Regional Workshop on Animal Disease Preparedness

Tsviatko Alexandrov

Measures to be taken in case of outbreaks

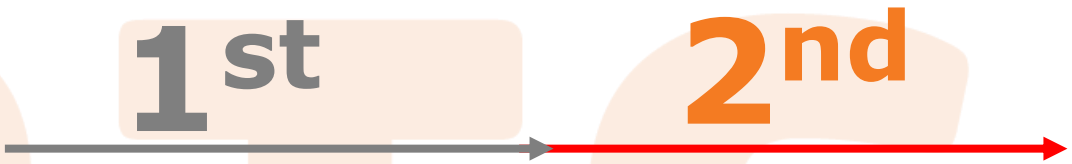
Food Safety

Tokyo, Japan
12-15 June 2018

Content

- High risk periods
- Legislation and contingency planning
- Zones
- Animal movement control
- Stamping out
- Restocking

High risk periods



The period between the introduction of an infection and the first detection of the infection

Efficiency of surveillance

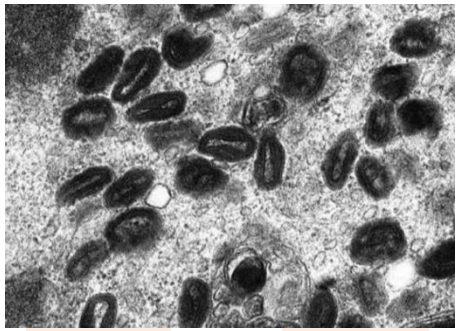
The period between the first animal has been detected as infected and the establishment of measures to prevent virus spreading

Outbreak management

Legislation

- *Council Directive 92/66/EEC – NCD*
- *Council Directive 92/119/EEC – list of diseases*
- *Council Directive 2002/69/EC – ASF*
- *Council Directive 2001/89/EC – CSF*
- *Council Directive 2003/85/EC – FMD*
- *Council Directive 2005/94/EC – AI*
- *……..*
- *Contingency plan…….*

The three pillars



Etiology

Epidemiology

Susceptible species

Incubation period

Virus resistance

Virus transmission

I. About the disease

Clinical signs

Pathology

Laboratory diagnosis

✓*Types of samples and collection*

✓*Sending of samples*

✓*Laboratory tests*

✓*Laboratory preparedness*

Differential diagnosis

II. Diagnosis

In case of suspicion

In case of confirmation

✓*Measures at the infected holding*

✓*Measures at slaughterhouse or means of transport*

✓*Restriction zones*

- *Protection zones*
- *Surveillance zones*
- *Others (if necessary) – Vaccination area, Surveillance area around the vaccination area etc.*

III. Measures

- Culling
- Disposal of carcasses
- Disinfection
- Vector control
- Vaccination

Lifting restrictions

Restocking

Notification of the outbreak

Stamping out

Destruction /treatment of all substance or waste that may have been contaminated (e.g. feed, manure etc.) to ensure destruction of the disease agent

Zooning

Extension of measures in holdings suspect of contamination

Cleaning and disinfection of all buildings, surroundings, equipment

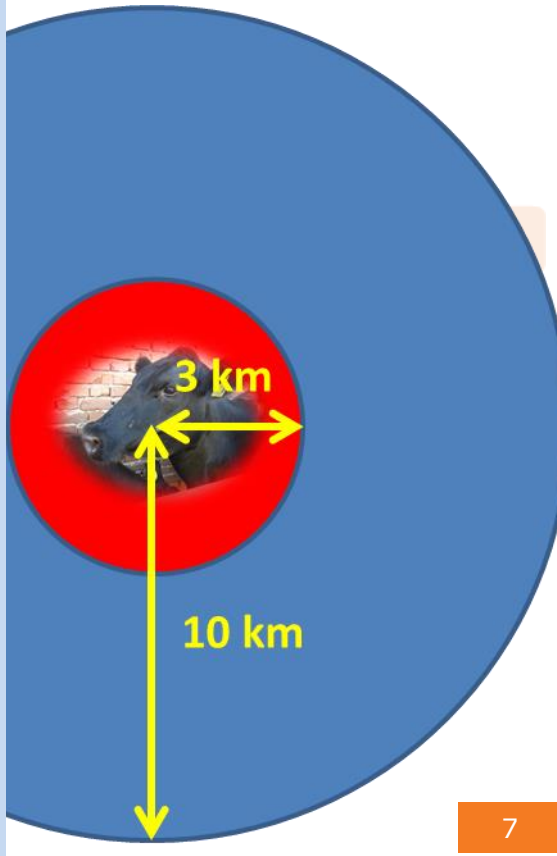
Epidemiological inquiry

Protection zone

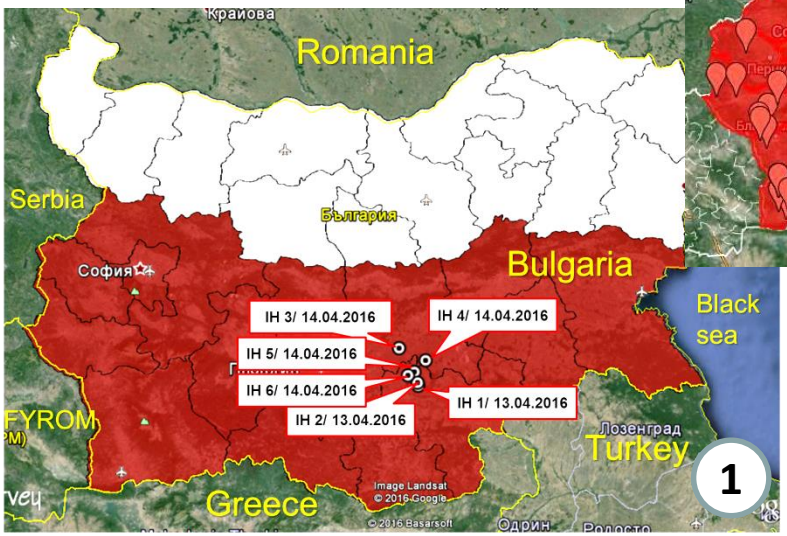
- Identification of holdings with susceptible species
- Periodic visits
- No Movement and transport of susceptible animals on public-private roads (only service roads of holdings + derogations for transiting)
- No exit of animals from the holdings unless to slaughterhouse for emergency slaughter under conditions (clinical examination/notification)

