



# Update on highly pathogenic avian influenza in the EU

**Animal Health Advisory Committee**

**Brussels, 18 December 2017**

DG SANTE, Unit G3  
Official controls and eradication of diseases in animals  
European Commission  
Directorate General for Health and Food Safety

*Health and  
Food Safety*

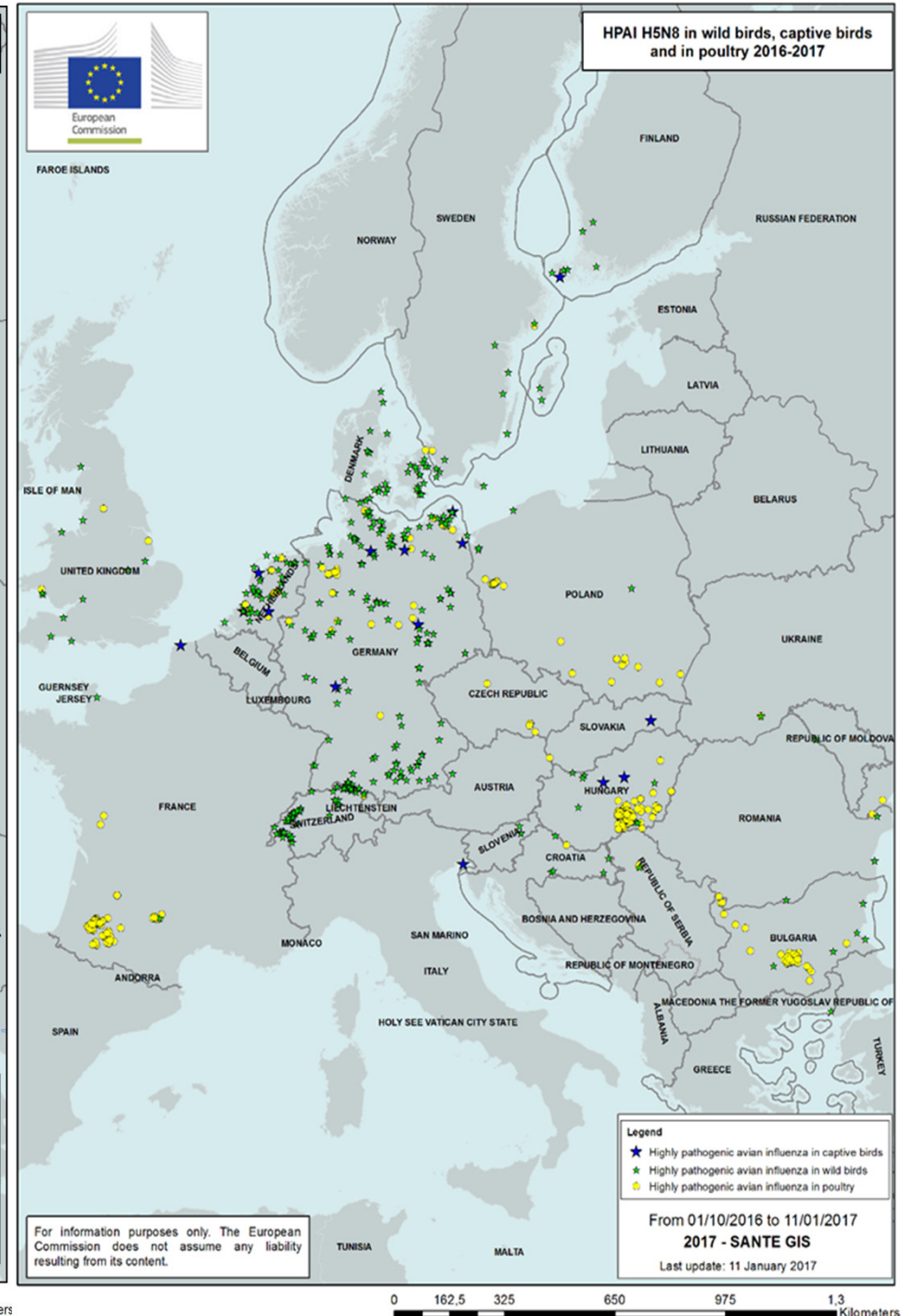
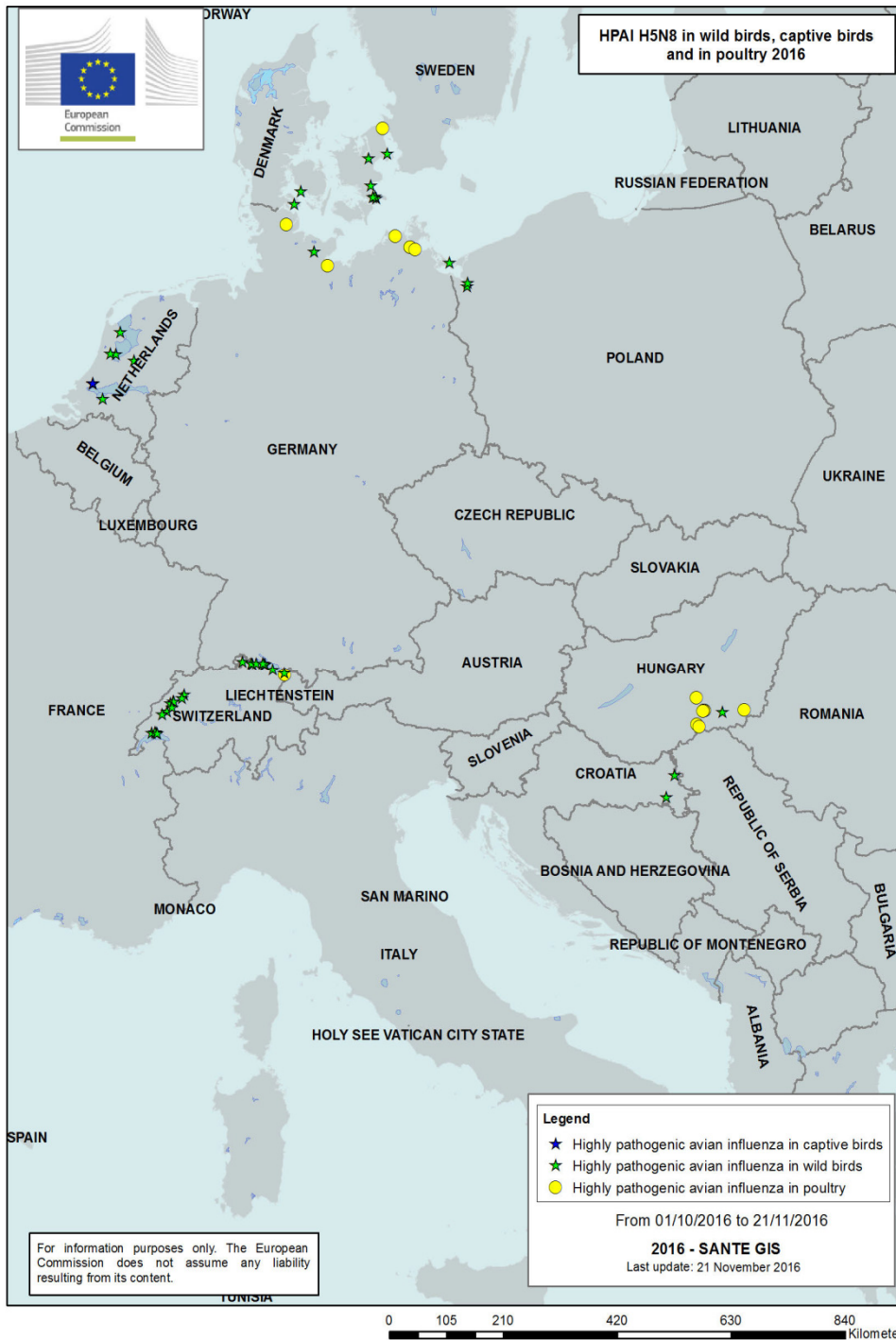


