



# Highly pathogenic avian influenza "The 2016-2017 Epidemic"

## *Regionalisation in the European Union*

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# Overview

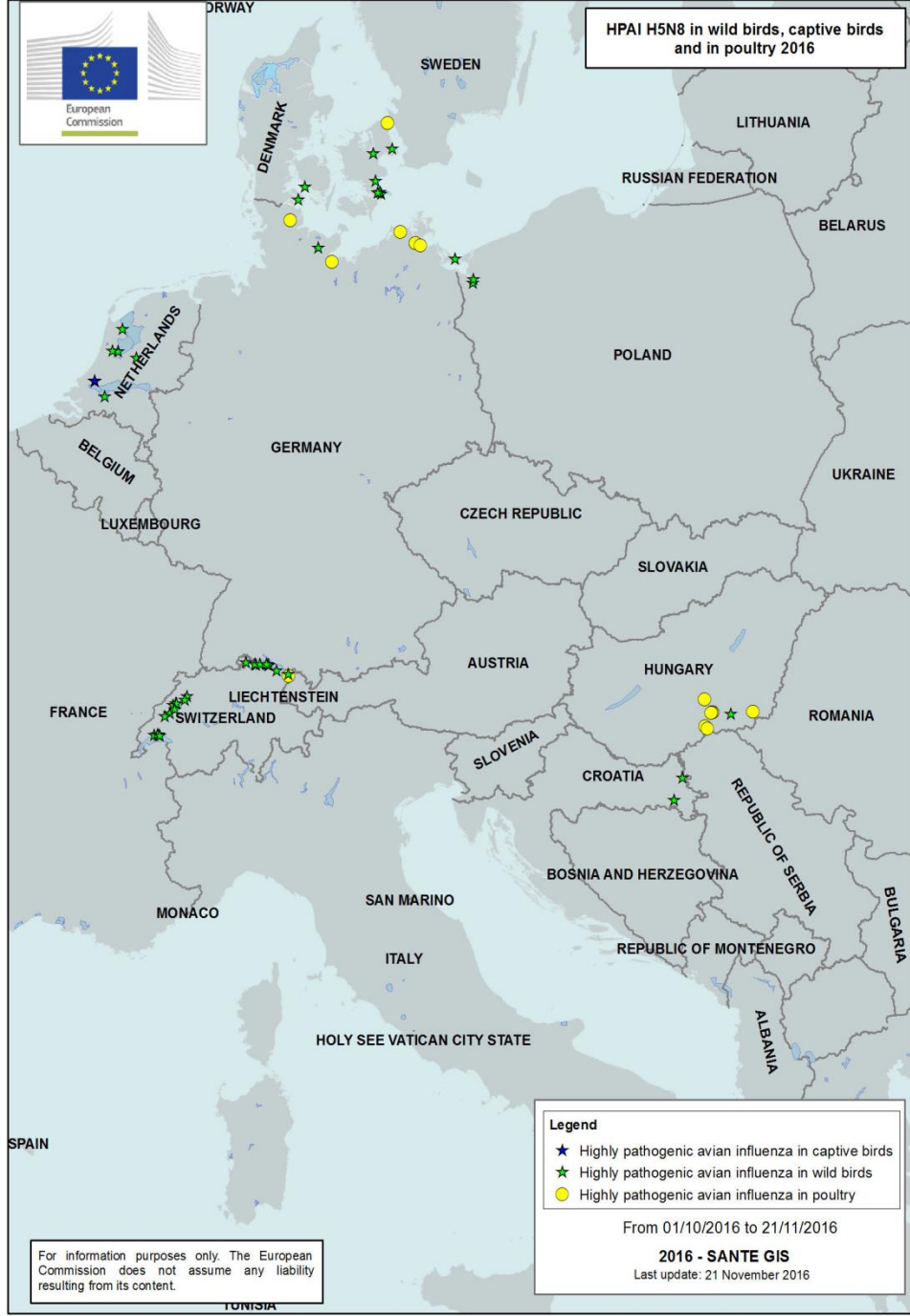
- 1. The HPAI epidemic 2016/2017***
- 2. EU strategy for HPAI control***
- 3. Key elements for regionalisation***

## HPAI outbreaks in poultry and captive birds and wild bird cases (01/10/2016-05/07/2017)

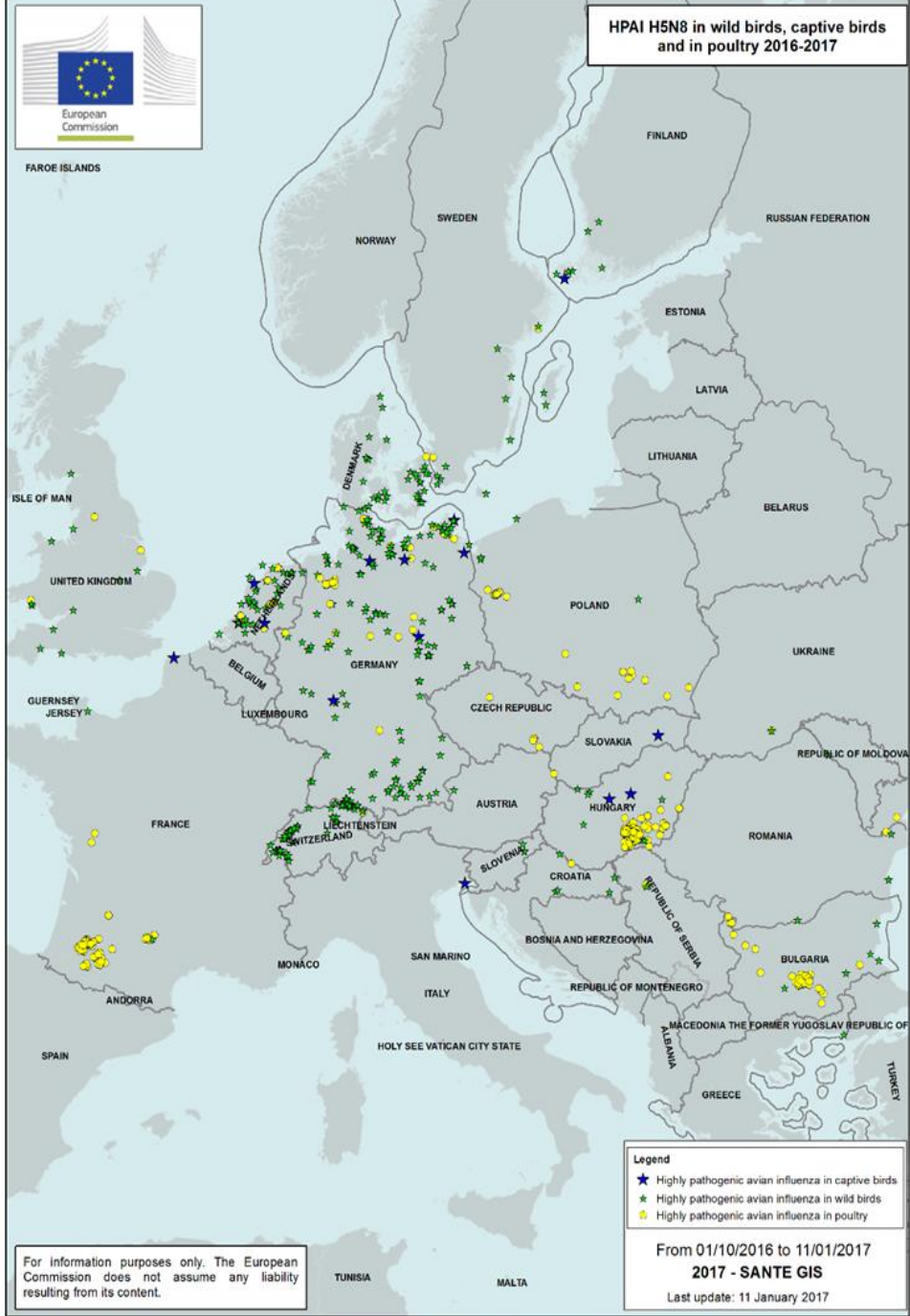
Member State	Wild birds	Poultry	Captive birds
GERMANY	1256	92	15
FRANCE	72	486	3
ITALY	7	16	
NETHERLANDS	174	9	10
BELGIUM	4	2	11
LUXEMBOURG			4
UNITED KINGDOM	43	13	
IRELAND	10		
DENMARK	77	1	1
GREECE	12	6	
SPAIN	3	10	
PORTUGAL	1		
AUSTRIA	21	2	1
FINLAND	14		1
SWEDEN	38	4	2
CZECH REPUBLIC	49	38	1
HUNGARY	196	240	5
POLAND	303	65	
SLOVENIA	273		
BULGARIA	20	71	2
LITHUANIA	13		
ROMANIA	143	45	2
SLOVAKIA	252	9	2
CROATIA	48	11	
<b>Total</b>	<b>3029</b>	<b>1120</b>	<b>60</b>