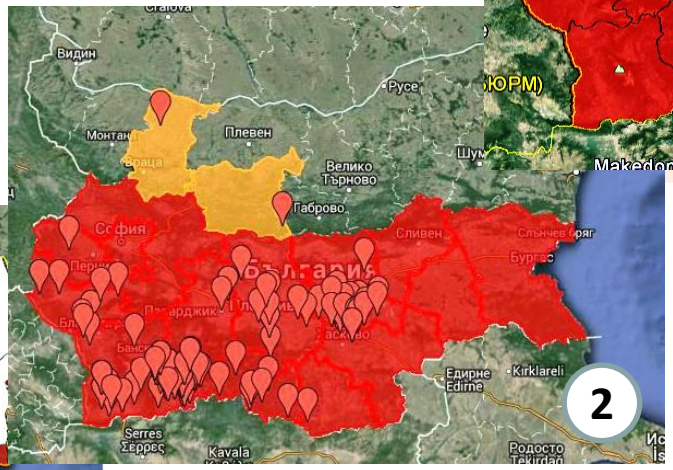
Surveillance zone

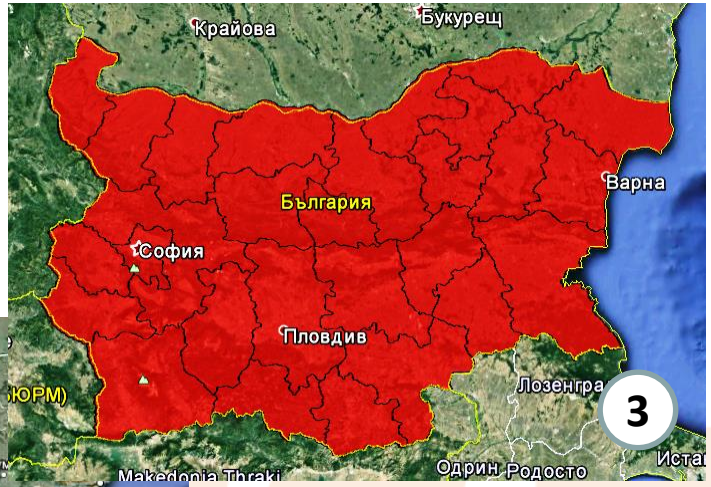
- Identification of holdings with susceptible species
- Period visits
- No movement and transport of susceptible animals in public/private roads (only for pasture or animal buildings + derogations for transiting)
- Transport of animals subject to authorization
- No exit of animals from the zone for 1 max disease incubation from the most recent recorded case- then exit to slaughterhouse under conditions (clinical examination /notification)



Restriction zone in Bulgaria in the framework of the LSD epidemic in 2016







Restriction zone | IH (Infected herd) / date of laboratory confirmation

Map with the locations of the LSD outbreaks (infected herds) in Bulgaria and the restriction zone as by 15.04.2016

Within restriction zone movement of animals only possible for direct slaughter and if vet. certificate issued by official vet!

Tools for animal movement controls

- *TRACES system*
- *Animal identification and registration*
- *National databases*
- *ADNS and WAHIS*
- *Veterinary movement certificates – issued by private vets, official vets*
- *Cooperation with police, industry etc.*

European Commission

L 60/78 EN Official Journal of the European Communities 28. 2. 98

COMMISSION REGULATION (EC) No 494/98

of 27 February 1998

laying down detailed rules for the implementation of Council Regulation (EC) No 820/97 as regards the application of minimum administrative sanctions in the framework of the system for the identification and registration of bovine animals

- *Article 1*
- *2. If the keeper of an animal cannot prove its identification within two working days, it shall be destroyed without delay under the supervision of the veterinary authorities, and without compensation from the competent authority.*

Bulgarian veterinary act

Illegal movement = immediate penalties and confiscation of animals

Cannot prove, Origin or/and health status

Culling and disposal

Stamping out

- Killing of animals (*Reg. 1099/2009*)
- Valuation of animals
- Safe disposal of carcasses (*Reg. 1069/2009*)
- Cleaning and disinfection

Before start…

- *Communicate with all stakeholders*
- *Make all clear*
- *Make sure that farmers, personnel, others? are away..*

All the time try to keep highest level of biosecurity!

Definition in ”New Animal Health Law”:

”Biosecurity” means the sum of management and physical measures designed to reduce the risk of the introduction, development and spread of disease to, from and within:

(a) an animal population, or

(b) an establishment, zone, compartment, means of transport or any other facilities, premises and location.

Appropriate methods for culling: The example of cattle

- penetrative captive bold with pithing,
- premedication and injection with barbiturates or other drugs
- free bullet

Protection of animals during culling to be considered!

European Commission

Food Safety

. Set up outer bag(s) by inserting 4 heets of cardboard in to the side ockets

2. Insert plastic liner into the outer bag and fold over the sides.

3. Add 2 kg of dry ice pellets to the bag and allow vaporizing. The addition of a liter of hot water can initially speed this up in cold weather.

. Measure the concentration C02. It hould be 70 % (or residual oxygen level f 6.3%) within 20cm of top of bag. he measurement can be done by igarette

5. Put the birds into the plastic liner

6. wait for several minutes till the dead of the birds

'. Remove the plastic liner with the lead birds out of the outer bag

8. Load the dead birds to vehicle and send for disposal

Importantly, severely affected animals should always be removed first from the herd….