# Highly pathogenic avian influenza 2016-2017

- **27/10/2016:** start of the HP H5N8 epidemic in Hungary, wild mute swan tested positive for H5N8
- **4/11/2016:** first poultry farm tested positive in HU  
Virus detected in further 24 Member States  
Six Member States infection only in wild birds
- **After 07/2017:** Italy and Bulgaria affected
- **8/12/2017:** Netherlands in poultry and wild birds

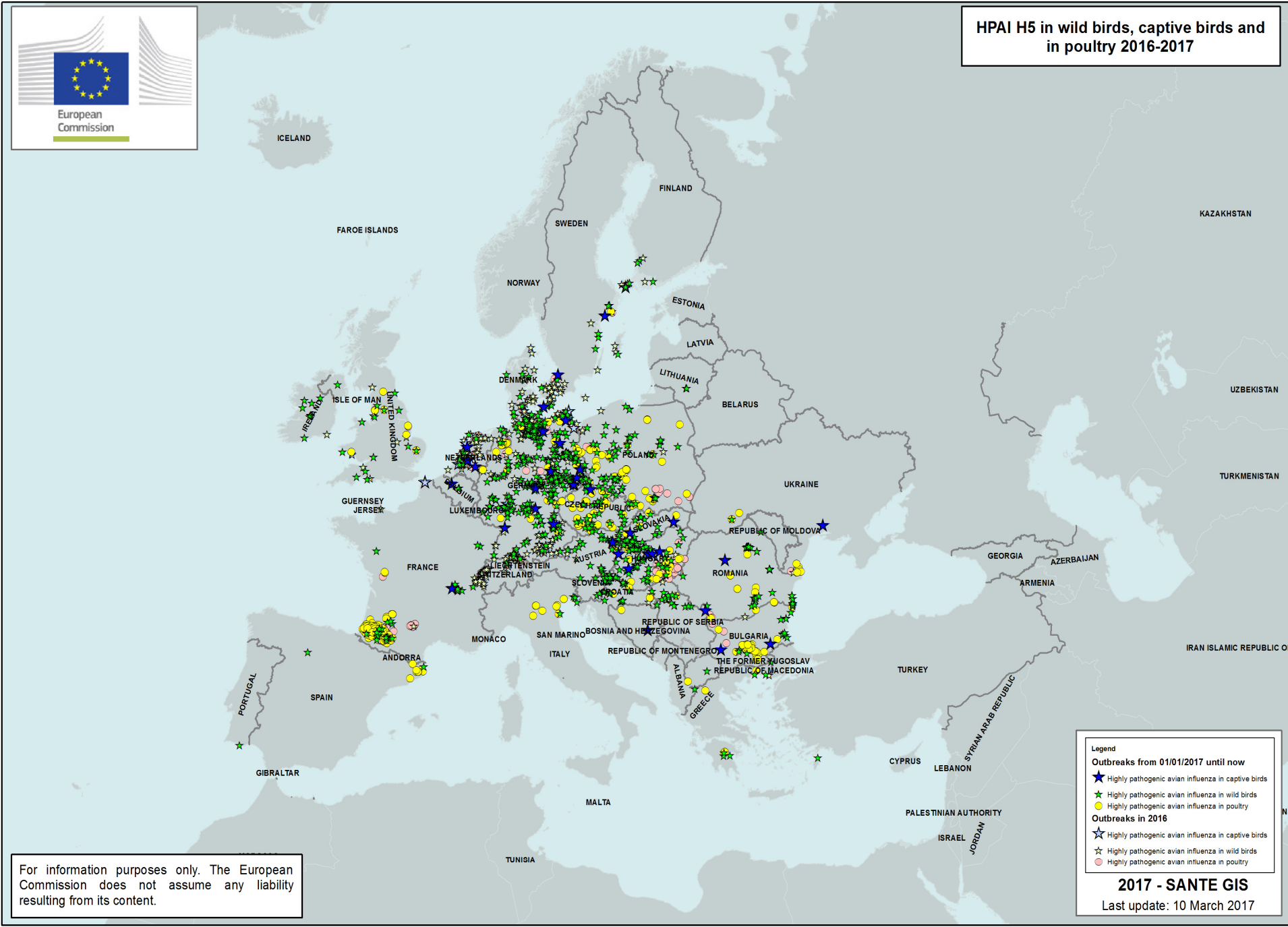
## HPAI in poultry, captive birds & wild birds 01/10/2016 -15/12/2017

MEMBER STATE	WILD BIRDS	POULTRY	CAPTIVE BIRDS
GERMANY	1260	92	15
FRANCE	72	486	3
<b>ITALY</b>	<b>24</b>	<b>83</b>	
<b>NETHERLANDS</b>	<b>174</b>	<b>10</b>	<b>10</b>
BELGIUM	4	2	13
LUXEMBOURG			4
UNITED KINGDOM	43	13	
IRELAND	10		
DENMARK	77	1	1
GREECE	12	6	
SPAIN	3	10	
PORTUGAL	1		
AUSTRIA	21	2	1
FINLAND	14		1
SWEDEN	38	4	2
CYPRUS	1		
CZECH REPUBLIC	49	38	1
HUNGARY	196	240	5
POLAND	303	65	
SLOVENIA	273		
<b>BULGARIA</b>	<b>20</b>	<b>76</b>	<b>2</b>
LITHUANIA	13		
ROMANIA	143	45	2
SLOVAKIA	252	9	2
CROATIA	48	11	
<b>Total</b>	<b>3051</b>	<b>1193</b>	<b>62</b>





# HPAI H5 in wild birds, captive birds and in poultry 2016-2017



For information purposes only. The European Commission does not assume any liability resulting from its content.

**Legend**

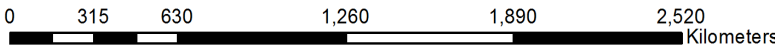
**Outbreaks from 01/01/2017 until now**

- ★ Highly pathogenic avian influenza in captive birds
- ★ Highly pathogenic avian influenza in wild birds
- Highly pathogenic avian influenza in poultry

