

The OIE Member Countries have the possibility to self-declare their country or a zone within their territory free from certain OIE-listed diseases other than those diseases for which the OIE has put in place a specific procedure for official recognition of disease status such as African horse sickness (AHS), bovine spongiform encephalopathy (BSE), classical swine fever\*, contagious bovine pleuropneumonia (CBPP), foot and mouth disease (FMD) and peste des petits ruminants\*.

\*Resolution N° 29 adopted in May 2013 at the 81<sup>st</sup> OIE General Session

## Self-declaration of the recovery of freedom from highly pathogenic avian influenza in poultry by the Netherlands

Declaration sent to the OIE on 12 July 2017 by Dr Christianne Brusckhe, OIE Delegate for the Netherlands Ministry of Economic Affairs

### Situation of highly pathogenic avian influenza

On 7 May 2015, the Netherlands self-declared freedom from highly pathogenic avian influenza in poultry in accordance with the provisions of Article 10.4.4. of the *Terrestrial Animal Health Code* (*Terrestrial Code*).

However, on 25 November 2016, the Netherlands reported an outbreak of highly pathogenic avian influenza (HPAI) type H5N8 in poultry. In total nine outbreaks occurred in 2016 in commercial poultry. These events were reported to the OIE World Animal Health Information System (WAHIS). Infected flocks were culled and the establishments were cleaned and disinfected. The last outbreak was detected on 24 December 2016. The last cleaning and disinfection was on 17 February 2017. Measures were lifted gradually, taking into account the epidemiological situation. The event was considered closed on 17 May 2017.

### Control and intensified surveillance

The Netherlands has carried out a control programme and intensified surveillance to regain its freedom from HPAI in poultry. In addition, an effective early detection system is in place. The programmes are carried out under the responsibility of the Veterinary Authority.

### Control and intensified surveillance in response to the outbreaks

The Netherlands has carried out a strict control strategy to eradicate the virus and control the nine outbreaks. All control measures and all inspections were carried out by the Netherlands Food and Consumer Product Safety Authority (NVWA) (the Veterinary authority).

This control strategy included measures mentioned in Directive 2005/94/EC<sup>1</sup> of the European Union and extra measures taken by the Dutch authorities. Restriction areas of 3 and 10 km radius were established where strict measures were applicable. These included movement restrictions between poultry farms, culling of poultry on infected premises and on flocks located up to 1 km around an outbreak, safe destruction of carcasses and contaminated material, cleaning and disinfection of infected premises (three times), and the application of hygienic measures for personnel, trucks, material etc. In the whole country, poultry was kept inside during 5 months (mid-November to mid-April).

<sup>1</sup> Directive 2005/94/EC: <http://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:32005L0094>

Poultry on affected farms were killed in line with Chapter 7.6. of the *Terrestrial Code*. Carcasses were safely destroyed at the rendering plant in the Netherlands. Approximately 218,000 birds have been culled at the farms where the outbreaks occurred. Approximately 432,000 birds have been pre-emptively culled at farms located up to 1 km around the outbreaks.

Within 2 days after confirmation of HPAI and the culling of the infected flock, all poultry flocks in a 3-km zone around each outbreak were examined clinically. When clinical signs were observed, a minimum of five sick animals were sampled and tested for the presence of virus. Per flock, 30 serum samples were collected and tested for the presence of antibodies against avian influenza. None of the samples tested positive for avian influenza (table 1), implying that none of the flocks in the 3-km zones were infected with avian influenza viruses.

Table 1 - number of samples tested in the 3-km zone surrounding the HPAI outbreaks in 2016. All tests had a negative results for avian influenza.

Screening	2016		2017			
	November	December	January	February	March	April
M-PCR	760	1420	332	280	0	10
ELISA	161	821	0	120	21	20

30 days after depopulation of each outbreak, all poultry flocks in the 10 km zones were visited and poultry clinically examined. If no signs of avian influenza were present, the area was declared free from avian influenza and the 3 and 10 km zones were abolished.

This additional surveillance programme did not reveal any additional outbreak of avian influenza. The nine outbreaks of HPAI that occurred in November and December 2016 were all detected due to rapid notification of a clinical suspicion by the farmers.

Tracing of contacts between infected flocks and other poultry farms and identifying possible sources of virus introduction were carried out by the NVWA. Forward and backward tracing was furthermore done by interviewing the farmers about all contacts in the three weeks before the suspicion was reported. In addition, farms that delivered products or poultry were visited by the NVWA to check for presence of avian influenza as well.