Valuation of animals

- Done by a Commission
- Market price for the day taken for valuation
- Non-identified animals are not subject to valuation and compensation

Disposal

- ***Directive 92/119, Art. 5,*** paragraph 1 (a), (b), (c):

(a) all animals of susceptible species on the holding shall be killed on the spot, without delay. The animals which have died or been killed shall either be burnt or buried on the spot, if possible, or destroyed in a carcase disposal plant. These operations shall be carried out in such a way as to minimize the risk of disseminating the agent of the disease;

(b) any substance or waste, such as animal feed, litter, manure or slurry, which is liable to be contaminated, shall be destroyed or treated appropriately. This treatment, carried out in accordance with the instructions of the official veterinarian, must ensure that any agent or vector of the agent of the disease is destroyed;

(c) after carrying out operations listed in subparagraphs (a) and (b), the buildings used for housing animals of susceptible species, their surroundings, the vehicles used for transport and all equipment liable to be contaminated shall be cleaned and disinfected in accordance with ***Article 16***;

***

- ***Regulation (EC) 1069/2009***
- ***Commission Regulation (EU) 142/2011, Art. 4***

Disposal of carcasses

REGULATION (EC) No 1069/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

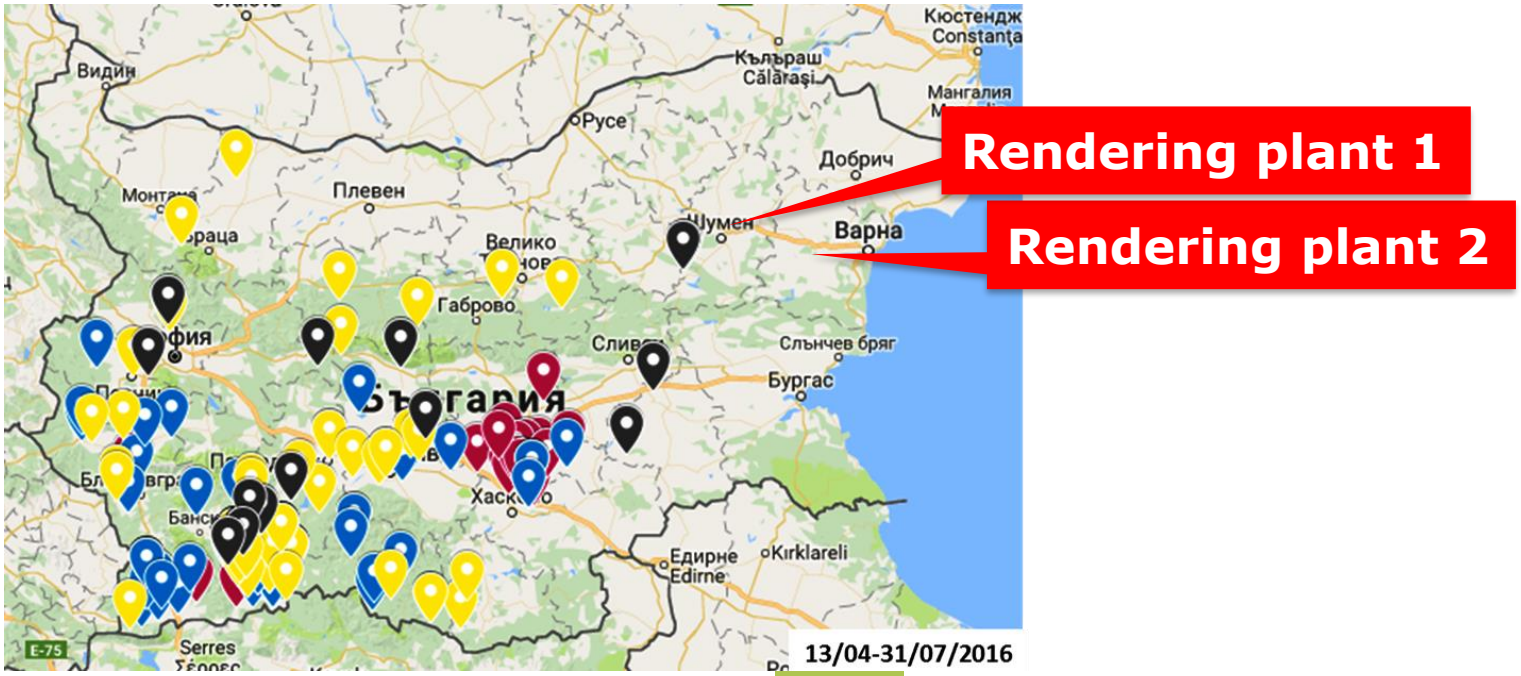
of 21 October 2009

laying down health rules as regards animal by-products and derived products not intended for human consumption and repealing Regulation (EC) No 1774/2002 (Animal by-products Regulation)

- Rendering
- Incineration
- Burial
- Burning

Disposal carcasses in rendering plants

- ✓ Preferred method for cattle in Austria, Denmark, other countries
- ✓ Biosafety during transportation to be considered



Mobile incinerators

Excellent option but ……..

does not work for cattle

Disposal of carcasses by burial & burning

Reg. 1069/2009 (50) Burial and burning of animal by-products, in particular of dead animals may be justified in specific situations, in particular in remote areas, or in disease control situations requiring the emergency disposal of the animals killed as a measure to control an outbreak of a serious transmissible disease. In particular, disposal on site should be allowed under special circumstances, since the available rendering or incinerator capacity within a region or a Member State could otherwise be a limiting factor in the control of a disease.

On site burial and burning of carcasses What is needed?

- Permission
- Remote site for burial/burning to be defined by environmental commission as close as possible to the affected farm
- Team for valuation of animals
- Team for loading and transportation of the cattle to the site for disposal
- Team for disposal
- Teams for cleaning and disinfection (at place of loading, at site for disposal)
- Transport technique, equipment, approved disinfectant
- Good weather……


ЗАБРАНЕНО
ФОТОГРАФИРАНЕТО
НА СЪСЕДНА ТЕРИТОРИЯ
NO PHOTOGRAPHY PERMITTED
IN NEIGHBOUR TERRITORY
No admittance!
Infectious animal
disease!
Влизането
забранено!
Заразна болест
по животните!
15.01.2011
15.01.2011

Cleaning and disinfection

Council Directive 91/119/EEC, Art. 16, paragraph 1:

1. Member States shall ensure that:

(a) the disinfectants and insecticides to be used and, where appropriate, their concentrations, are officially approved by the competent authority;

(b) the cleaning, disinfection and disinsectization operations are carried out under official supervision:

— in accordance with the instructions given by the official veterinarian,

— and

— in such a way as to eliminate any risk of spread or survival of the agent of the disease;

(c) on completion of the operations in (b), the official veterinarian makes sure that the measures have been carried out properly and that an appropriate period, of not less than 21 days, has elapsed to ensure that the disease in question has been completely eliminated before animals of susceptible species are re-introduced.


ПОЛИЦИЯ
15.01.2011


15.01.2011

Controlled Restocking

- Use of sentinel animals
- Introduce sentinels at least one incubation period after final cleansing and disinfection
- Expose sentinels to high risk areas on premises
- Monitor for regularly, daily/weekly inspection
- After clinical inspection – blood tests. If clear, start restock

The contents of this presentation are the views of the author and do not necessarily represent an official position of the European Commission.