**Outbreaks in 2016**

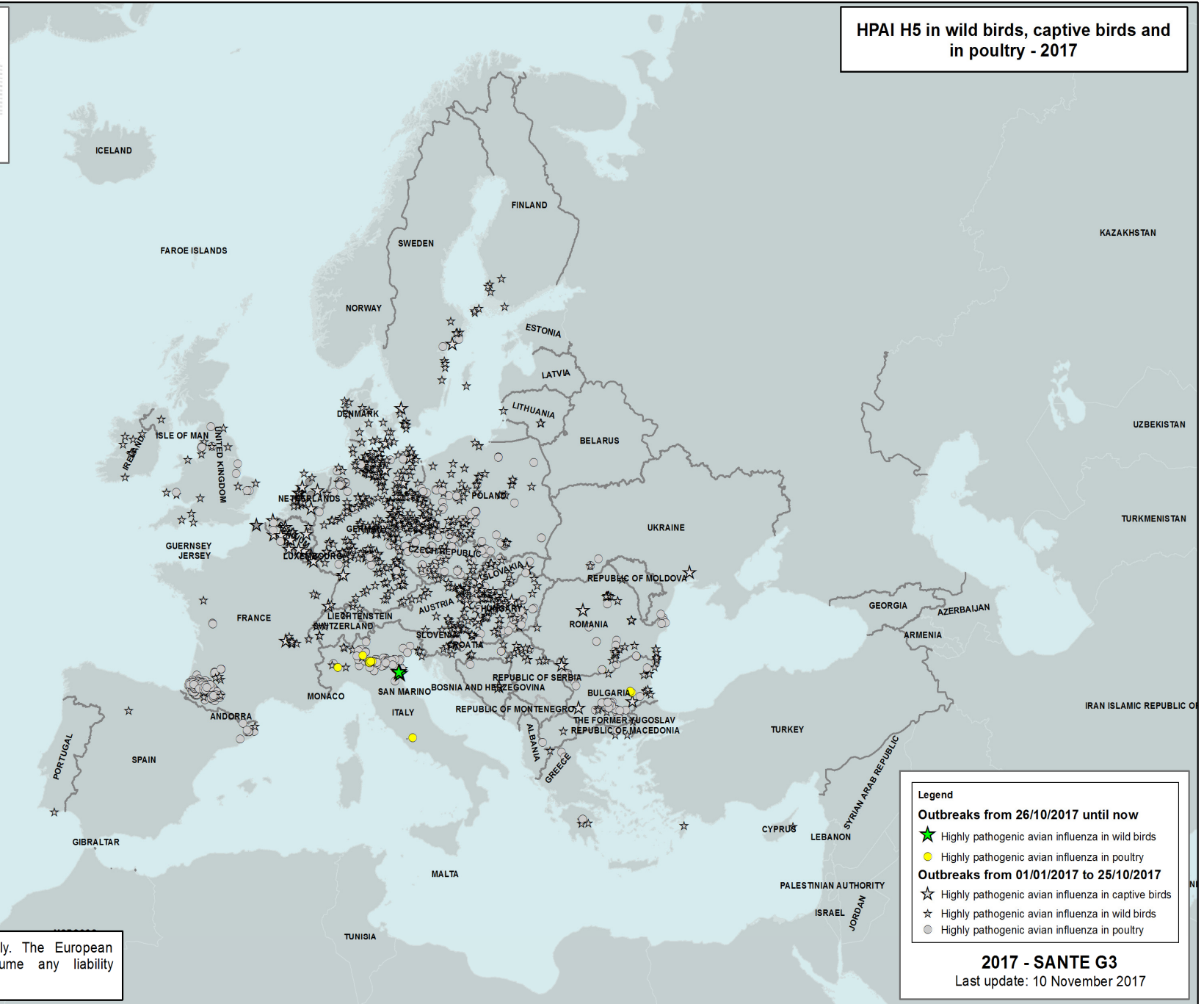
- ★ Highly pathogenic avian influenza in captive birds
- ★ Highly pathogenic avian influenza in wild birds
- Highly pathogenic avian influenza in poultry

**2017 - SANTE GIS**  
Last update: 10 March 2017





# HPAI H5 in wild birds, captive birds and in poultry - 2017



For information purposes only. The European Commission does not assume any liability resulting from its content.

**Legend**

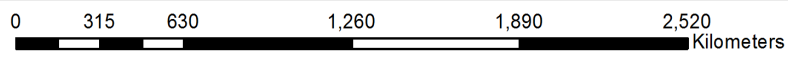
**Outbreaks from 26/10/2017 until now**

- ★ Highly pathogenic avian influenza in wild birds
- Highly pathogenic avian influenza in poultry

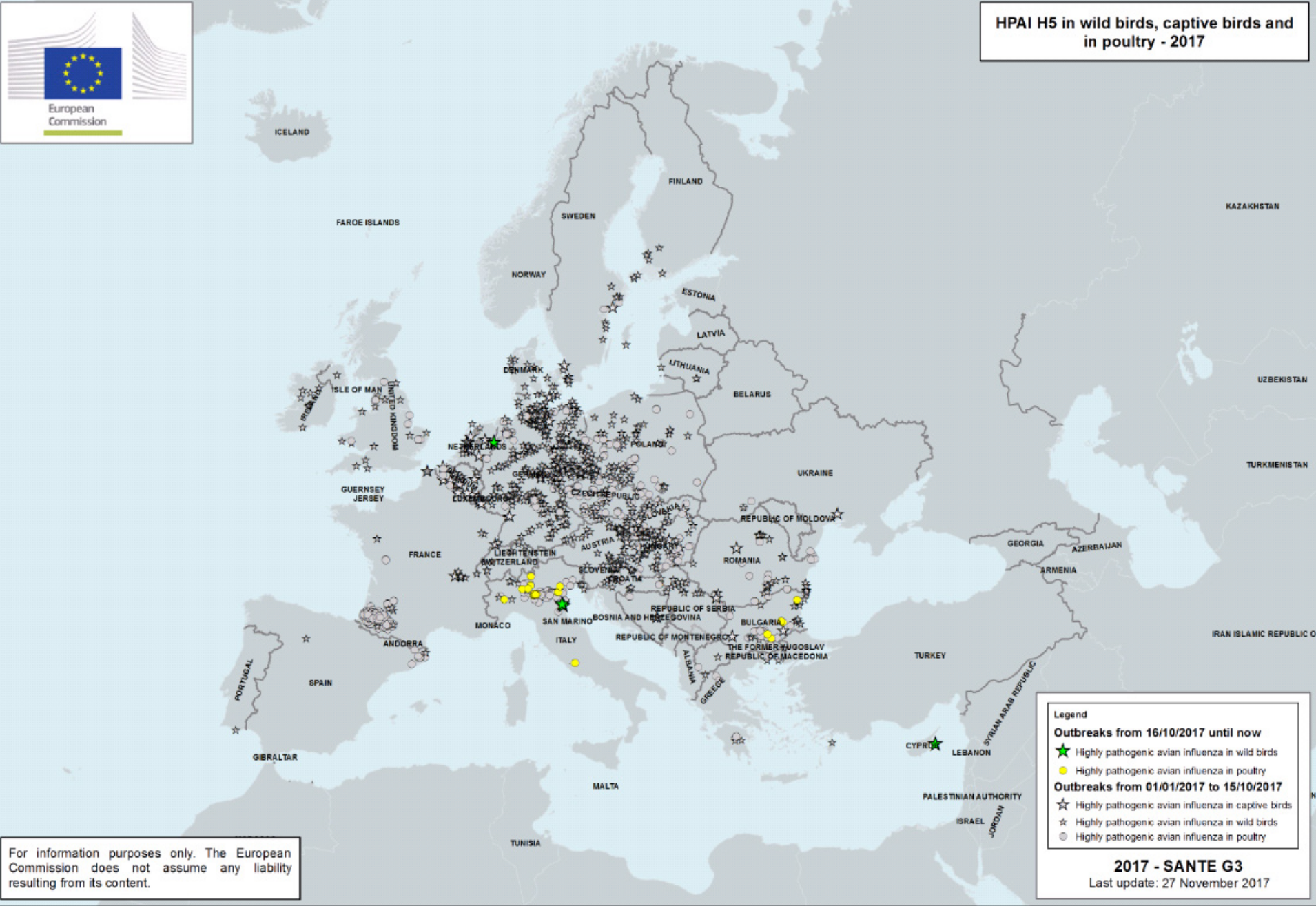
**Outbreaks from 01/01/2017 to 25/10/2017**