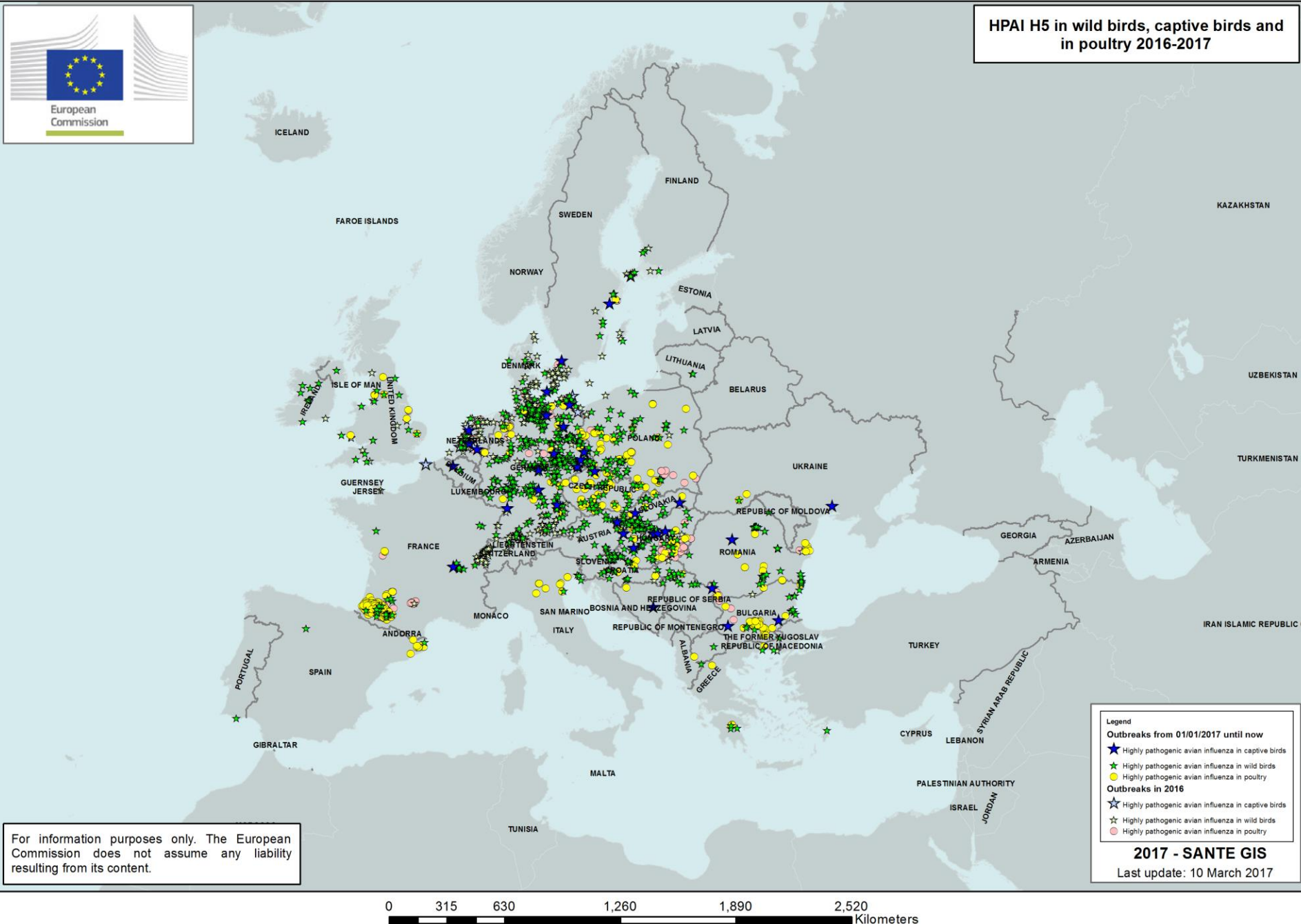


### HPAI H5N8 in wild birds, captive birds and in poultry 2016



### HPAI H5N8 in wild birds, captive birds and in poultry 2016-2017





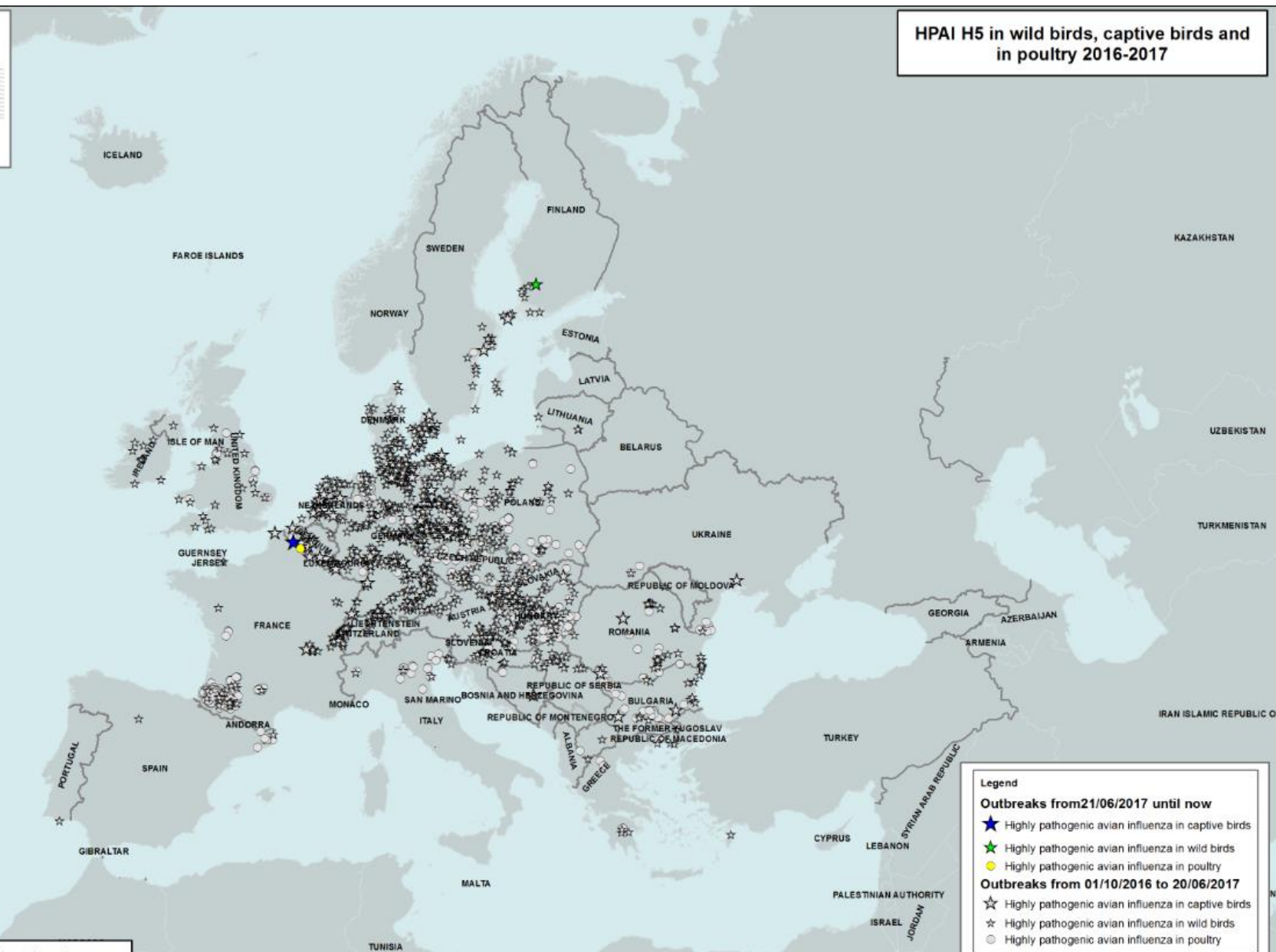


# Outbreaks in poultry and captive birds

## 21/6 – 5/7/2017 – France and Belgium



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