Thank you!

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Food Safety

Regional Workshop on Animal Disease Preparedness

Better Training For Safer Food

Silvia BELLINI

EU Rules on Regionalisation

Tokyo, Japan
12-15 June 2018

Food Safety

Content

- Regionalization
- Disease control measures
- EU legislation framework
- Example of Regionalization in the EU (ASF)

ZONING FOR ANIMAL DISEASES IN THE EU

Within the European Union, the main goal of regionalisation is twofold:

1. to ensure the effective control of diseases within the affected area and
2. to limit the impact of diseases on both the EU internal market and on exports.

Tool to control diseases, widely applied in the EU in line with SPS and OIE guidelines and standards

Zoning and Compartmentalisation (*OIE: Terrestrial Animal Health Code, 2017*)

Meaning of terms:

Procedures which may be implemented by a country to define and manage animal subpopulations of distinct health status within its territory for purposes :

- of national or regional disease control, and/or
- international trade: to gain / maintain market access for certain commodities where whole country sourcing is not justified on disease risk grounds

Zoning and Compartmentalisation
(*OIE: Terrestrial Animal Health Code, 2017*)

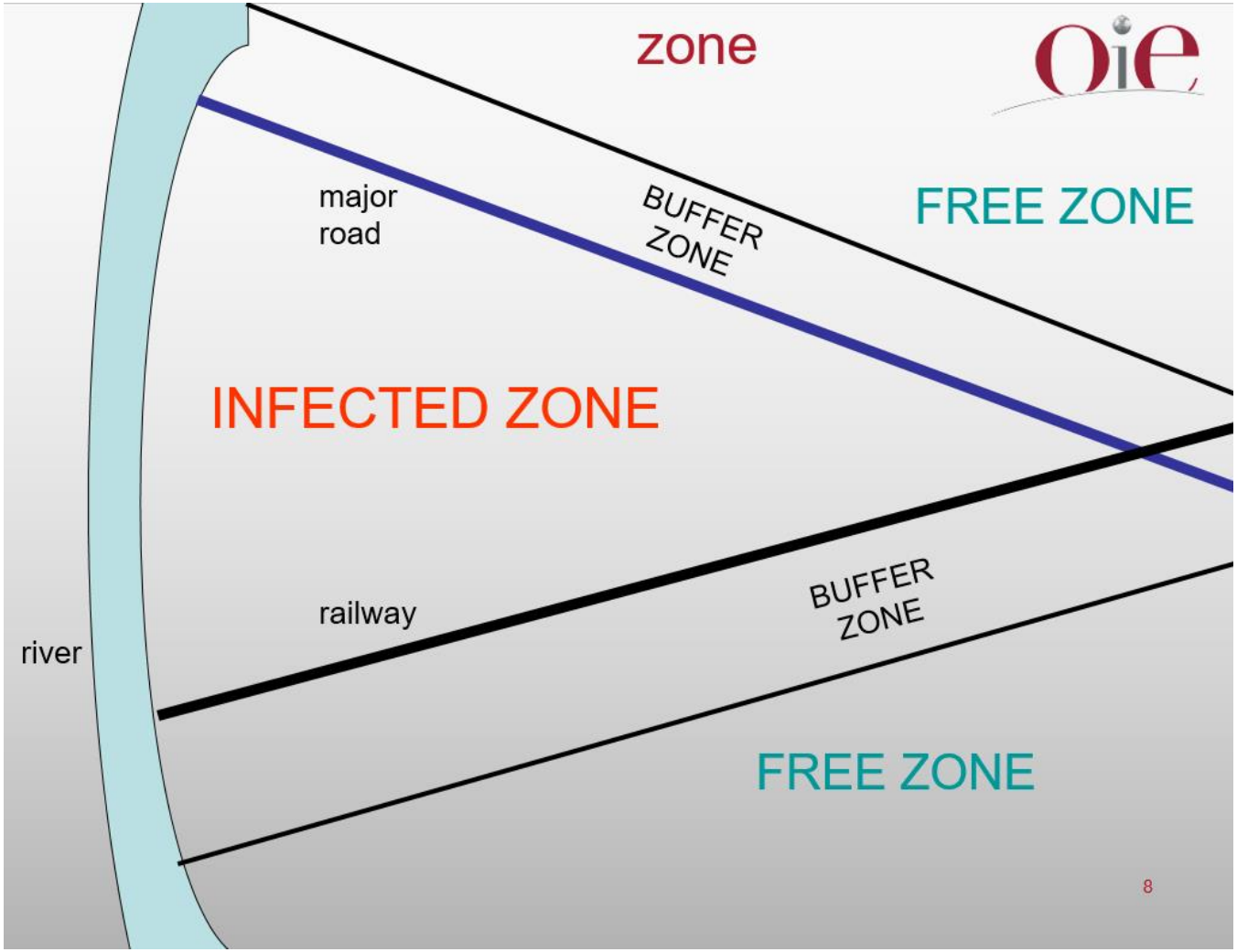
Meaning of terms:

Zoning: applies to an animal subpopulation defined primarily on a geographical basis

Compartmentalisation: applies to an animal subpopulation defined primarily by management and husbandry practices relating to biosecurity

in practice:

spatial considerations and good management are important in the application of both concepts


zone
FREE ZONE
major road
BUFFER ZONE
INFECTED ZONE
railway
BUFFER ZONE
river
FREE ZONE
8

Disease Control Measures

The EU has a set of specific legislation for a number of animal diseases depending on their impact.

