

#### **EUROPEAN COMMISSION**

#### DIRECTORATE-GENERAL FOR HEALTH AND FOOD SAFETY

Food sustainability, international relations

Unit D4 - Food safety programmes, Emergency funding

### <u>Programmes for eradication, control and surveillance of animal diseases and zoonoses submitted for obtaining EU financial contribution</u>

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

Member States seeking an EU financial contribution for national programmes of eradication, control and surveillance 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).

Due to the late adoption of the SMP regulation all programmes will be submitted to be approved technically for 2021 and 2022.

Therefore, this document shall also be filled out and submitted after selection of the options:

This programme is multiannual: "YES"

Request for Union cofinancing from beginning 2021 to end of 2022.

#### If encountering difficulties:

- concerning the information requested, please contact SANTE-VET-PROG@ec.europa.eu.
- on the technical point of view, please contact <u>SANTE-Bl@ec.europa.eu</u>, include in your message a printscreen of the complete window where the problem appears and the version of this pdf:

#### Instructions to complete the form:

- 1) You can attach documents (.doc, .xls, .pdf, etc) to complete your report using the button "Add attachments" on the last page of the form.
- 2) Before submitting this form, please use the button "Verify form"(bottom right of each page). If needed, complete your pdf document as indicated.
- 3) When you have finished completing this pdf document, save it on your computer.
- 4) Verify that your internet connection is active and then click on the "Submit notification" button and your pdf document will be sent to our server. A submission number will appear on your document. Save this completed document on your computer for your record.
- 5) For simplification purposes you are invited to submit multi-annual programmes.

6) Yo	ou are invited to submit your	programmes in English.	Document Version: 2021 2.1

Member state :	: PORTUGAL	
Disease	Avian Influenza	
This program is	s multi annual : yes	
Type of submiss	sion: New multiannual programme or Modification of already approved m	ultiannual programme
Request of Unio	ion co-financing from beginning : 2021 To end of	2022
	Request year for multiannual programme :	2021
1. Contact data		2021
Contact data     Name		2021
	a	2021

**Submission Date** 

11/10/2021 16:51:56

**Submission Number** 

1633967518180-17601

- 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 n° 81/2013 of 14th June and is applicable to all commercial poultry establishments. Non-

commercial 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 teritory; this code is preceded by the letters PT and follwed 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):

### 2.1.3.1 - Programme for 2021:

In 2021, the surveillance system will continue to be implemented according to annex I to Comission Decision 2010/367/UE and on the basis of a representative sample according to point 5 of that annex. Samples will be taken on holdings or in slaughterhouses, representing the different species/categories and the different regions of the country. Sampling period: January 1st to December 31st 2021.

Total number of tests foreseen:

- 1. ELISA: a total of 4810 tests will be carried out in the following poultry categories: chicken breeders, laying hens, free range laying hens, at-risk broilers, fattening turkeys, fattening ducks and duck breeders. The at-risk broilers are free range broilers which, like free range laying hens, have access to outdoors within their holding.
- 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: Due to practical constraints regarding blood sampling of some poultry categories, namely: ratites, backyard poultry and farmed game (gallinaceous and waterfowl), these will be tested by PCR and not by serology. 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. A total of 135 RT-PCR tests are foreseen and no cofinancing is requested for this testing.

#### 2.1.3.2 - Programme for 2022:

For 2022, 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 2022:

- ELISA a total of 2470 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 286 tests will be carried out in the following poultry categories: duck breeders, fattening ducks, game birds gallinaceous, game birds waterfowl and quails.

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 3 and 4.

#### **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 16-18 weeks for males (average weight exceeding 10 kg).

#### Ducks – Breeding and fattening:

Duck production is not very important in Portugal and is entirely 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.

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 33 establishments of gallinaceous farmed game birds in the national territory; these poultry establishments are essentially located in Norte (12), Centro (6) 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.

#### Ratites:

There are only 3 ostrich farms in the national territory, 2 in the region of Lisboa e Vale do Tejo and 1 in Centro.