- ☆ Highly pathogenic avian influenza in captive birds
- ☆ Highly pathogenic avian influenza in wild birds
- Highly pathogenic avian influenza in poultry

**2017 - SANTE G3**  
Last update: 10 November 2017



**HPAI H5 in wild birds, captive birds and in poultry - 2017**



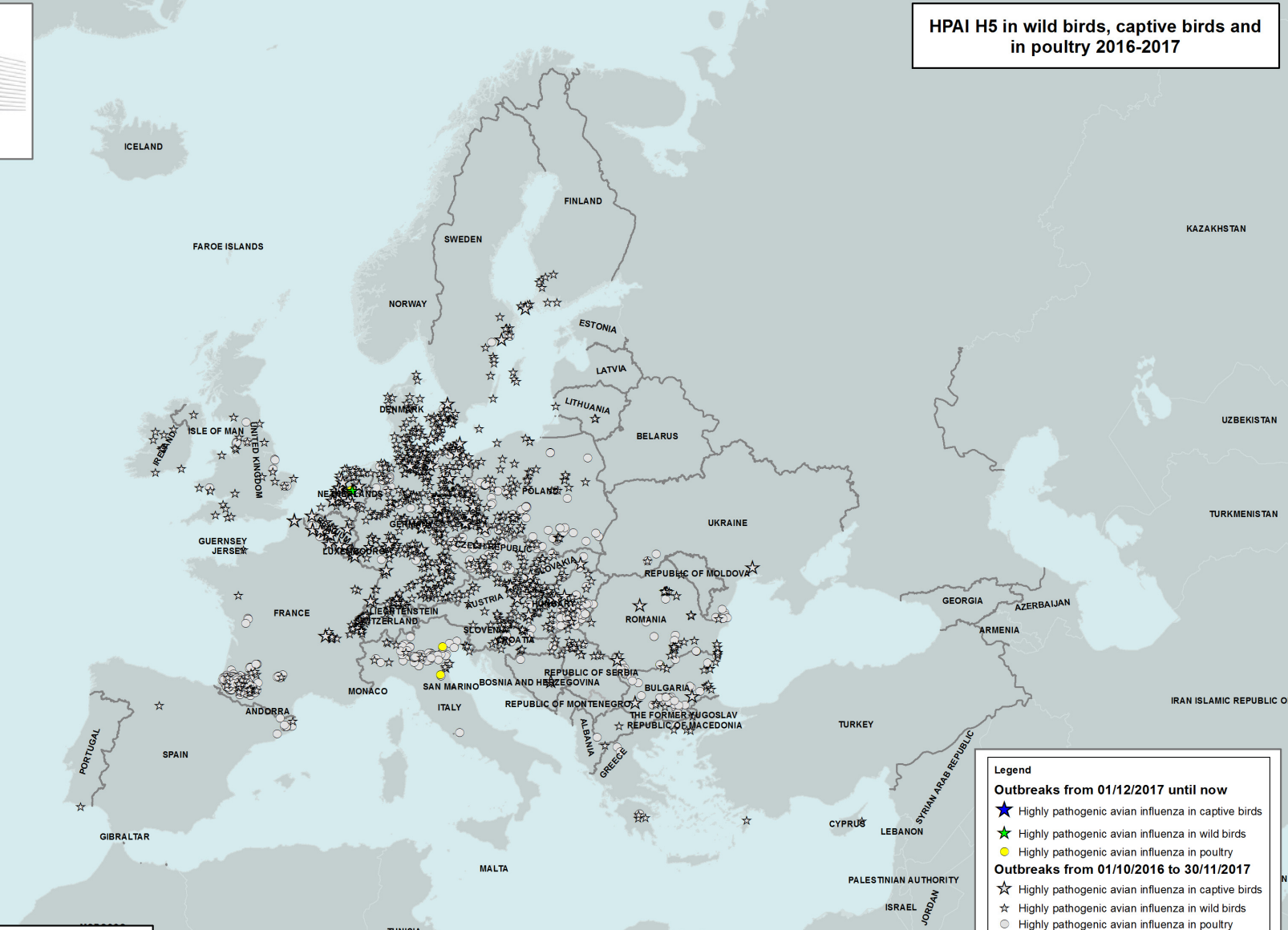
For information purposes only. The European Commission does not assume any liability resulting from its content.

- Legend**
- Outbreaks from 16/10/2017 until now**
  - ★ Highly pathogenic avian influenza in wild birds
  - Highly pathogenic avian influenza in poultry
  - Outbreaks from 01/01/2017 to 15/10/2017**
  - ☆ Highly pathogenic avian influenza in captive birds
  - Highly pathogenic avian influenza in poultry

**2017 - SANTE G3**  
Last update: 27 November 2017



### HPAI H5 in wild birds, captive birds and in poultry 2016-2017



For information purposes only. The European Commission does not assume any liability resulting from its content.

**Legend**

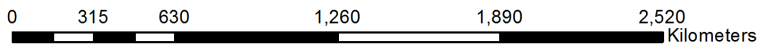
**Outbreaks from 01/12/2017 until now**

- ★ Highly pathogenic avian influenza in captive birds
- ★ Highly pathogenic avian influenza in wild birds
- Highly pathogenic avian influenza in poultry