This includes:

- Notification obligations
- Diagnostic methods
- Measures to adopt in case of suspicion and confirmation of disease and, where applicable
- **Regionalization measures (zoning)**

EU main framework for disease control

- **The specific legislation on the disease (Directive)**
- **Contingency plans**
- ***Regionalization***
- **EU Reference Laboratory – diagnostic manual**
- **The EU co-financing of emergency measures and eradication programmes**
- **Health and Food audits and analysis (former FVO) audits**
- **The Community Veterinary Emergency Team - CVET**
- **Training (BTSF)**
- **Scientific advise – EFSA scientific opinions**
- **International cooperation – OIE/FAO GF-TADSs**
- **EU research projects - RTD**

Outbreak management is aimed at:

- ✓ Eliminating the source of the pathogen
  - Killing or slaughter of animals, safe disposal of dead animals and potentially contaminated products
  - Cleaning, disinfection, disinsection
- ✓ Stopping the spread of the infection
  - Movement restrictions (animals, vehicles and equipments)
  - Biosecurity
  - Investigations
  - Vaccination, when the vaccine is available
  - Communication and public awareness
  - ✓ **ZONING**
- ✓ Specific post-control surveillance to demonstrate freedom

SURVEILLANCE

Basic measures to be implemented to contain and eradicate major animal diseases

- ✓ Definition of the area (size)
- ✓ stamping-out (humane killing and destruction) of animals in the infected farms
- ✓ and ..if necessary, on other at-risk farms identified by means of epidemiological investigations)
- ✓ and/or vaccination.
- ✓ Trade restrictions may include a ban on animal movements within and from the infected areas.

SURVEILLANCE

Control measures and trade restrictions can only be lifted after appropriate surveillance have been applied in the affected area, modulated on the basis of the outcome of epidemiological investigations.

Main Legislation in force on ASF

Council Directive 2002/60/EC **of 27 June 2002 laying down specific provisions for the control of African swine fever and amending Directive 92/119/EEC as regards Teschen disease and African swine fever**

Commission Decision 2003/422/EC **of 26 May 2003 approving an African swine fever diagnostic manual**

Commission Decision 2014/709/EU **of 9 October 2014 concerning animal health control measures relating to ASF in certain Member States and repealing Implementing Decision 2014/178/EU**

Council Directive No 82/894/EEC **of 21 December 1982 on the notification of animal diseases within the Community**

Council Directive 2002/60/EC: main provisions

- ✓ Disease notification
- ✓ Measures to be established when ***the presence of ASF on a holding is suspected or confirmed***
- ✓ Epidemiological Investigation and measures in contact holdings
- ✓ Establishment of protection and surveillance zones (3 – 10 Km), measures to be applied
- ✓ Cleansing, disinfection and treatment with insecticides
- ✓ Repopulation of pig holdings following disease outbreaks
- ✓ Measures in cases where African swine fever is suspected or confirmed in a slaughterhouse or means of transport
- ✓ Measures in cases where African swine fever is suspected or confirmed in feral pigs and plans for eradication
- ✓ Contingency plan

Commission Decision 2003/422/EC

diagnostic manual for ASF, it lays down uniform diagnostic procedure, sampling methods and criteria for the evaluation of the results of lab tests:

- How to recognize ASF and principles for differential diagnosis
- Main criteria to be considered for the recognition of a suspect holding
- Checking and sampling procedures, samples collection and transport
- Virological tests and results evaluation
- Serological tests and results evaluation
- Safety requirements for Labs

Regionalisation for ASF

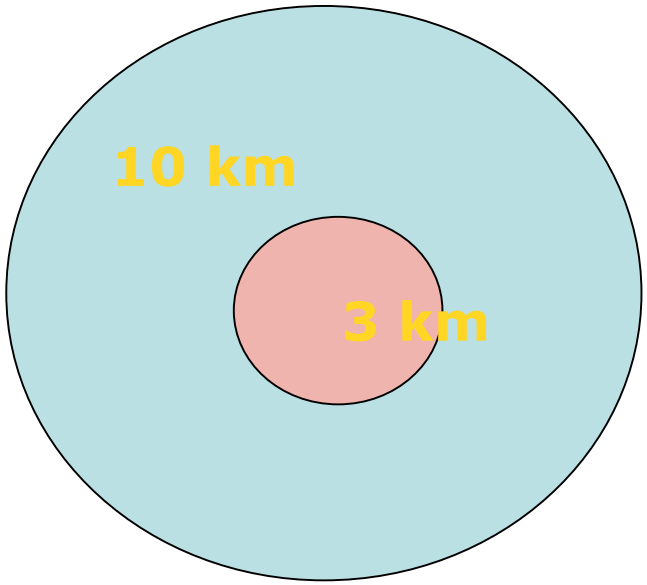
CID of 9 October 2014 (2014/709/EU)

- In line with the OIE international standards (Terrestrial Animal Health Code - Chapter 4.3. on "Zoning and compartmentalisation")
- Flexible: can be adapted based on the evolution of the epidemiological situation
- Updated when necessary - last update 16 May 2018 by CID (EU) 2018/745

Restictive Measures in case of ASF confirmation

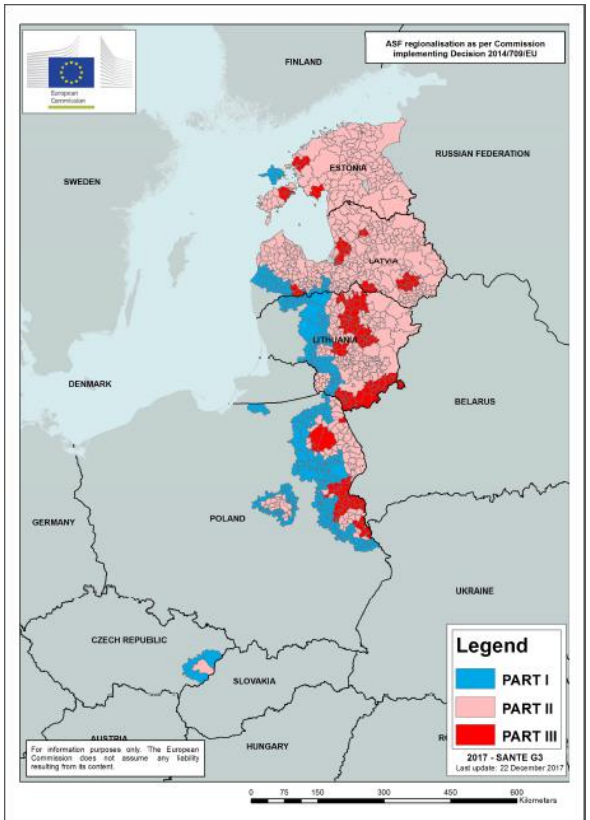
CD 2002/60/EC

Protection and surveillance Zones



CD 2014/709/EU

Regionalization



CD 2014/709/EU

"concerning animal health control measures relating to ASF in certain Member States and repealing Implementing Decision 2014/178/EU"

It lays down animal health control measures in relation to African swine fever in the Member States or areas set out in the Annex