Quails: There are 4 quail production establishments in Portugal: 1 in Centro, 2 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):

Starting from 2022 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\_2 - 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):

#### 2.2.1 - Programme for 2021:

In accordance to point 2.2 of annex I to Commission Decision 2010/367, the sampling of the following poultry species and production categories will be included in the 2021 surveillance programme:

- (a) laying hens;
- (b) free range laying hens;
- (c) chicken breeders;
- (d) free range broilers
- (e) duck breeders;
- (f) fattening ducks;
- (g) fattening turkeys;
- (h) farmed game birds (gallinaceous) focusing on adult birds such as breeding birds;
- (j) farmed game birds (waterfowl);
- (k) ratites;
- (I) backyards flocks.

The number of sampled establishments and the number of samples collected in each establishment shall be according to point 5 of annex I to Commission Decision 2010/367. Sampling shall be carried out throughout the whole territory of Portugal, including Mainland and Autonomous Regions of Açores and Madeira.

#### 2.2.2 - Programme for 2022

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.

2.2.2.1 - 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;

Fattening ducks – 15;

Game birds waterfowl - 2;

Ouails - 4

2.2.2.2 - 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:

2.2.2.2.1 – Poultry establishments located in areas of higher risk for the introduction of avian influenza virus:

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Laying hens – 4;Free range laying hens – 1;
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- Fattening turkeys – 6;

- Farmed game gallinaceous – 7

2.2.2.2.2 - Poultry establishments not located in areas of higher risk for the introduction of avian influenza virus:

- Laying hens – a total of 53 poultry establishments will be sampled:

Norte - 4

Centro – 32

Lisboa e Vale do Tejo – 17;

- Free range laying hens – a total of 36 poultry establishments will be sampled:

Norte - 4

Centro – 24

Lisboa e Vale do Tejo – 4

Alentejo – 3;

Madeira - 1

- Fattening turkeys – a total of 53 poultry establishments will be sampled:

Centro - 20

Lisboa e Vale do Tejo – 32

Alentejo – 1;

- Farmed game gallinaceous –a total of 26 poultry establishments will be sampled:

Norte - 12

Centro - 4

Lisboa e Vale do Tejo – 9



2.2.2.2.3 - Number of samples to be taken in each establishment considering the minimum requirements set in Annex II section 9 to Commission Delegated Regulation (EU) 2020/689:

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 <sup>(a)</sup> (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 2021

Category: chicken breeders

delete this category

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	6	4	20	80	80	ELISA test	X
PT16-Centro	41	20	20	400	400	ELISA test	X
PT17-Lisboa e Vale do Tejo	27	15	20	300	300	ELISA test	X
PT18-Alentejo	1	1	20	20	20	ELISA test	X
PT20-Açores	1	1	20	20	20	ELISA test	X
PT30-Madeira	1	1	20	20	20	ELISA test	X
All country	0	0	0	0	17	HI-test (H5)	X
All country	0	0	0	0	17	HI-test (H7)	X

Tota	l la	874
		Add a new row
• •	s or flocks or establishments as appropriate. ation of the holding of origin. In case NUTS (Nomenclature of Territorial Units for Statistics) car	a not be used region as defined in the programme by the Member States is requested
	holdings of one category of poultry in concerned NUTS 2 region.	That be used, region as defined in the programme by the Member States is requested

Category: laying hens

delete this category

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	5	20	100	100	ELISA test	X
PT16-Centro	72	30	20	600	600	ELISA test	X
PT17-Lisboa e Vale do Tejo	24	14	20	280	280	ELISA test	X
PT18-Alentejo	1	1	20	20	20	ELISA test	Х
PT20-Açores	6	3	20	60	60	ELISA test	X
PT30-Madeira	3	2	20	40	40	ELISA test	X
All country	0	0	0	0	22	HI-test (H5)	X
All country	0	0	0	0	22	HI-test (H7)	X
Total					1 144		
						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: 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	4	4	20	80	80	ELISA test	X
PT16-Centro	24	24	20	480	480	ELISA test	X
PT17-Lisboa e Vale do Tejo	5	4	20	80	80	ELISA test	X
PT18-Alentejo	4	4	20	80	80	ELISA test	X
PT30Madeira	2	2	20	40	40	ELISA test	X
All country	0	0	0	0	15	HI-test (H5)	X
All country	0	0	0	0	15	HI-test (H7)	X
Total					790		