**Outbreaks from 01/10/2016 to 30/11/2017**

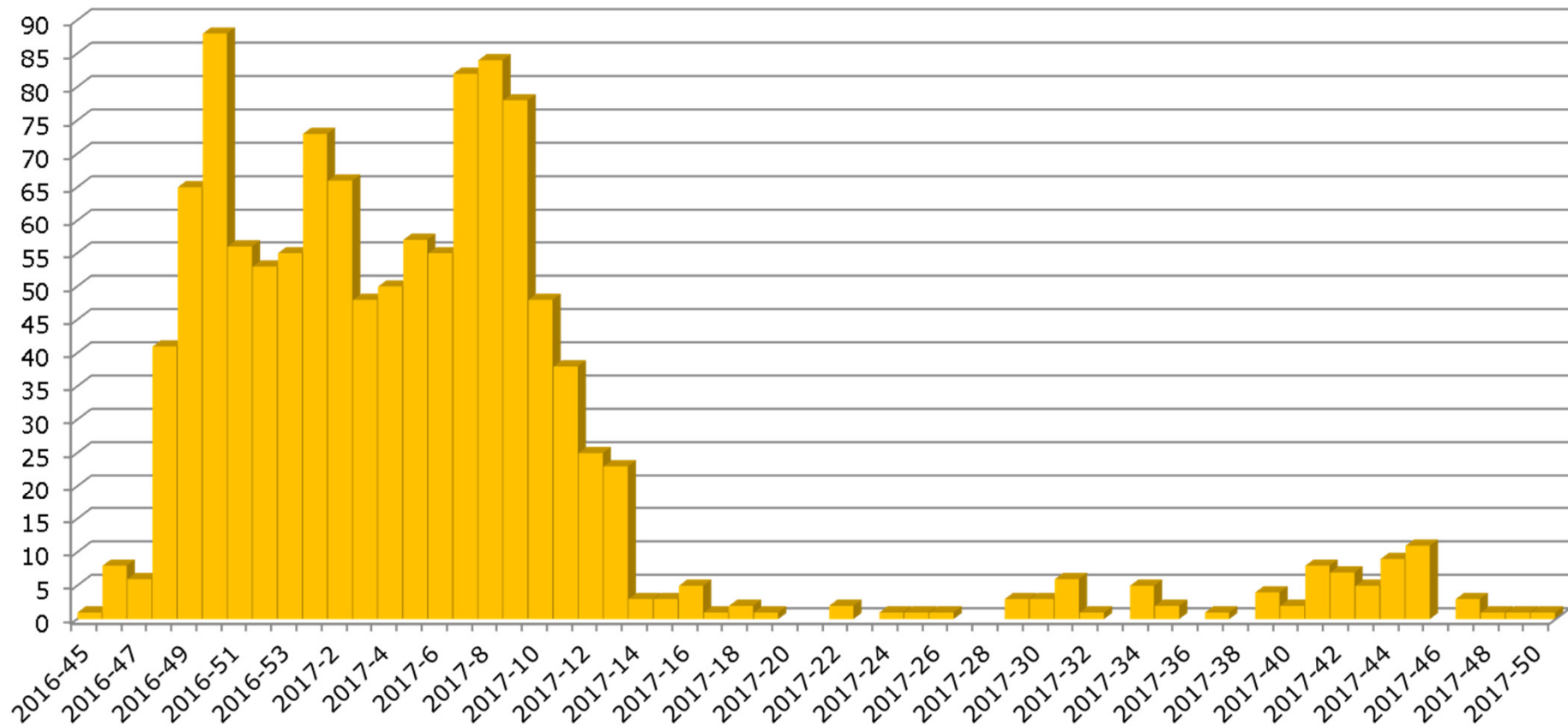
- ★ Highly pathogenic avian influenza in captive birds
- ★ Highly pathogenic avian influenza in wild birds
- Highly pathogenic avian influenza in poultry