- Legend**
- Outbreaks from 21/06/2017 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 20/06/2017**
- ★ Highly pathogenic avian influenza in captive birds
  - ★ Highly pathogenic avian influenza in wild birds
  - Highly pathogenic avian influenza in poultry

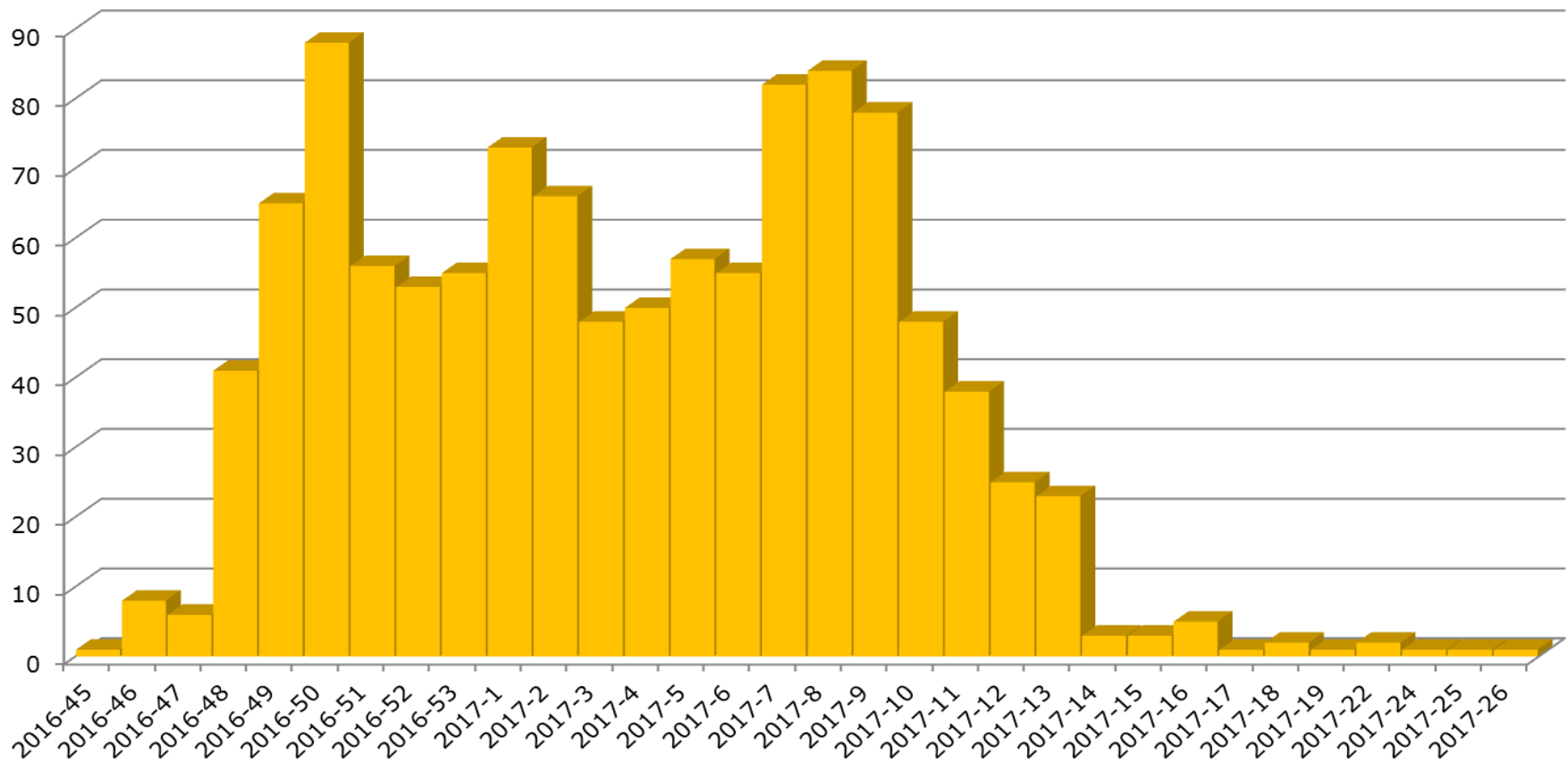
**2017 - SANTE G3**  
Last update: 05 July 2017