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: Free range broilers

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	7	2	10	20	20	ELISA test	X
PT16-Centro	188	42	10	420	420	ELISA test	X
PT17-Lisboa e Vale do Tejo	21	8	10	80	80	ELISA test	X
PT-Madeira	1	1	10	10	10	ELISA test	X
All country	0	0	0	0	11	HI-test (H5)	X
All country	0	0	0	0	11	HI-test (H7)	X
Total					552		

### 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: fattening turkeys

delete this category

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	1	10	10	10	ELISA test	X
PT16-Centro	40	19	190	190	190	ELISA test	X
PT17-Lisboa e Vale do Tejo	87	38	380	380	380	ELISA test	X
PT18-Alentejo	3	2	20	20	20	ELISA test	X
All country	0	0	0	0	12	HI-test (H5)	X
All country	0	0	0	0	12	HI-test (H7)	X
Total					624		

### Add a new row

Category: ratites

delete this category

NUTS (2) (b)	Total number of holdings(c)	Total number of holdings to be sampled		Total number of samples	Total number of tests	Method of laboratory analysis	
PT16-Centro	1	1	5	5	1	PCR test	X
PT17-Lisboa e Vale do Tejo	2	2	5	10	2	PCR test	X
Total					3		

<sup>(</sup>a) Holdings or herds or flocks or establishments as appropriate.

<sup>(</sup>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

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

#### 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: 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	12	12	10	120	24	PCR test	X
PT16-Centro	6	6	10	60	12	PCR test	X
PT17-Lisboa e Vale do Tejo	9	9	10	90	18	PCR test	X
PT18-Alentejo	3	3	10	30	6	PCR test	X
PT15-Algarve	2	2	10	20	4	PCR test	X
PT30-Madeira	1	1	10	10	2		X
Total					66		

### 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: backyard flocks

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	96 000	16	5	80	16	PCR test	X
PT16-Centro	66 500	15	5	75	15	PCR test	X
PT17-Lisboa e Vale do Tejo	30 000	8	5	40	8	PCR test	X
PT18-Alentejo	26 500	7	5	35	7	PCR test	X
PT15-Algarve	9 500	8	5	40	8	PCR test	X
PT20-Açores	4 500	3	5	15	3	PCR test	X
PT30-Madeira	4 500	3	5	15	3	PCR test	X
Total					60		

### 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.

### Add a category

Totals	Total number of tests	Total number of samples
Total poultry 2021	4 113	4 475

Targets for year

2022

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	72	34	20	680	680	ELISA test	X
PT17-Lisboa e Vale do Tejo	24	19	20	380	380	ELISA test	X
All country	0	0	0	0	23	HI-test (H5)	X
All country	0	0	0	0	23	HI-test (H7)	X
Total					1 186		

Add a new row

<sup>(</sup>a) 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	4	4	20	80	80	ELISA test	X
PT16-Centro	24	24	20	480	480	ELISA test	X
PT17-Lisboa e Vale do Tejo	5	4	20	80	80	ELISA test	X
PT18-Alentejo	4	4	20	80	80	ELISA test	X
PT30-Madeira	2	1	20	20	20	ELISA test	X
All country	0	0	0	0	14	HI-test (H5)	X
All country	0	0	0	0	14	HI-test (H7)	X
Total					768		

Add a new row

Category: fattening turkeys

delete this category

<sup>(</sup>a) Holdings or herds or flocks or establishments as appropriate.