**2017 - SANTE G3**  
Last update: 15 December 2017

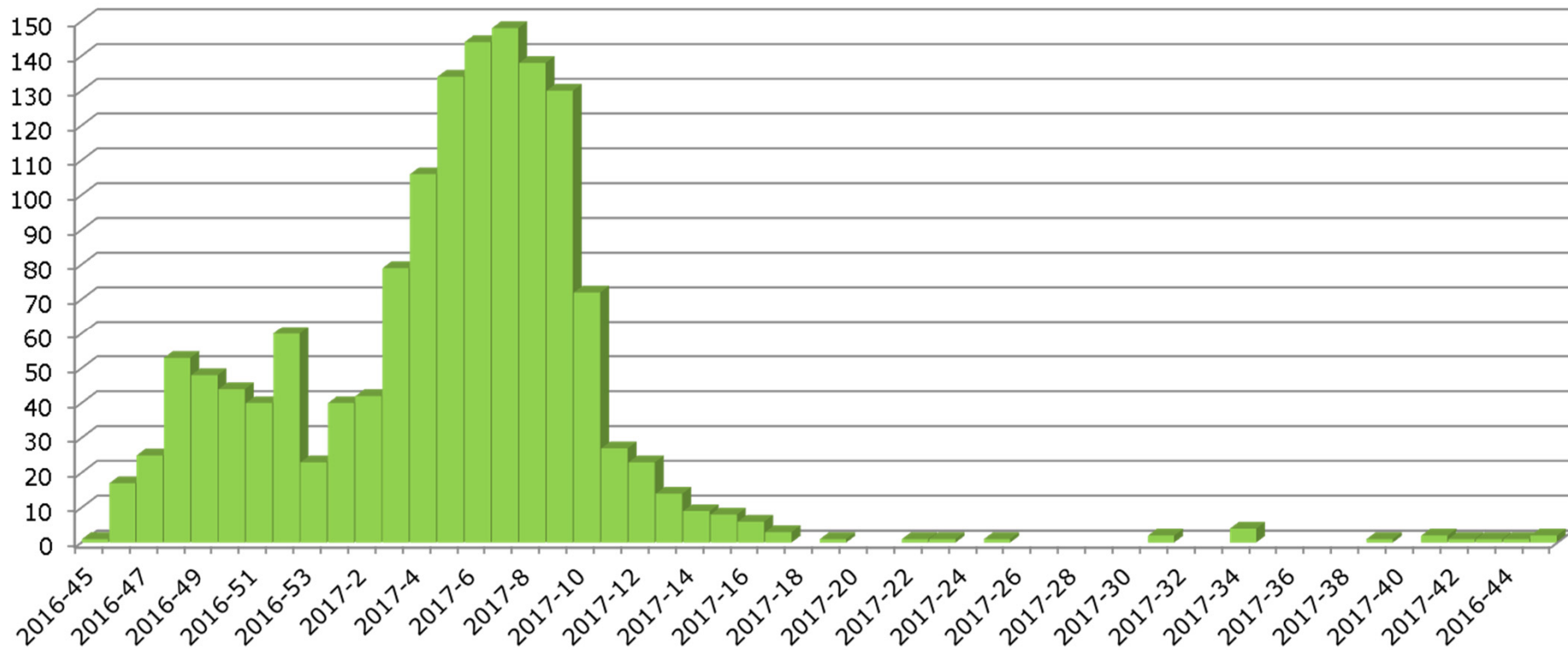




## Weekly epidemic curve for HPAI H5 outbreaks in poultry 01/10/2016 - 15/12/2017

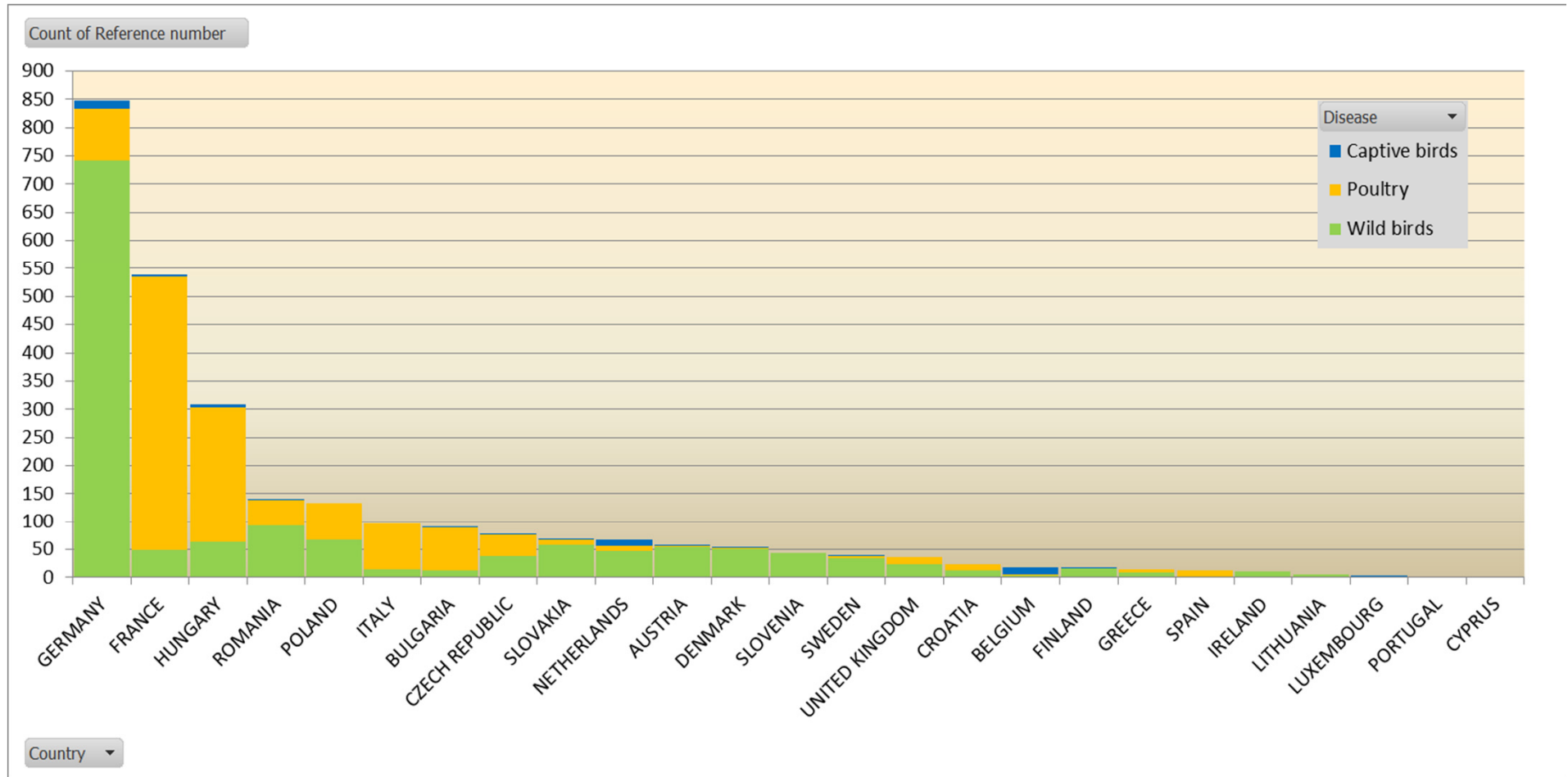


## Weekly epidemic curve for HPAI H5 findings in wild birds (10/2016-15/12/2017)

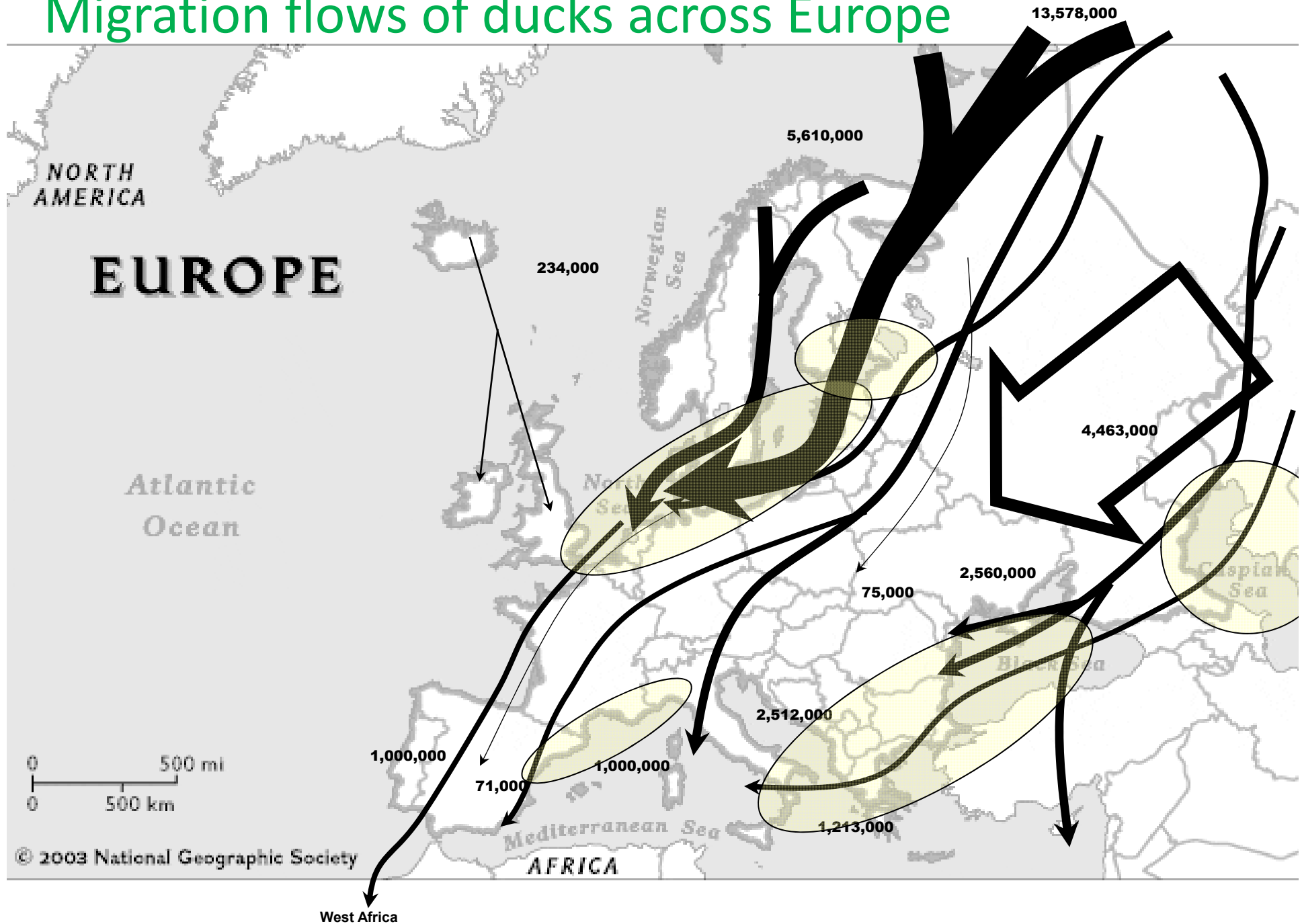




## Number of outbreaks in poultry, captive birds and detections in wild birds per Member State (01/10/2016 - 15/12/2017)

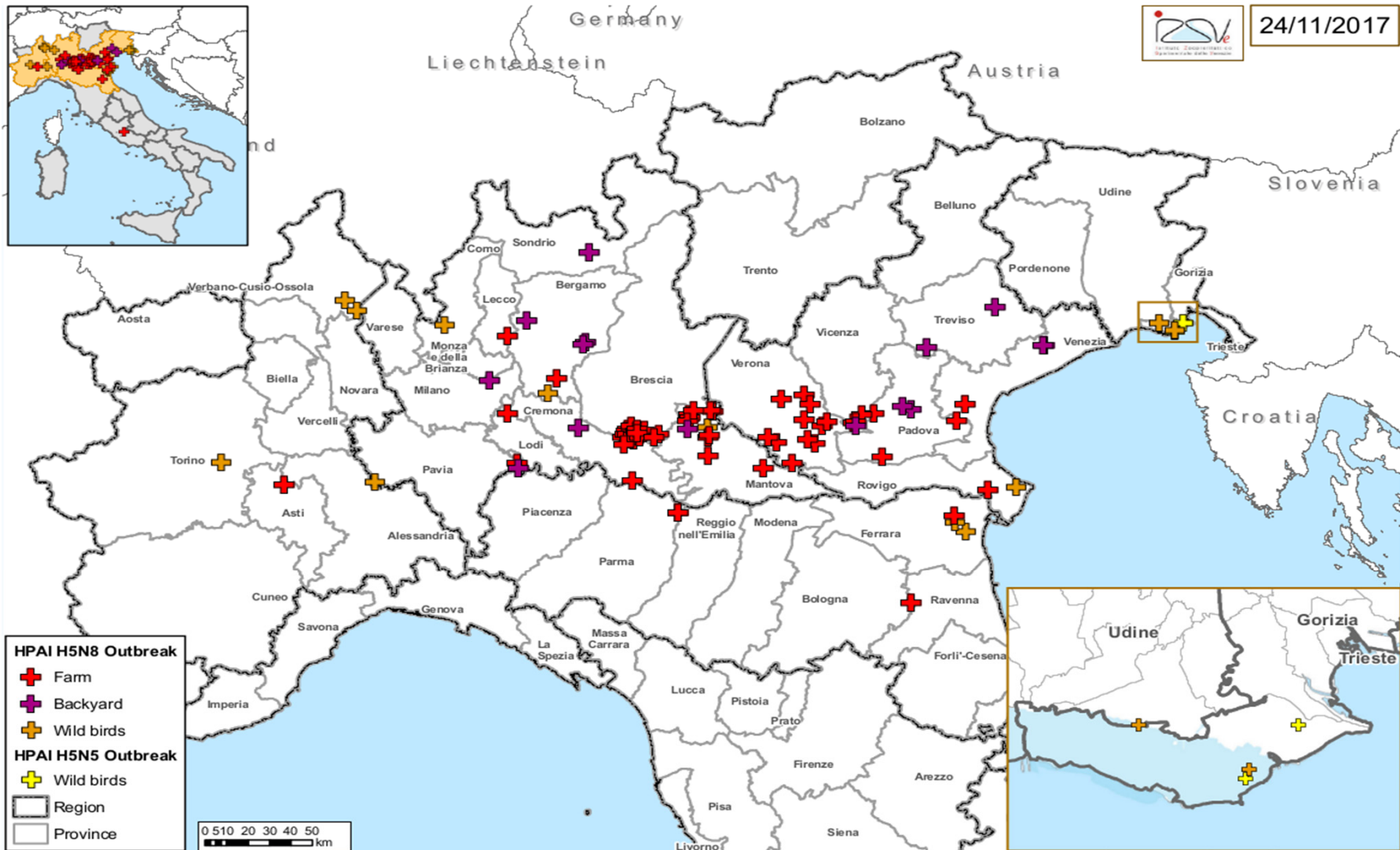


# Migration flows of ducks across Europe

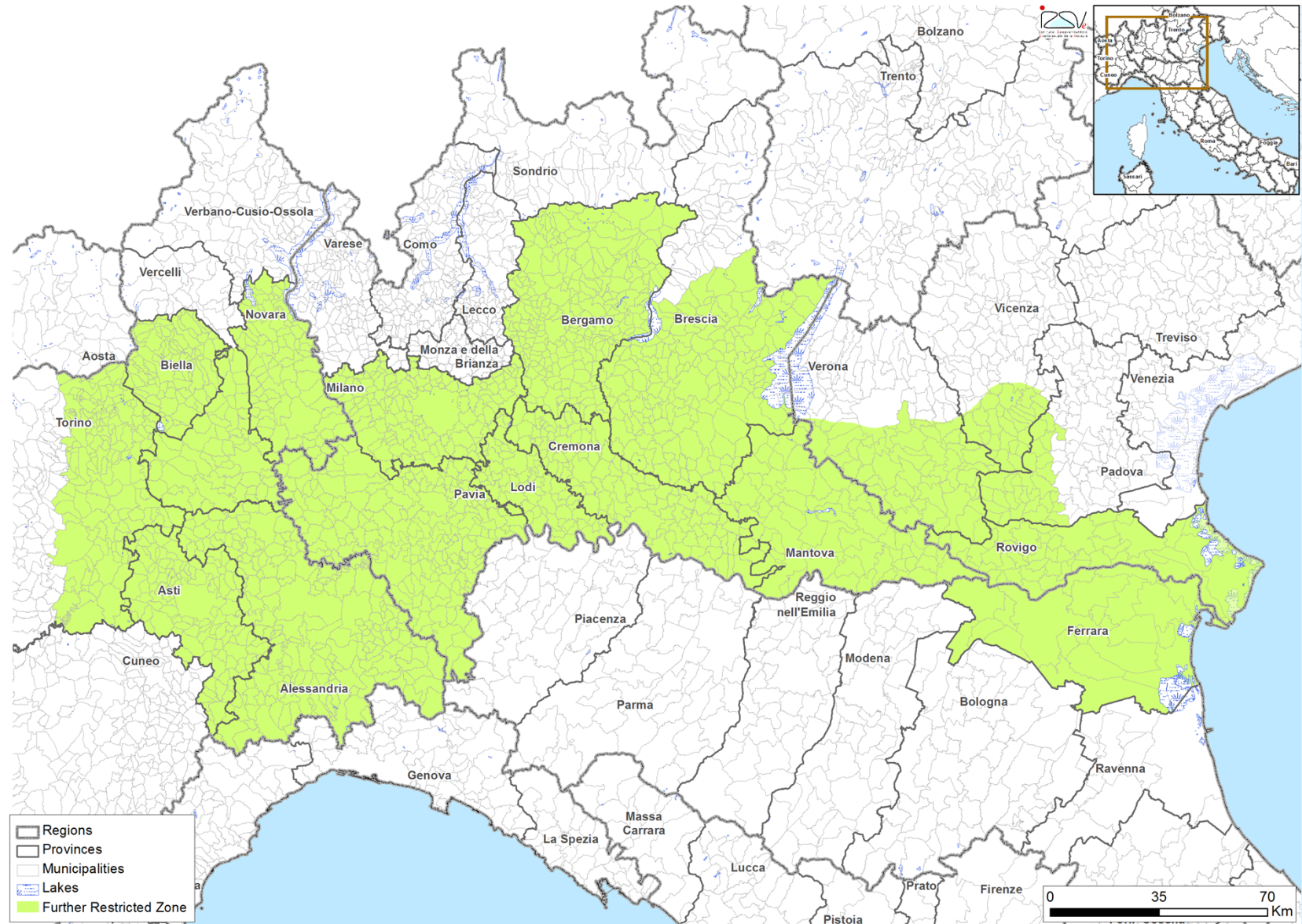


# Italy 2017: 81 HP H5N8 outbreaks in total: Jan-Jun (16), Jul-Nov (65)

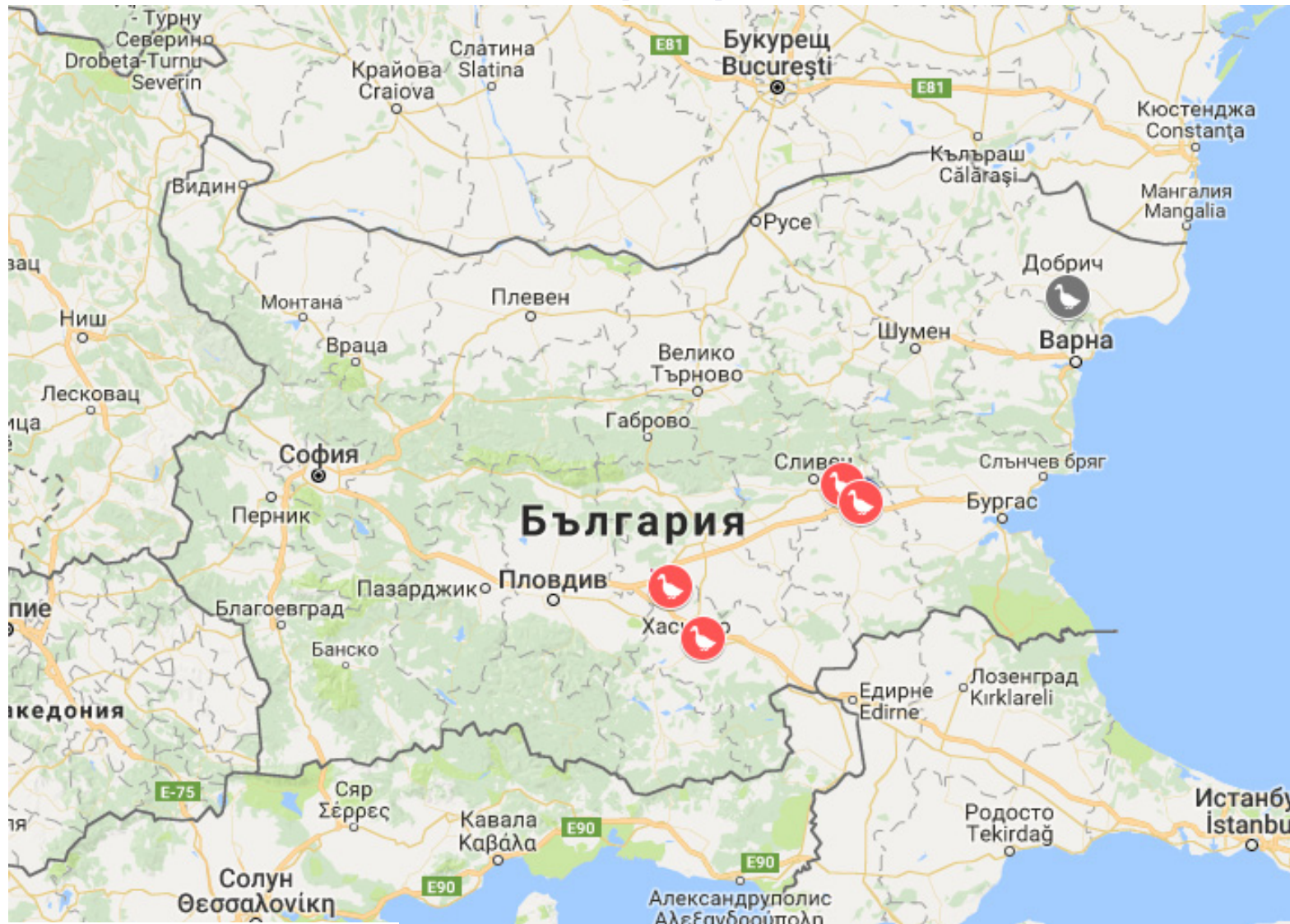
## Map: Geographical distribution of H5N8 HPAI outbreaks from July – November 2017



# Further restricted zone established in Italy



# HPAI outbreaks in Bulgaria – 68 in total 5 since 17/10/2017



- The measures are still in force



- Measures are not maintained already

**Ducks (3), turkey (1), backyard (1)**



## 2016/17 HPAI epidemic - Key features(1)

- **Unprecedented** in extent & geographical range
- **Heavy infection pressure** by wild birds & environment
- **Biosecurity challenge**
- **Free range**
- **Farm structures and rearing practises**
- **Virus persistence** over the summer period – wild bird reservoir, the environment?





## Key features (2)

- Mostly primary single point introductions into poultry
- **Principally rapid containment** of poultry outbreaks
- Challenge in **high density poultry areas** for lateral spread
- In particular for domestic waterfowl that cannot be effectively confined