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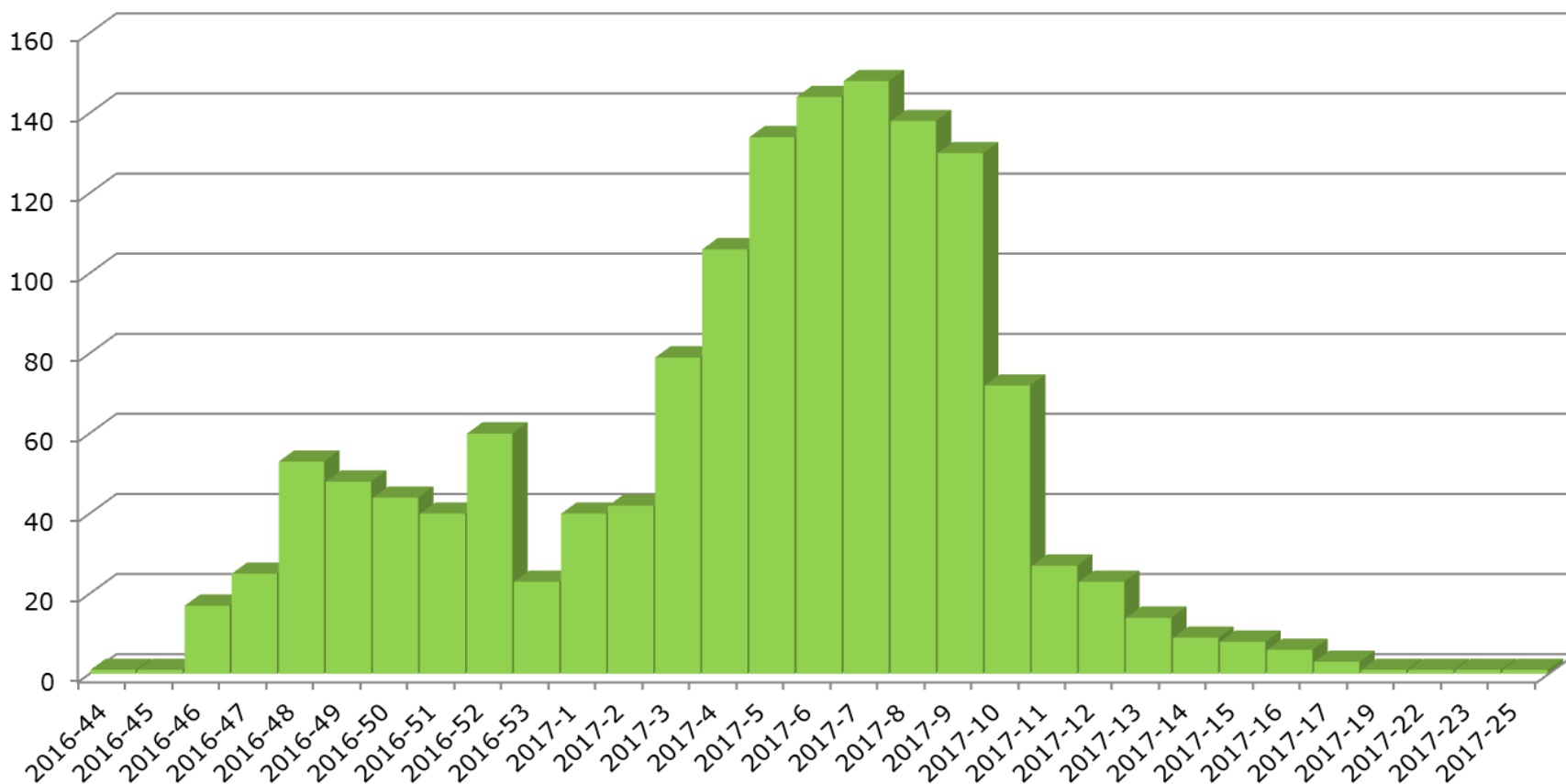
## Weekly epidemic curve for HPAI H5 outbreaks in poultry (01/10/2016 – 05/07/2017)





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## Weekly epidemic curve for HPAI H5 findings in wild birds (01/10/2016-06/07/2017)

