included in the tables under point 3.2.1 is the maximum number foreseen. The number of tests was estimated at 4% of the total of RT-PCR tests.

(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		Number of tests	
PT11-Norte	20	40	PCR test	40	x
PT16-Centro	60	120	PCR test	120	x
PT17-Lisboa e Vale do Tejo	60	120	PCR test	120	x
PT18-Alentejo	50	100	PCR test	100	x
PT15-Algarve	80	160	PCR test	160	x

PT20-Açores	20	40	PCR test	40	X	
PT30-Madeira	10	20	PCR test	20	X	
All regions	0	0	Virus isolation test	24	X	
All regions	0	0	Sequencing	24	X	
Total	300	600		648		
		Add a new row				
(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.

	Total number of tests
Total number of tests	648
Total Virus isolation tests	24
Total PCR tests	600
Total Other tests	24
Total number of wild birds to be sampled for passive surveillance	600

3.3 Sampling procedures and sampling periods

Please also explain which samples are taken from wild birds

max 32000 chars :

Sampling will be carried out throughout the year with a special focus on the autumn/winter migration period. The following samples will be taken: cloacal and tracheal/oropharyngeal swabs and/or tissues (brain, heart, lungs, kidneys and intestines). All wild birds samples will be tested by real-time RT-PCR assays. Whenever possible samples will be pooled up to a maximum of 5 samples of the same

species, collected at the same time and location. The number of tests is quite unpredictable, depending on the detected mortality and the epidemiological situation and can therefore be different than foreseen.

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 :

Similarly to poultry, wild bird testing will be carried out by INIAV, I.P., the National Reference Laboratory for Animal Health. All wild birds' samples will be tested by RT-PCR assays, either individually or pooled. Whenever possible samples will be pooled up to a maximum of 5 samples of the same species, collected at the same time and location. The number of tests will also depend on the type of analytical matrix collected: tissue, oropharyngeal swab and/or cloacal swab. When both swabs are collected in the same bird, two RT-PCR tests will be carried out, one for each swab and these may be pooled samples as previously explained. Hence, the number of tests is quite variable, depending also on the detected mortality and the epidemiological situation and can therefore be different than foreseen. The number of tests included in the tables under point 3.2.1 is the maximum number foreseen. The number of virus isolation tests and sequencing tests was estimated at 4% of the total of RT-PCR tests.

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

max 32000 chars :

Between 2017 and 2021 a total of 240 014 birds were tested within the scope of active surveillance. All samples were negative. Until the end of November 2021, no HPAI outbreaks in domestic birds were confirmed in Portugal. In November 30th 2021, we detected our first outbreak, in a backyard flock located at a higher risk area for introduction of avian influenza virus. Afterwards, between December 23rd 2021 and March 15th 2022, a total of 13 outbreaks were confirmed: 7 in commercial poultry establishments, 5 in backyard flocks and 1 in a private bird collection. All outbreaks were confirmed after notification of clinical suspicions; that is, all were detected through early warning system/passive surveillance. Please see ANNEX_7 for details regarding these outbreaks

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

(max. 32000 chars) :

Between 2017 and 2021, a total of 366 wild birds were tested and all were negative except one: a grey heron (Ardea cinerea) found dead, in January 2017 in Loulé, Algarve, which was infected with high pathogenicity avian influenza virus H5N8. A restriction area of 1 km radius, centred on the location where the dead bird was found, was established. There were no commercial poultry establishments within that area but reinforced surveillance of backyard flocks was implemented. All poultry tested negative. Wild bird surveillance were also reinforced and no further positive birds were found. However, since January 10th 2022 and until March 10th 2022, infection by avian influenza virus H5N1 was detected in 6 wild birds found dead. Due to this, surveillance in wild birds was reinforced and, so far, in 2022 a total of 145 birds were tested. Please see ANNEX_8 for details regarding 2022 HPAI outbreaks in wild birds.

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) :

Avian influenza is a notifiable disease and measures to be taken in the event of a suspicion or confirmation of an outbreak of HPAI are those foreseen in Part III, Title II, chapter 1 of that regulation as well as in Part II, Chapter 1 of Delegated Regulation (EU) 2020/687. 6.1 Poultry: any poultry establishment suspected to be infected with a HPAI virus shall be placed under official surveillance and preliminary movement restriction of birds and products is enforced. Additional biosecurity measures will also be implemented. DSAVR/DRA will carry out an investigation, including clinical examination and sampling as well as an initial epidemiological inquiry. In case of confirmation of infection with HPAI virus, control measures foreseen in articles 12 to 20 of Delegated Regulation (EU) 2020/687 will be implemented. Furthermore, protection and surveillance zones will be established around the infected establishment and surveillance according to article 21 of the aforementioned regulation. Within these restriction zones, an inventory of all establishments keeping poultry, including the species, categories and estimated number of animals in each establishment, will be carried out and movements of birds and products shall be restricted. Also, additional surveillance and increased biosecurity measures will also be implemented. Within the protection zone, the implementation of measures will be according to articles 25 to 27 and 38 to 39 of Delegated Regulation (EU) 2020/687. Within the surveillance zone, measures will be implemented according to articles 40 to 42, 54 and 55 of the previous mentioned delegated regulation.