<sup>(</sup>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

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

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	
PT16-Centro	40	20	10	200	200	ELISA test	X
PT17-Lisboa e Vale do Tejo	87	38	10	380	380	ELISA test	X
PT18-Alentejo	3	1	10	10	10	ELISA test	X
All country	0	0	0	0	12	HI-test (H5)	X
All country	0	0	0	0	12	HI-test (H7)	X
Total					614		

### Add a new row

Category: farmed game birds (gallinaceous)

delete this category

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	12	12	10	120	24	PCR test	X
PT16-Centro	6	6	10	60	12	PCR test	X
PT17-Lisboa e Vale do Tejo	9	9	10	90	18	PCR test	X
PT18-Alentejo	3	3	10	30	6	PCR test	X
PT15-Algarve	2	2	10	20	4	PCR test	X

<sup>(</sup>a) Holdings or herds or flocks or establishments as appropriate.

<sup>(</sup>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

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

PT30-Madeira	1	1	10	10	2	PCR test	X
Total					66	\$	
						Add a new row	
1	flocks or establishments as a		Territorial Units for Statistics	can not be used region a	s defined in the progr	ramme by the Member States is requested	•

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	
PT16-Centro	1	1	10	10	2	PCR test	X
PT17-Lisboa e Vale do Tejo	2	2	10	20	4	PCR test	X
PT30-Madeira	1	1	10	10	2	PCR test	Х
Total					8		

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.

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 2022	2 642	2 840

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

2021

Category: duck breeders

delete this category

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	
PT17-Lisboa e Vale do Tejo	2	2	40	80	80	ELISA test	X
PT17-Lisboa e Vale do Tejo	0	0	0	0	2	HI-test (H5)	X
PT17-Lisboa e Vale do Tejo	0	0	0	0	2	HI-test (H7)	X
Total					84		

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: 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
PT17-Lisboa e Vale do Tejo	1	1	20	20	4	PCR test	X
Total					8		

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

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	
PT17-Lisboa e Vale do Tejo	14	14	60	840	840	ELISA test	X
PT18-Alentejo	1	1	60	60	60	ELISA test	X
All country	0	0	0	0	18	HI-test (H5)	X

All country	у	0	0	0	0	18	HI-test (H7)	X	
	Total					936			
	Add a new row								
(a) (b)		ocks or establishments as a of the holding of origin. In co	ppropriate. ase NUTS (2) code can not be	e used, region as defined in	n the programme by the M	ember State is requested		-	

### Add a category

Totals	Total number of tests	Total number of samples
Total ducks and geese and farmed game birds 2021	1 028	1 020

Targets for year

2022

Category: duck breeders

delete this category

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	
PT17-Lisboa e Vale do Tejo	2	2	40	80	16	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

#### 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	
PT17-Lisboa e Vale do Tejo	14	14	60	840	168	PCR test	X
PT18-Alentejo	1	1	60	60	12	PCR test	X
Total					180		

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

delete this category

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	40	40	8	PCR test	X
PT17-Lisboa e Vale do Tejo	1	1	40	40	8	PCR test	X
Total					16		
					A	dd a new row	

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

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

(b)

Totals	Total number of tests	Total number of samples
Total ducks and geese and farmed game birds 2022	212	1 060

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

2021

Poultry + Ducks/Geese /farmed game birds	Total number of tests
Grand Total	5 141
Grand Total ELISA	4810
Grand Total agar	0
Grand Total HI tests (H5)	97
Grand Total HI tests (H7)	97
Grand Total Virus Isolation test	0
Grand Total PCR test	135
Grand Total Samplings	5 495

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

2022

Poultry + Ducks/Geese /farmed game birds	Total number of tests
Grand Total	2 854
Grand Total ELISA	2 470
Grand Total agar	0
Grand Total HI tests (H5)	49
Grand Total HI tests (H7)	49
Grand Total Virus Isolation test	0
Grand Total PCR test	286
Grand Total Samplings	3 900