- **No disease in humans**



# Risk management by the Commission

- **Immediate information** to other countries and international institutions
- Adoption of **emergency measures**
- Technical support by CVET missions - **Veterinary emergency expert teams**
  - Italy (22-24/11)
  - Bulgaria (27/11-30/11)
- **Better Training for Safer Food** in Member States and third countries
- **Financial support** for emergency measures and surveillance



# Scientific advice on avian influenza

## **Animal health:**

### **European Food Safety Authority (EFSA)**

10/2017: Publication of scientific opinion on AI and quarterly scientific reports on the situation in the EU and world-wide:

<https://www.efsa.europa.eu/en/press/news/171016>

## **Human health:**

### **European Center for disease prevention and control (ECDC)**

<https://ecdc.europa.eu/en/avian-influenza-humans/threats-and-outbreaks/risk-assessments>



## Current global threat viruses: H5 HPAI

- H5 HPAI viruses circulate widely and some strains are maintained in wild aquatic birds
- Current global **H5N8 HPAI epizootic** (3 continents) has during 2017 spread south of equator for first time (DRC, Uganda, Zimbabwe, South Africa)
- Prospects for eradication poor
- Risk to humans low (no recorded cases to date)
- Still essentially avian virus without increased affinity to humans
- continuously evolving, re-assorting H5N5, H5N6



## HPAI H5N6

- H5N6 in the East Asian flyway (now South Korea)
- Established in wild birds mediating spread
- Possibly the same paths/routes as H5N8
- Two different H5N6 strains (one non-zoonotic)
- Small number of human cases
- HPAI H5N6 detected in NL poultry and wild birds