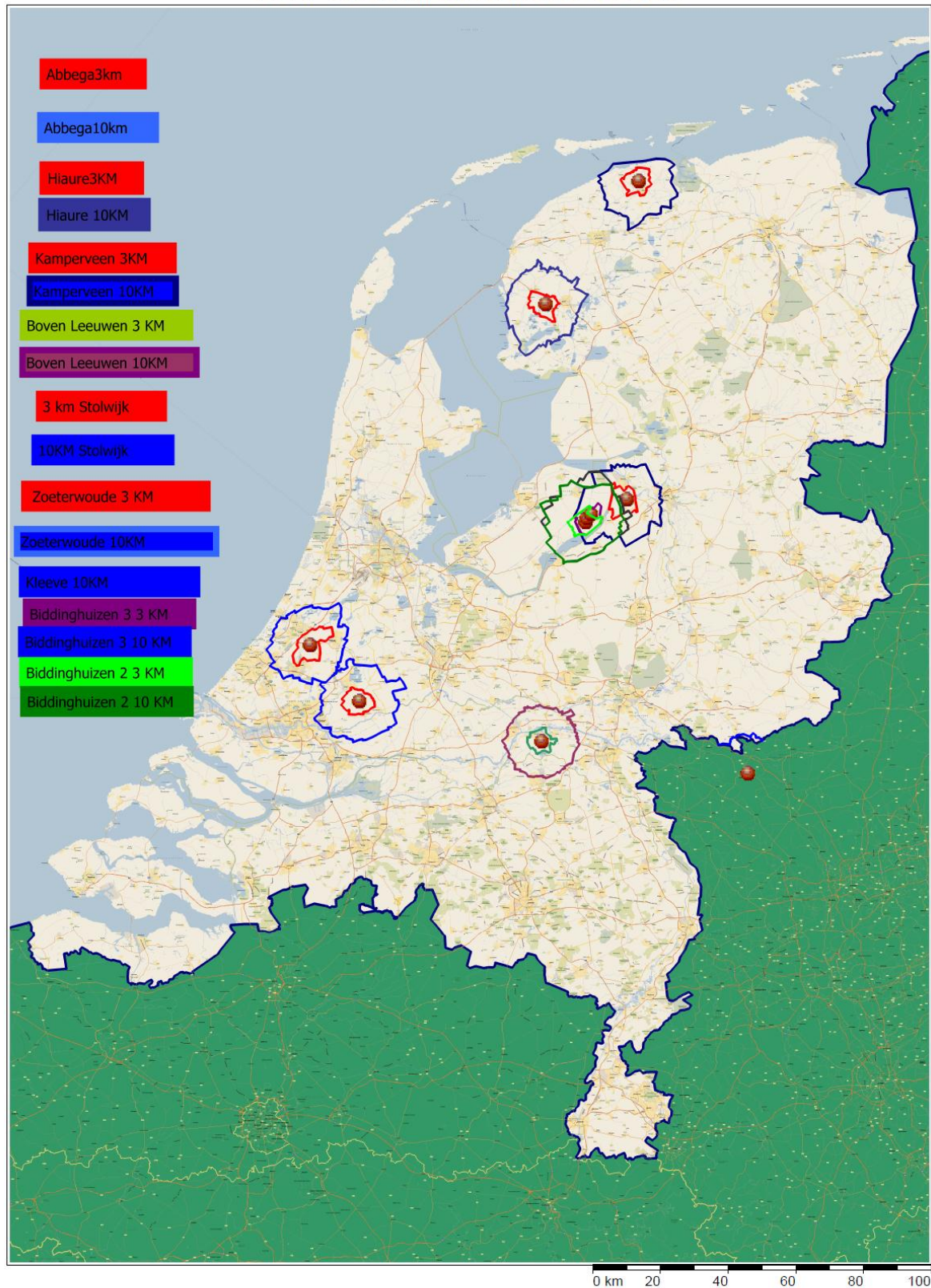
The virus strain from each infected flock was tested in the Dutch reference laboratory Wageningen Bioveterinary Research (WBVR). Epidemiological analyses based on RNA sequencing and contact tracing supported the hypothesis that wild birds introduced the virus at the nine farms, and no between-flock transmission has occurred.