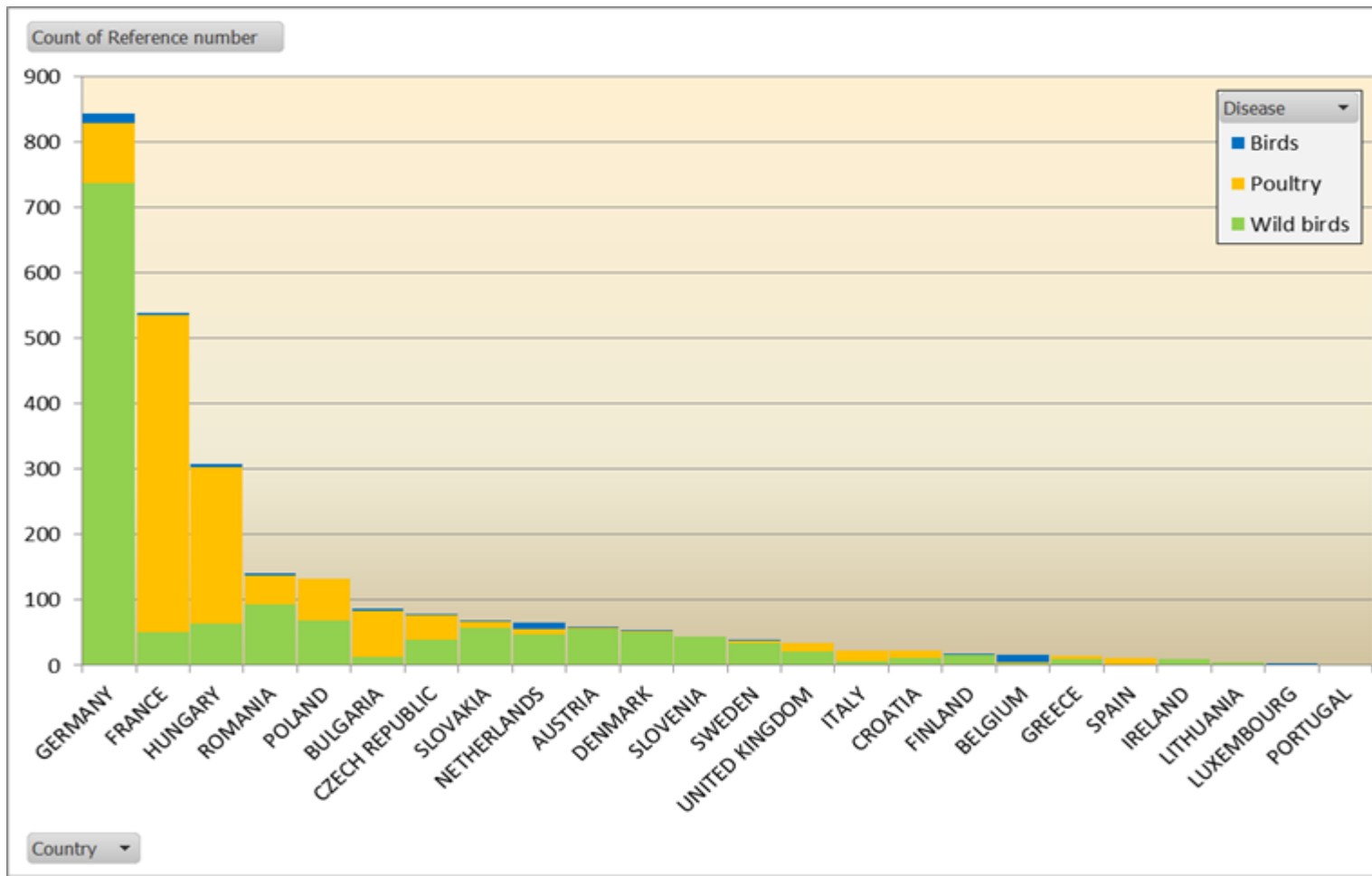






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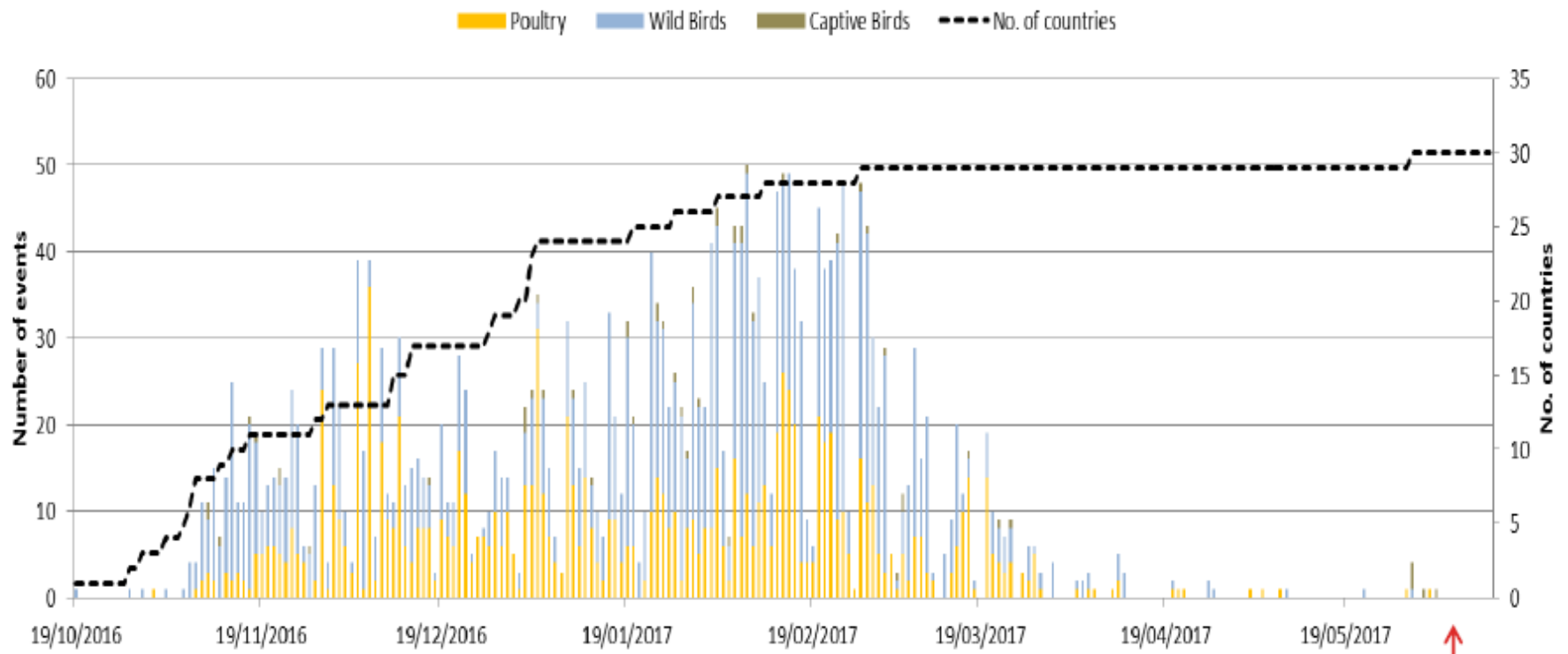
## Number of outbreaks in poultry, captive birds and detections in wild birds per Member State (1/10/2016 – 5/7/2017)





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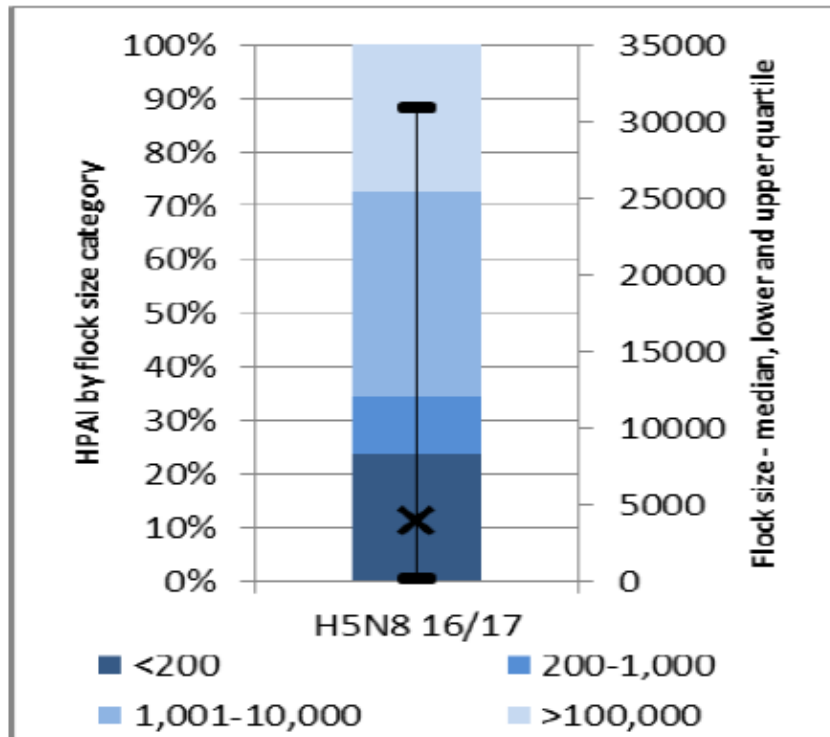
# European Epidemic Curve (data as of 12/06/17)