The aim is to minimize the risk of ASF spread from the affected areas

CD 2014/709/EU

"concerning animal health control measures relating to ASF in certain Member States and repealing Implementing Decision 2014/178/EU"

Based on the epidemiological situation Affected territories of affected member countries are listed:

- Annex: Part I (at risk)
- Annex: Part II (feral pigs)
- Annex: Part III (feral & domestic pigs)
- Annex: Part IV (endemic situation)

SANCO/7112/2015

Main criteria for demarcating Parts I, II, III and IV of Annex to 2014/709/EU

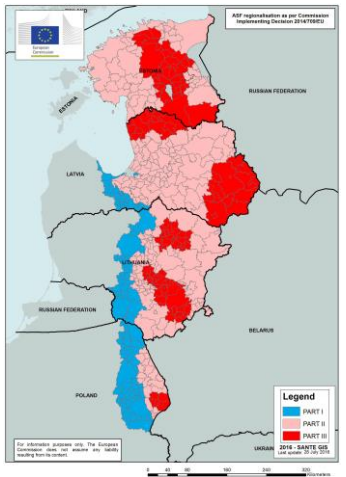
1)Part IV: occurrence of ASF in both domestic pigs and wild boar. The situation is endemic.

2) Part III: occurrence of ASF in both domestic pigs and wild boar. The situation is not yet endemic.

3) Part II: occurrence of ASF in wild boar.

4) Part I: higher risk area with no cases, nor outbreaks, of ASF and where higher surveillance is applied..

Surveillance: in domestic pigs and in wild boar

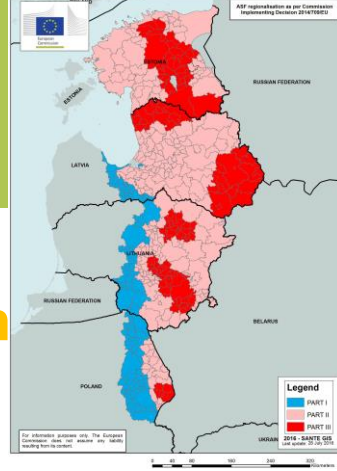


EU Guidelines

SANCO/7112/2015

Principles and criteria for geographically defining ASF **regionalisation**

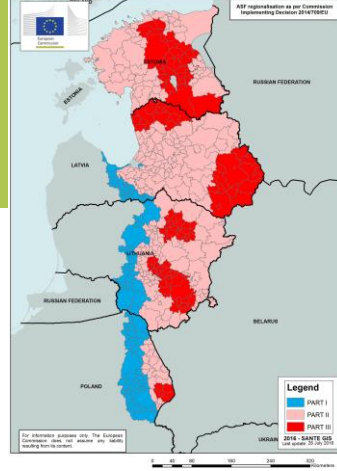
SANCO/7112/2015
Principles and criteria for geographically definin
ASF regionalisation



- The different parts of the Annex to 2014/709/EU are defined considering the epidemiological situation of ASF and take into account if it is present in wild boar and domestic pigs.
- The 2 categories behave differently and have different biosecurity constrains and movement patterns (wild boar more difficult to control)

the infection continued to spread slowly through the wild boar populations;

it is the uncontrollable nature of the wild boar that heavily influences the definition of regionalisation.

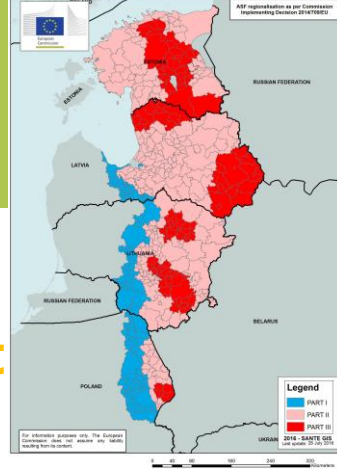


SANCO/7112/2015
Elements relevant for ASF regionalisation

- the spread of the disease in the wild boar seems to be independent of the density of the wild boar populations;
- the transboundary spread of ASF occurs through wild boar sub-populations; NOT MIGRATORY SPECIES
- short-distance spread (up to 50 km/year) have been observed in the wild boar population (direct contact) whereas long distance

suggest the involvement of the human factor.

http://www.efsa.europa.eu/en/efsajournal/pub/4163



SANCO/7112/2015

Factors to be taken into account for the demarcat of the size and shape of the area:

a) geographical aspects linked to the location of the outbreaks/wild boar cases;

b) ecological factors (e.g. water ways, forests) and the existence of natural and artificial barriers;

c) presence and distribution of wild boar;

d) epidemiology of the disease and results of specific epidemiological studies;

e) historical experience gained on ASF spread;

f) administrative divisions, territorial continuity and enforceability of the control measures;

g) distribution of pig farms (non-commercial farms, commercial farms and outdoor farms) and the existence of protection and surveillance zones (if any);

h) hunting practices and other wildlife management considerations.

CD 2014/709/EU

"concerning animal health control measures relating to ASF in certain Member States and repealing Implementing Decision 2014/178/EU" (Last amendment CID (EU) 2017/2411 of 20/12/2017)

At risk commodities and level of risk:

1. **Live pigs, Pig semen, ova and embryos and Animal by-products of porcine species**
2. **Pig meat, meat preparations and meat products**

These commodities may represent a risk for the spread of ASF

CD 2014/709/EU

Article 2

The Member States concerned shall prohibit:

(a) the dispatch of **live pigs** from the areas listed in Parts II, III and IV of the Annex;

(b) the dispatch of consignments of **porcine semen, ova and embryos** from the areas listed in Parts III and IV of the Annex;

(c) the dispatch of consignments of **pig meat, pig meat preparations, pig meat products** and any other products containing such meat from the areas listed in Parts III and IV of the Annex;

(d) the dispatch of consignments of **animal by-products from porcine animals** from the areas listed in Parts III and IV of the Annex.