After the outbreak on 24 December 2016 no further outbreaks were reported or detected by surveillance. The last cleaning and disinfection was done on 17 February 2017.

The situation on 29 December 2016 is shown in figure 1 below, including the localisations of the infected farms, and the 3 and 10 km zones with restrictions (Figure 1).

Figure 1 – localisation of the infected farms and restrictions zones

### HPAI Gebieden tot en met 31-12-2016



## Surveillance programme and early detection system

The Netherlands has a thorough surveillance programme carried out annually to rapidly detect new incursions and to prove freedom from notifiable avian influenza. The surveillance programme is in accordance with Chapter 1.4. and Articles 10.4.27. to 10.4.33. of the *Terrestrial Code*.

The programme has the following elements:

### 1. Obligation to report a clinical suspicion of avian influenza

Avian influenza is notifiable in the whole country. Veterinarians and poultry owners/holders should notify clinical signs of highly pathogenic avian influenza to the NVWA immediately. They have to report any occurrence of clinical signs resembling HPAI, or when daily mortality in a shed is higher than 0,5 % during 2 consecutive days. This obligation is embedded in Dutch legislation (Articles 19 and 100 of the Animal Health and welfare Act) and also in European rules (Directive 82/894/EEC)<sup>2</sup>. All suspected cases of avian influenza are investigated immediately by the NVWA. Based on the judgement of the NVWA, samples are collected and sent to the Dutch reference laboratory WBVR in Lelystad for further laboratory examination.

### 2. Awareness programme

An ongoing awareness programme is in place. Information about the avian influenza situation in the Netherlands and neighbouring countries is provided regularly to veterinary practitioners, and representatives of poultry sectors (commercial and hobby flock owners), and other stakeholders like hunters, and the general public. Updates about clinical signs of circulating avian influenza virus strains and susceptible species are also provided. Information about the epidemiological situation is shared between delegates of affected and not yet affected member countries.

### 3. Early Warning System

In addition to the obligation of reporting any suspicion, the Netherlands has implemented a procedure in which all farmers are legally obliged to consult a veterinarian when a drop in egg production, and/or feed and water intake occurs (Regeling preventie, bestrijding en monitoring van besmettelijke dierziekten en zoönosen en TSE's)<sup>3</sup>. If avian influenza cannot be ruled out, samples are sent to WBVR for confirmation or exclusion of avian influenza.

### 4. Serological monitoring

An active surveillance programme in which the susceptible poultry population undergoes regular clinical examination and active surveillance is implemented. Active surveillance is obligatory according to European legislation (Decision 2010/367/EU)<sup>4</sup>. The Netherlands has an intensive serological monitoring system. Serum samples are collected on each poultry farm in the Netherlands on a regular basis. Outdoor layer farming systems are sampled 4 times a year, turkey farms each production cycle (average production cycle is 4 months), and other flocks are sampled once a year. Per visit, 30 birds are sampled. In total approximately 100,000 tests are carried out annually.

### 5. Wild bird monitoring

Monitoring of wild water birds found dead is carried out and is obligatory due to European legislation. The Dutch government has requested public to notify findings of several dead birds at the same spot. Birds are sent to WBVR and samples are examined for confirmation or exclusion of avian influenza.

<sup>2</sup> Directive 82/894/EEC: <http://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:31982L0894>

<sup>3</sup>Regeling preventie, bestrijding en monitoring van besmettelijke dierziekten en zoönosen en TSE's: <http://wetten.overheid.nl/BWBR0018397/2017-01-01>

<sup>4</sup>Decision 2010/367/EU: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:166:0022:0032:EN:PDF>

## Conclusions

Bearing in mind that:

- prior to the occurrence of new outbreaks in November 2016, the Netherlands were free from highly pathogenic avian influenza in poultry (self-declaration 7 May 2015);
- stamping out measures were adopted that included cleaning-up and disinfecting all the affected farms;
- three months have elapsed as stipulated in Article 10.4.4. of the OIE *Terrestrial Code* since the end of the clean-up and disinfection operations;
- surveillance has been performed in accordance with Articles 10.4.27. to 10.4.33. of the OIE *Terrestrial Code* during that three-month period.

The OIE Delegate of the Netherlands declares that the country complies with the requirements for a country free from infection with highly pathogenic avian influenza in poultry as of 17 May 2017, in accordance with Article 10.4.4. of the OIE *Terrestrial Code* and in compliance with the information provided in WAHIS.