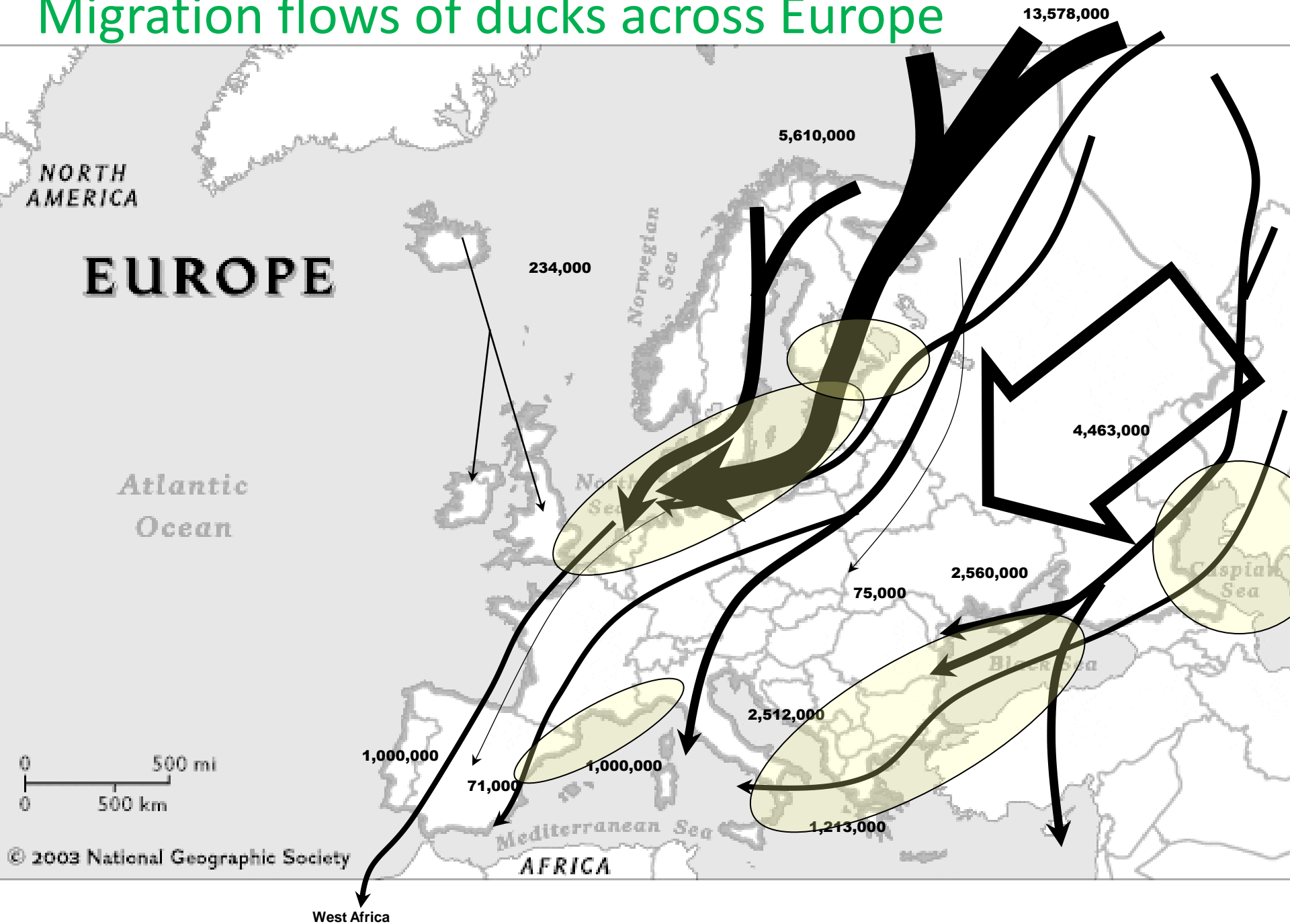
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# Poultry production affected by size of farm



Compared to other epizootics the involvement of backyard poultry or captive birds was an important epidemiological feature

# Migration flows of ducks across Europe



# Wild bird introduction pathways – H5N8 Europe 2016/17

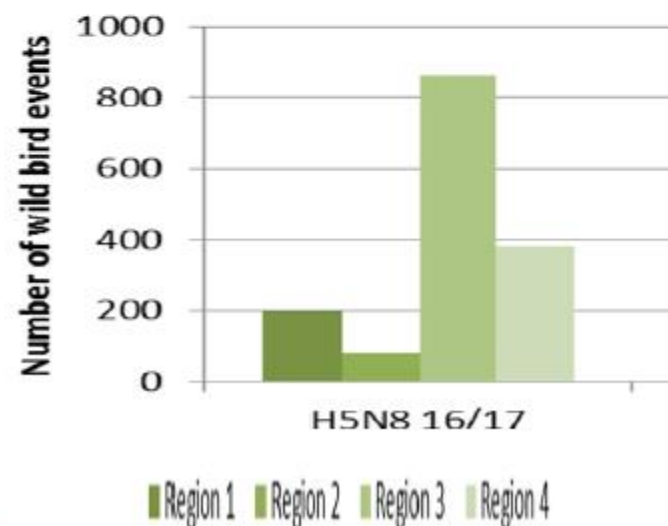
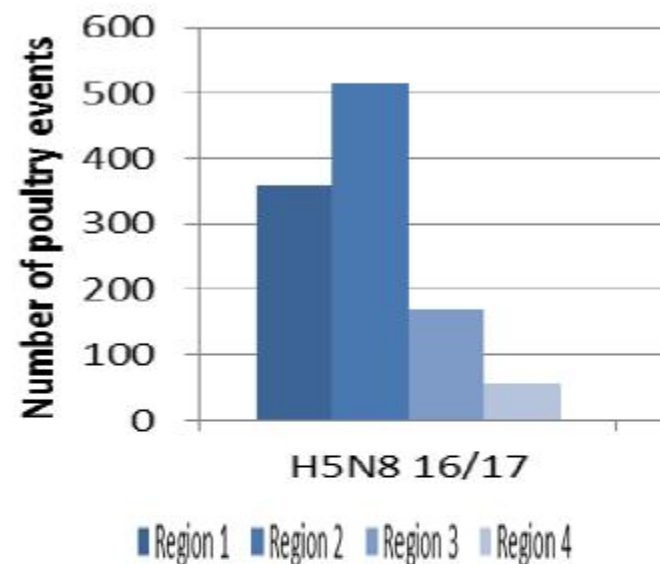


Region 1: BG, EL, HU, RO

Region 2: HR, IT, South FR (<45 lat), ES

Region 3: DK, NL, North France (>45 lat), North DE (>50 lat), PL, SE, UK

Region 4: AT, CZ, South DE (<50 lat), SK



# HPAI H5(N8) in the European Union

- HPAI H5 virus was detected in **23 Member States** in **wild birds, captive birds or poultry farms**
- Virus was in most cases **first detected in wild birds**
- 1120 outbreaks confirmed in poultry
- ~ 700 thereof in commercial poultry
- Rare detection of re-assorted subtypes of European origin (**H5N5, H5N1** and **H5N6**)



# Key features of the 2016/17 HPAI epidemic (1)

- **Unprecedented!**
- Amplitude and geographical range
- **Heavy infection pressure** by wild birds & environment
- **Biosecurity challenge**
- **Free range**
- **Farm structures**

## Key features (2)

- Mostly primary single point introductions in poultry
- **Mostly rapid containment** of poultry outbreaks
- Challenge in **high density poultry areas for lateral** spread
- In particular for domestic waterfowl not effectively confined
- **No disease in humans** also globally

# EU policy on avian influenza (1)

- **Harmonised EU legislation**
- **Preparedness** and **awareness**
- **Contingency** planning
- Network of EU and national **reference laboratories**
- **Enforcement** of legislation
- **Commission audits** in Member States
- **Risk assessment and scientific advice:**
  - Animal health - European Food Safety Authority (EFSA)
  - Human health - European Centre for Disease Prevention and Control (ECDC)



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## EU policy on avian influenza (2)

- **Risk management** by the European Commission
- **Immediate information** to other countries and international institutions
- Adoption of **emergency measures**
- **Immediate implementation** of measures and trade restrictions
- **Critical assessment** of the epidemiological situation and measures
- **Constant review** of measures and zones
- **Technical support** by Veterinary emergency expert teams
- **Training** in Member States and third countries
- **Financial support** for Emergency measures and surveillance



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# HPAI Outbreak management (1)