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 wil 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:

#### 2.3.1 - Programme for 2021:

- Chicken breeders twice a year, 4 to 6 months apart;
- Laying hens and free range laying hens twice a year, 4 to 6 months apart;
- Free range broilers once a year;
- Fattening turkeys once a year;
- Farmed game gallinaceous once a year;
- Ratites once a year;
- Backyard flocks once a year;
- Farmed game waterfowl once a year;
- Duck breeders twice a year, 4 to 6 months apart;
- Fattening ducks 2 or 3 times per year;

For the following poultry categories, sampling may take place either at the poultry establishment or in a slaughterhouse: chicken breeders, laying hens, free range laying hens, free range broilers, fattening turkeys, fattening ducks and duck breeders. For game birds, gallinaceous and waterfowl, ratites and backyard flocks sampling will be carried out at the respective poultry establishments.

### 2.3.2 - Programme for 2022:

- 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;
- Duck breeders twice a year, 4 to 6 months apart;
- Fattening ducks 2 or 3 times per year;
- Quails once a year.

For the following poultry categories, sampling may take place either at the poultry establishment or in a slaughterhouse: laying hens, free range laying hens and fattening turkeys. For breeding ducks, fattening ducks, game birds (gallinaceous and waterfowl) and quails, sampling will be carried out at the respective poultry establishments.

In both years, the frequency of testing may be adjusted according to the epidemiological situation. Hence, it may 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)

### 2.4.1 - Programme for 2021:

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

- -Chicken breeders;
- -Laying hens;
- -Free range laying hens;
- -Free range broilers;
- -Fattening turkeys;
- -Breeding ducks;
- -Fattening ducks.

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.

Due to practical constraints regarding blood collection, RT-PCR assays shall be used as screening tests for the following poultry categories:

- -Game birds gallinaceous;
- -Game birds waterfowl;
- -Ratites;
- -Backyard flocks.

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: chicken breeders, laying hens, free range laying hens, free range broilers, fattening turkeys and farmed game gallinaceous. For ratites establishments and backyard flocks 5 samples per sampling event will be taken. For duck breeders, fattening ducks and farmed game waterfowl, 20 samples per sampling event will be taken.

#### 2.4.2- Programme for 2022:

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. DDue to practical constraints regarding blood collection, 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.

### 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 and adjacent zones (Please see ANNEX\_6) 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 ocasionally 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. Please see ANNEXES\_2 and 8.

### 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 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):

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 Northeast and Eastern routes and Portugal is geographically located outside the usual pathways of these routes.

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 3.2.1is the maximum number foreseen. The number of virus isolation tests and sequencing 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

2021

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	
PT11-Norte	30	30	PCR test	60	X
PT16-Centro	40	40	PCR test	80	X
PT17-Lisboa e Vale do Tejo	40	40	PCR test	80	X
PT18-Alentejo	40	40	PCR test	80	X
PT15-Algarve	50	50	PCR test	100	Х
PT20-Açores	25	25	PCR test	50	Х
PT30-Madeira	25	25	PCR test	50	Х
All country	0	0	Virus isolation test	20	Х
All country	0	0	Virus subtipification by sequence	20	X

Total	250	250	540			
		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	540
Total Virus isolation tests	20
Total PCR tests	500
Total Other tests	20
Total number of wild birds to be sampled for passive surveillance	250

### Targets for year **2022**

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	20	PCR test	40	X
PT16-Centro	40	40	PCR test	80	X
PT17-Lisboa e Vale do Tejo	40	40	PCR test	80	X
PT18-Alentejo	30	30	PCR test	60	X
PT15-Algarve	50	50	PCR test	100	X
PT20-Açores	15	15	PCR test	30	X

PT30-Madeira	10	10	PCR test	20	X
All country	0	0	Virus isolation test	16	X
All country	0	0	Virus subtipification by sequenc	16	X
Total	205	205		442	

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	442
Total Virus isolation tests	16
Total PCR tests	410
Total Other tests	16
Total number of wild birds to be sampled for passive surveillance	205

# 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 3.2.1is 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:

No avian influenza outbreaks in poultry, either high or low pathogenicity, were detected in Portugal in the last five years. Please see ANNEX\_7.