CD 2014/709/EU

Conditions for derogation depend on:

1. *Type of commodity*
2. *Part of the Annex (level of risk)*

Based on:

- ✓ Lab testing (CD 2003/422/EC)
- ✓ ASF Surveillance and eradication programme
- ✓ Farm biosecurity (VS)
- ✓ Residency
- ✓ Conditions for transport, slaughtering, processing..
- ✓ Conditions for the holdings and transport vehicles
- ✓ Certification (VS)
- ✓ Treatment to ensure no risk for ASFV
- ✓ Special health mark (meat, meat preparations and meat products)

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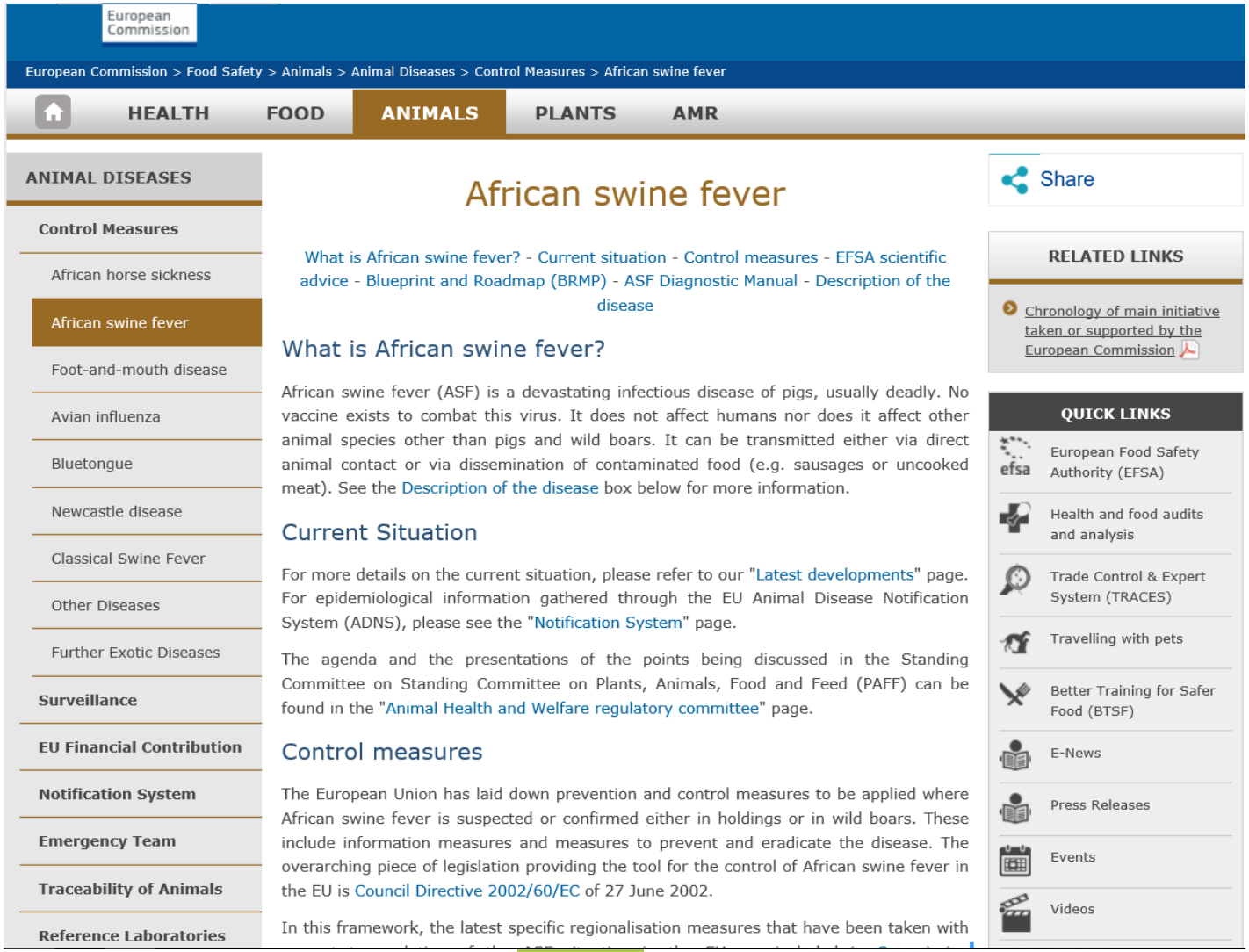
https://ec.europa.eu/food/animals/animal-diseases/control-measures/asf_en



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Thank you very much for your attention!

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Regional Workshop on Animal Disease Preparedness

Better Training For Safer Food

Stefano Marangon

A practical experience of zoning
Case Study
2016-2018 Italian H5N8 HPAI epidemic

Tokyo, Japan
12-15 June 2018

Food Safety

Background - Definition

OIE Terrestrial Animal Health Code

Article 4.3.1.

A zone contains a (susceptible) animal sub-population with a distinct health status with respect to a specific disease and it is primarily defined on a **geographical** basis

Background - Objectives

Disease control

- Can be applied wherever the eradication of a disease is not possible or practicable for the whole country
- Can be based on a stepwise approach
- Can be focussed on one/some geographical areas of a Country (concentration of resources, prompt control/eradication, better management of disease re-emergence, etc.)

International trade

- To gain or maintain international market access

Description – What are zones

Zones are **clearly delineated geographical areas** within a Country….