## *Avian influenza Directive 2005/94/EC*

### Member States:

- restrictions on **suspect holding** notified by owner, keeper, veterinarian
- **official investigation** and **sampling** for laboratory tests
- **killing of poultry without delay**
- dispose of carcasses and eggs under official supervision
- waste destroyed or treated
- **Cleansing and disinfection**

## HPAI Outbreak management (2)

### Establishment of a:

- **protection zone** of at least 3km radius
- **surveillance zone** of at least 10km radius around infected farm
- **movement restrictions** for live poultry, hatching eggs, meat and other poultry products
- **epidemiological investigations**
- **tracing on and tracing back** of direct or indirect contacts between farms, products

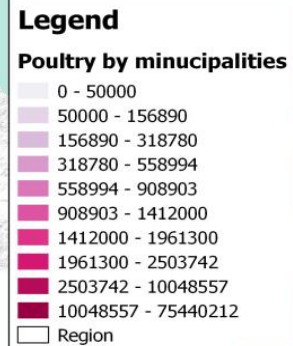


## Criteria for establishing zones

- Outcome of epidemiological enquiry
- Geographical situation
- Natural and administrative boundaries
- Location, proximity of other holdings
- Role of wildlife
- Number of holdings and birds
- Movements
- Trade patterns
- Facilities, personnel to control movements



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0 100 200 km

## Example: Italy

Important risk factor for  
virus spread

**Density** of poultry  
holdings and heads of  
poultry kept



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# Additional tailormade measures

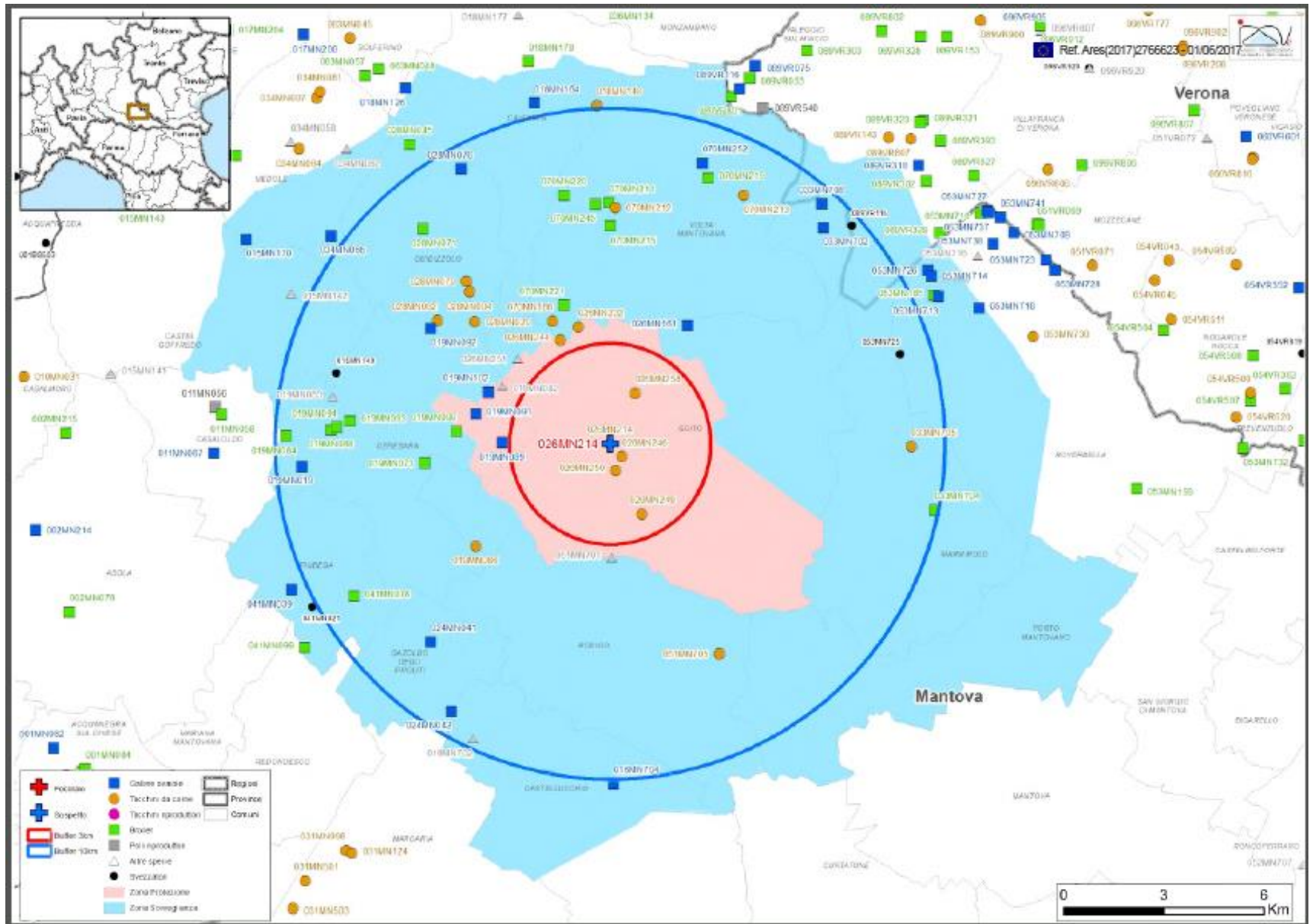
## Preventive killing

- Upon suspicion, direct or indirect contacts
- To lower the susceptible population in the neighbourhood of the infected farm

## Additional zoning

- Areas with a **high density of holdings**
- **Further restricted zone** adjacent to surveillance zone
- **Temporary control zone** around a suspect holding
- **Temporary standstill** for all poultry, poultry products movements (even for the whole territory of the MS)