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

#### (max. 32000 chars):

Between 2016 and 2020 a total of 435 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.

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, currently, after entry into force of Regulation (EU) 2016/429 ("Animal Health Law"), 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. 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 no 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):

### 7.1.1.1 - Programme for 2021:

The surveillance system will continue to be implemented according to annex I to Comission Decision 2010/367/UE and on the basis of a representative sample according to point 5 of that annex.

Samples will be taken on holdings or in slaughterhouses, representing the different species/categories and the different regions of the country. Sampling period: January 1st to December 31st 2020.

Total number of tests foreseen:

1. ELISA: a total of 4810 tests will be carried out in the following poultry categories: chicken breeders, laying hens, free range laying hens, at-risk broilers, fattening turkeys, fattening ducks and duck breeders. The at-risk broilers are free range broilers which, like free range laying hens, have access to

outdoors within their holding.

- 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: Due to practical constraints regarding blood sampling of some poultry categories, namely: ratites, backyard poultry and farmed game (gallinaceous and waterfowl), these will be tested by PCR and not by serology. In these poultry categories a total of 135 RT-PCR tests will be carried out. 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. No cofinancing is requested for this testing.

### 7.1.1.2 - Programme for 2022:

From 2022 onwards, the avian influenza surveillance programme will be implemented according to Annex II to Delegated Regulation 2020/689. As previously stated, depending on poultry category, sampling will carried out at poultry establishments or at the slaughterhouse.

Total number of tests foreseen:

- 1. ELISA: a total of 2854 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 286 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):

### 7.1.2.1 - Programme for 2021:

1. Number of wild birds to be sampled: 250.	
2. Number of tests foreseen:	
<ul> <li>- RT-PCR: a maximum of 500 RT-PCR tests is estimated. This number may vary as explained in point 3.4.</li> <li>- Virus isolation: an expected value of 4% of samples subjected to isolation was considered.</li> <li>- Virus subtyping by sequencing: an expected value of 4% of samples subjected to isolation was considered.</li> </ul>	
7.1.2.2 - Programme for 2022:	
From 2022 onwards, the avian influenza surveillance programme will be implemented according to Annex II to Delegated Regulation 2020/689.	
1. Number of wild birds to be sampled: 205. The sampling in PT11-Norte, PT20-Açores and PT30-Madeira was reduced due to the fact that there are no higher risk areas for the introduction of a influenza in these regions. However, considering that wild birds, potentially infected, may also be found, although in smaller numbers, outside higher 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 these	er risk
Total number of tests foreseen:	
<ul> <li>- RT-PCR: a maximum of 410 RT-PCR tests is estimated. This number may vary as explained in point 3.4.</li> <li>- Virus isolation: an expected value of 4% of samples subjected to isolation was considered.</li> <li>- Virus subtyping by sequencing: an expected value of 4% of samples subjected to isolation was considered.</li> </ul>	
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	у
Costs of the planned activities for year: 2021	

Laboratory testing								
Cost related to	<u>Specification</u>	Number of tests	Unitary cost in EUR	Total amount in EUR	Union funding requested	Cofinancin g rate	Requested Union contribution	
esting	ELISA test - poultry	4 810	3.57	17171.7	yes	75	12 878,77	X
esting	AGID test - poultry	0	8.08	0	yes	75	0	X
esting	HI-Test for H5	97	4.19	406.43	yes	75	304,82	X
esting	HI-Test for H7	97	4.19	406.43	yes	75	304,82	X
esting	Virus isolation test - poultry	0	51.07	0	yes	75	0	X
esting	PCR test - poultry	135	19.25	2598.75	no	75	0	X
Sampling								
Cost related to	<u>Specification</u>	Number of vaccine dosis	Average cost per dose in EUR		Union funding requested	Cofinancin g rate	Requested Union contribution	
Sampling	Domestic animals sampled	5 495	1.91	10495.45	yes	75	7 871,59	X
Other measures								
Cost related to	Compensation of	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	Cofinancin g rate	Requested Union contribution	
	Total with Union funding request (€):			28480.01	including 21360			
Total without Union funding request (€):			2598.75	= requested EU contribution in €				
			,					