Repopulation of the infected poultry establishments will be carried out according to articles 57 to 61 of Delegated Regulation (EU) 2020/687. In case of detection of LPAI infected establishments, measures foreseen in Decree-Law n° 39:209 of May, 14th, 1953 will be implemented. Besides placing infected establishments under official control, these may include carrying out an epidemiological inquiry, killing and destruction of infected birds, destruction of infected products and materials, cleaning and disinfection procedures under official supervision and animal and products movement restrictions.

6.2 Wild birds: in the event of a suspicion or confirmation of an outbreak of HPAI in wild birds measures will be taken according to article 70 of Regulation (EU) 2016/429 and articles 62 to 67 of Delegated Regulation (EU) 2020/687.

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) :

Total number of tests foreseen:

1. ELISA: a total of 2600 tests will be carried out in the following poultry categories: laying hens, free range laying hens, fattening turkeys, fattening ducks and duck breeders.

2. HI for H5 and H7: this testing will be performed only in case of positive ELISA results; an expected value of 2% ELISA tests results was considered.

3. RT-PCR: A total of 344 tests will be carried out in the following poultry categories: duck breeders, fattening ducks, farmed game waterfowl, quails and farmed game (gallinaceous). Virological testing for duck breeders, fattening ducks, farmed game waterfowl and quails is foreseen in section 9 of annex II do Delegated Regulation 2020/689. Regarding farmed game (gallinaceous), there are technical and practical constraints which preclude blood sampling, so this category will also be tested by RT-PCR.

The number of tests foreseen is inferior to the number of samples due to the fact that these samples will be pooled in groups of 5, always of the same species and holding.

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) :

Number of wild birds to be sampled: 300

The sampling in PT11-Norte, PT20-Açores and PT30-Madeira is smaller than in the other regions due to the fact that there are no higher risk areas for the introduction of avian influenza in these regions. However, considering that wild birds, potentially infected, may also be found, although in smaller numbers, outside higher risk areas, it was decided to maintain a certain level of sampling in these regions in order to allow monitoring of avian influenza virus circulation in the whole territory of the country.

Total number of tests foreseen:

- RT-PCR: a maximum of 600 RT-PCR tests is estimated. This number may vary as explained in point 3.4. - Virus subtyping and sequencing: an expected value of 4% of the foreseen number of bird sampled was considered;

7.2 Summary of the annual costs :

7.2.1 Poultry surveillance including ducks, geese and farmed game birds : Detailed analysis of the cost of the programme - poultry

Costs of the planned activities for year :

2023

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) :

Poultry sampling is always carried out by the official veterinary services.

On the Mainland, sampling is performed by DGAV local veterinary services and in the Autonomous Regions of Madeira and Açores, it is carried out by the personnel of the DRA.

In the case of wild birds, sampling may be carried out by DGAV personnel and by other entities, mostly public entities (ICNF, SEPNA).

The material and equipment needed for sampling is acquired by DGAV, in the case of the Mainland or by the DRA, in the case of the Autonomous Regions.

On the Mainland, sampling is paid by the state's budget. In the autonomous regions of Açores and Madeira, sampling is paid by the regional government's budgets.

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) :

All testing is carried out by INIAV, I.P. which is the National Reference Laboratory for Animal Health. On the Mainland, testing is paid by the state's budget. In the autonomous regions of Açores and Madeira, testing is paid by the regional government's budgets.

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 expenses are not foreseen in this programme.

However, in the event of an outbreak of AI, compensations are paid by DGAV in the Mainland or by the budget of the Regional Governments in the case of the Autonomous Regions.

The payment of compensation for animals slaughtered is foreseen in Decree-Law 39209 from May 14, 1953, allowing the Veterinary Authority (DGAV) to determine the culling of animals and the payment of compensation.

In all cases in which the slaughter of animals is determined a compensation process is made which serves as the basis for compensation.

In all cases where the culling of animals is determined a process, which includes a slaughter testimonial, is made that underlies the compensation process. The value of this compensation is defined by the Joint Decree 530/2000 of 16 May.

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) :

No vaccination is foreseen within the scope of this programme.

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

(max. 32000 chars) :

Other essential measures are not foreseen in this programme.

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:

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.

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		Total size of attachments :	