- Not the Asian H5N6 with human health impact
- Is it the "Greek H5N6" from earlier this year?
- EU Reference Laboratory: Adaptation of PCR to ensure proper diagnosis

# Poultry-associated zoonotic avian influenza:H7N9 LPAI & HPAI

## Human cases and positive findings in birds or the environment



**Influenza A(H7N9) virus with pandemic potential.**

**Country: China; imported cases in Malaysia (1) and Canada (2).**

**Number of human cases: 1,622 confirmed; 619 deaths (since 02/2013)**



# Influenza : the human/animal interface – One health approach

- ***Second G7 CVOs Forum, Rome, Italy, 5/10/2017 - CVOs document on avian influenza:***

[http://www.salute.gov.it/imgs/C\\_17\\_notizie\\_3118\\_listaFile\\_itemName\\_1\\_file.pdf](http://www.salute.gov.it/imgs/C_17_notizie_3118_listaFile_itemName_1_file.pdf)

- ***DG SANTE meeting 23-24 October 2017***

Chief Veterinary Officers and Chief Medical Officers (CVOs/CMOs) with EU Agencies and international organisations (OIE, WHO, FAO) on intersectoral collaboration for enhanced flu preparedness:

[https://ec.europa.eu/food/animals/animal-diseases/control-measures/avian-influenza\\_en](https://ec.europa.eu/food/animals/animal-diseases/control-measures/avian-influenza_en)

- ***Simulation exercises*** at EU/Member State level, COM, agencies, international observers



**Thank you for your attention**

***DG Health and Food Safety***

***[https://ec.europa.eu/food/animals\\_en](https://ec.europa.eu/food/animals_en)***

***EFSA:***

***<http://www.efsa.europa.eu/en/press/news/171016>***

***ECDC:***

***<https://ecdc.europa.eu/en/avian-influenza-humans>***