Costs of the planned activities for year:

2022

Laboratory testing	g							
Cost related to	<u>Specification</u>	Number of tests	Unitary cost in EUR	Total amount in EUR	Union funding requested	Cofinancin g rate	Requested Union contribution	
esting	ELISA test - poultry	2 470	3.57	8817.9	yes	75	6 613,43	X
esting	AGID test - poultry	0	8.08	0	yes	75	0	X
esting	HI-Test for H5	49	4.19	205.31	yes	75	153,98	X
esting	HI-Test for H7	49	4.19	205.31	yes	75	153,98	X
esting	Virus isolation test - poultry	0	51.07	0	yes	75	0	X
esting	PCR test - poultry	286	19.25	5505.5	yes	75	4 129,13	X
Sampling								
Cost related to	<u>Specification</u>	Number of vaccine dosis	Average cost per dose in EUR	Total amount in EUR	Union funding requested	Cofinancin g rate	Requested Union contribution	
ampling	Domestic animals sampled	3 900	1.91	7449	yes	75	5 586,75	X
		,			!			
Other measures								
Cost related to	<u>Compensation of</u>	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	Cofinancin g rate	Requested Union contribution	
		Total with Union fu	Total with Union funding request (€):			including 16637.		
		Total without Union funding request (€):			= requested EU contribution in €			

7.2.2 Wild bird surveillance: Detail analysis of the cost of the programme - wild birds

Costs of the planned activities for year: 2021

Laboratory testing								
<u>Specification</u>	Number of tests	Unitary cost in EUR	Total amount in EUR	Union funding	ng rate	Requested Union contribution		
Virus isolation test - wild birds	20	51.07	1021.4	yes	75	766,05	X	
PCR test - wild birds	500	19.25	9625	yes	75	7 218,75	X	
<u>Specification</u>	Number of wild birds to be sampled	Average cost per dose in EUR	Total amount in EUR	Union funding requested	na rate	Requested Union contribution		
Wild birds sampled	250	10	2500	yes	75	1 875	X	
Compensation of	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	na rate	Requested Union contribution		
Total with Union funding request (€):  Total without Union funding request (€):						9859.8 equested EU contribution	n in €	
	Virus isolation test - wild birds  PCR test - wild birds  Specification  Wild birds sampled  Compensation of	Virus isolation test - wild birds  PCR test - wild birds  Specification  Number of wild birds to be sampled  Wild birds sampled  250  Compensation of  Number of units  Total with Union fur	Virus isolation test - wild birds 20 51.07   PCR test - wild birds 500 19.25      Number of wild birds to be sampled Average cost per dose in EUR   Wild birds sampled 250 10     Total with Union funding request (€):	Virus isolation test - wild birds 20 51.07 1021.4   PCR test - wild birds 500 19.25 9625      Number of wild birds to be sampled   Average cost per dose in EUR	Specification     Number of tests     Unitary cost in EUR     Total amount in EUR     Union funding requested requested       Virus isolation test - wild birds     20     51.07     1021.4     yes       PCR test - wild birds     500     19.25     9625     yes       Specification     Number of wild birds to be sampled     Average cost per dose in EUR     Total amount in EUR     Union funding requested       Wild birds sampled     250     10     2500     yes       Compensation of     Number of units     Unitary cost in EUR     Total amount in EUR     Union funding requested       Total with Union funding request (€):	Specification     Number of tests     Unitary cost in EUR     Total amount in EUR     Including requested funding requested       Virus isolation test - wild birds     20     51.07     1021.4     yes     75       PCR test - wild birds     500     19.25     9625     yes     75       Specification     Number of wild birds to be sampled     Average cost per dose in EUR     Total amount in EUR     Union funding requested     Cofinanci requested       Wild birds sampled     250     10     2500     yes     75       Compensation of     Number of units     Unitary cost in EUR     Total amount in EUR     Union funding requested     Cofinanci requested       Total with Union funding request (€):     13146.4     including	Specification     Number of tests     Unitary cost in EUR     Total amount in EUR     Union funding requested requested     on the requested requested requested       Virus isolation test - wild birds     20     51.07     1021.4     yes     75     766,05       PCR test - wild birds     500     19.25     9625     yes     75     7218,75       Specification     Number of wild birds to be sampled     Average cost per dose in EUR     Total amount in EUR     Cofinanci requested     Requested Union contribution       Wild birds sampled     250     10     2500     yes     75     1875       Compensation of     Number of units     Unitary cost in EUR     Total amount in EUR     Cofinanci requested     Requested Union contribution       Total with Union funding request (€):     13146.4     including     9859.8	