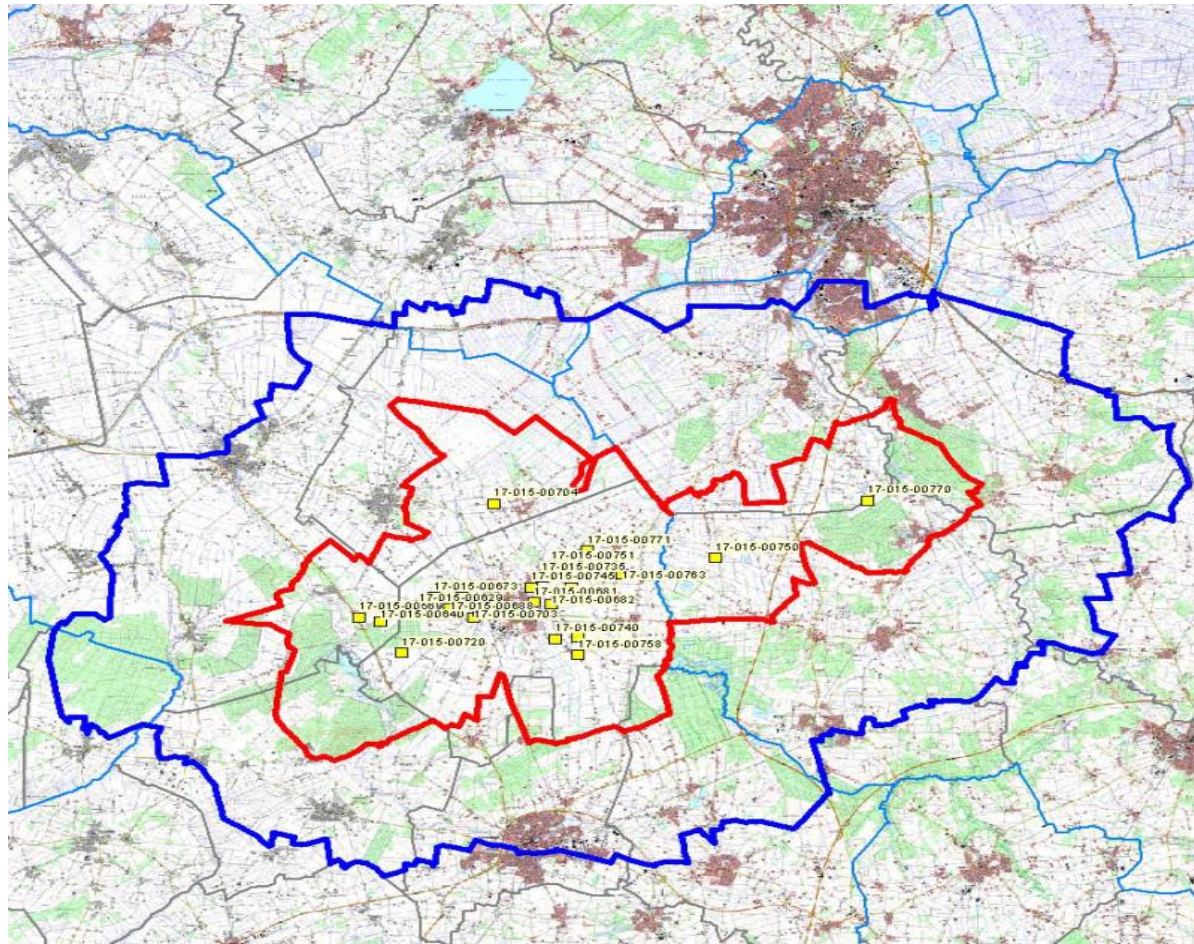
# Example: Italy HPAI H5N8 - 2017





# Enlarged protection & surveillance zones

## Example: Cloppenburg, Germany 2017





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# Zoning in bordering areas

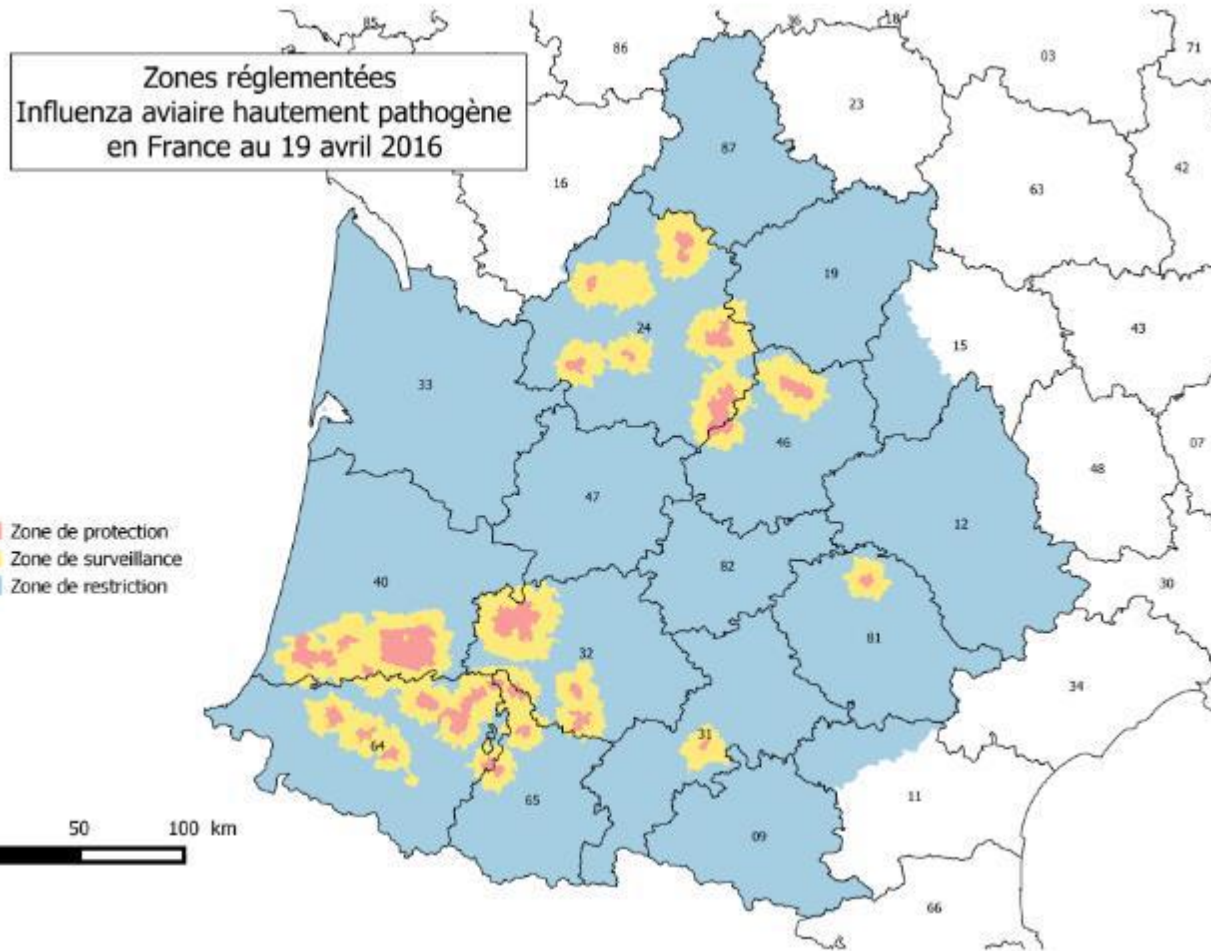
## Example: Austria and Slovakia







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France:  
Further  
restricted zone

# EU Veterinary Control System

## Prevention

**Biosecurity**

**Animal identification**

**Veterinary certification and movement control for intra-EU trade of livestock**

**Veterinary certification and border controls for animals and products imported.**

## Detection

**Surveillance**

**Reference laboratories**

**Health monitoring in high risk areas**

**Animal Disease Notification System.**

## Control

**Contingency planning**

**Animal Disease Notification System**

**Isolation of infected holdings**

**Eradication**

**EU support: Emergency team, vaccine banks, compensation, training.**

## Transparency

**EU audits of Member State veterinary services**

**Public information systems (RASFF, ADNS)**

**Scientific consultations**

**Notification.**

# Regionalisation in the EU: transparency of EU measures

- **Clearly defined roles** for Member States and Commission
- **Rapid flow of information**
- **Urgent adoption of emergency measures**
- Agreed with Member States
- Immediately applicable
- **Published in the Official Journal** of the European Union in **23 languages**

## Key elements for successful regionalisation are:

- **Swift response**
- **Risk based / Proportionality**
- **Consistency/Predictability**
- **Transparency**

**Regionalisation is part of a comprehensive veterinary control system!**



# Thank you for your attention

***More: Website DG Health and Food Safety***  
***[https://ec.europa.eu/food/animals\\_en](https://ec.europa.eu/food/animals_en)***