Costs of the planned activities for year: 2022

Laboratory testing							
Cost related to	Specification	Number of tests	Unitary cost in EUR	Total amount in EUR	Union funding requested	Cofinanci ng rate	Requested Union contribution
Testing	Virus isolation test - wild birds	16	51.07	817.12	yes	75	612,84 <b>X</b>
esting	PCR test - wild birds	410	19.25	7892.5	yes	75	5 919,38
Sampling							
Cost related to	<u>Specification</u>	Number of wild birds to be sampled	Average cost per dose in EUR	Total amount in EUR	Union funding requested	Cofinanci ng rate	Requested Union contribution
Sampling	Wild birds sampled	205	10	2050	yes	75	1 537,5
					•		
Other measures							
Cost related to	Compensation of	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	Cofinanci ng rate	Requested Union contribution
	Ψ.	Total with Union fu		10759.62	inclu	ıding	8069.72
	10	tal without Union fui	nding request (€):	0		= re	quested EU contribution in t

TOTALS for Poultry, duck, geese, farmed game birds (7.2.1) + WILD BIRDS (7.2.2) for year: 2021 **Total with Union funding request (€):** 41626.41 including 31219.8 **Total without Union funding request (€):** 2598.75 = requested EU contribution in € TOTALS for Poultry, duck, geese, farmed game birds (7.2.1) + WILD BIRDS (7.2.2) for year: 2022 Total with Union funding request (€): 32942.64 including 24706.99 Total without Union funding request (€): 0 = requested EU contribution in €

### 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 - <b>other essential measures</b> : who implements this measure? Who provides the equipmen
service? Who pays?
(max. 32000 chars) :
Other essential measures are not foreseen in this programme.
2 Co-financing rate (see provisions of applicable Work Programme)
The maximum co-financing rate is in general fixed at 50%. However based on provisions of Article 5.2 and 5.3 of the Regulation (EU) No 652/2014, we request that the co-financing rate for the reimbursement of the eligible costs would be increased:
∑Up to 75% for the measures detailed below
Up to 100% for the measures detailed below

Please explain for which measures and why co-financing rate should be increased to 75% (max 32000 characters)

We propose the co-financing rate of 75% for all eligible costs referred to in point 7.2. because, according to Eurostat data, in Portugal the gross national income per inhabitant is less than 90% of the European average.

3. Source of funding of eligible measures

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

 $\boxtimes$ yes

 $\square$ no

4. 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:

Other essential measures are not foreseen in this programme.

However, in the event of an outbreak of AI the equipment and resources are provided by the official veterinary services.

Material and financial execution is supported by DGAV, in the case of the Mainland, or by the budget of the Regional Governments, in the case of the Autonomous Regions.

### **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 <u>SEVERAL MINUTES TO UPLOAD</u> 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 :	