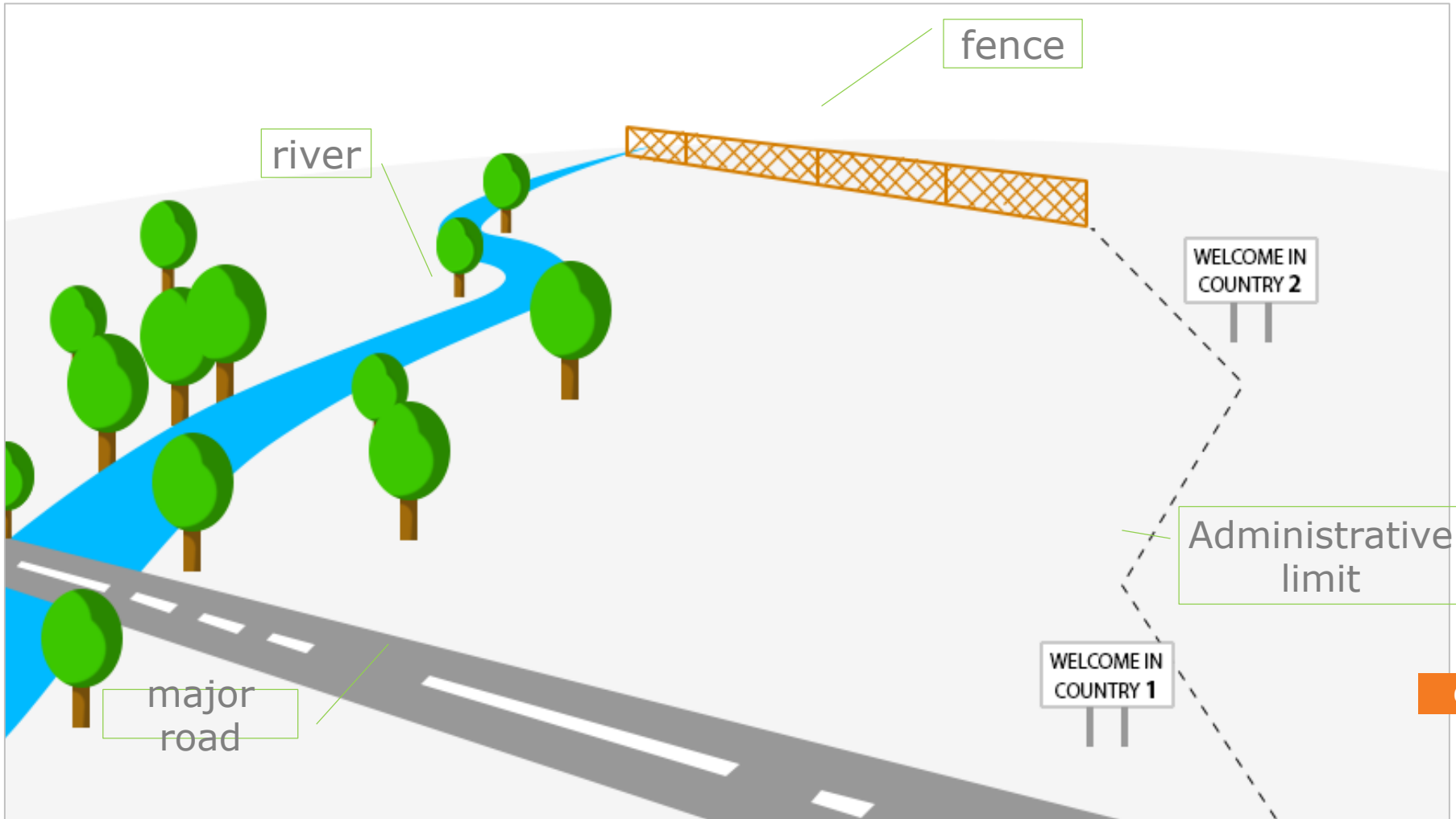
…. for which appropriate **surveillance, biosecurity and sanitary measures** have been applied

Description – What are zones

The extent of a zone and its geographical limits are established on the basis of **natural, artificial or legal boundaries**

Natural	River, Coast line, ….
Artificial	Major road, Railway, Fence, ….
Legal boundaries	Administrative limits, Buffer area, ….

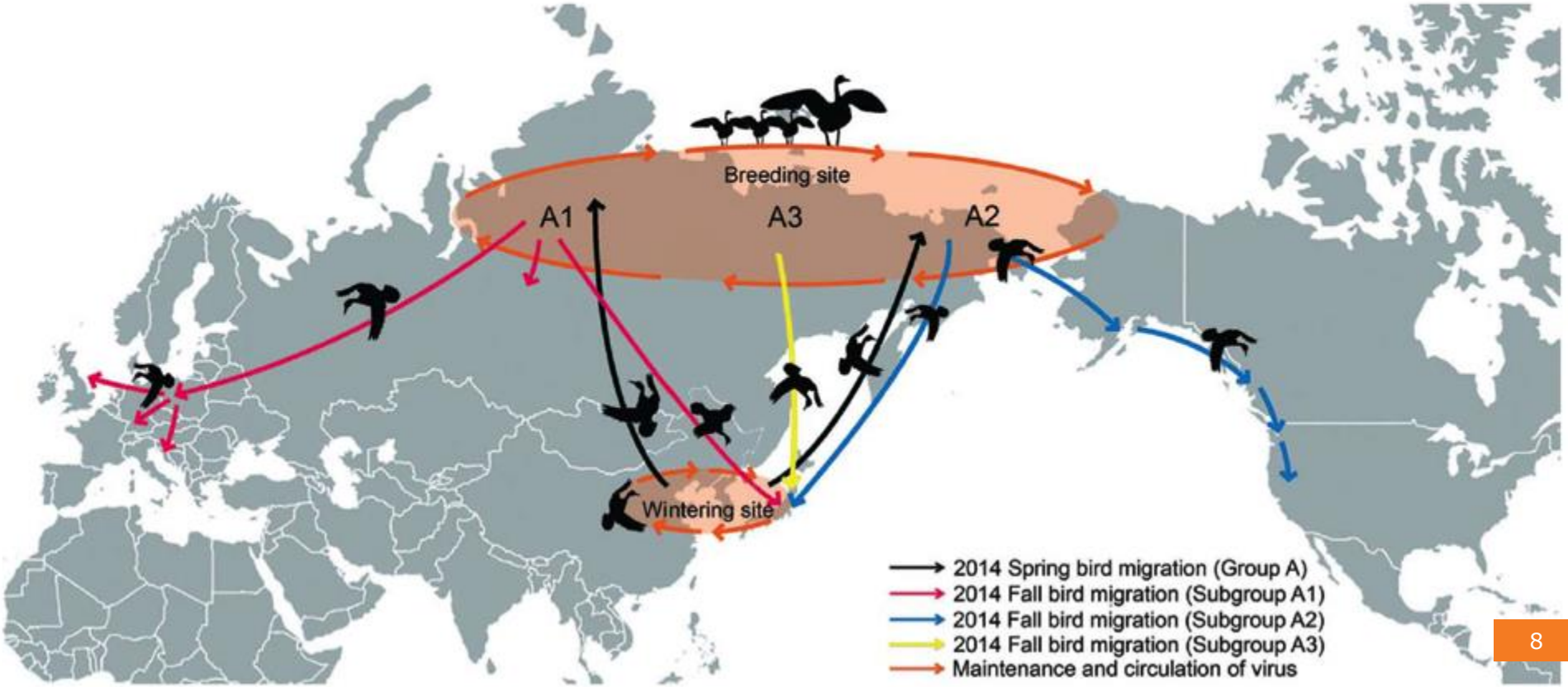
Description – What are zones



Case Study

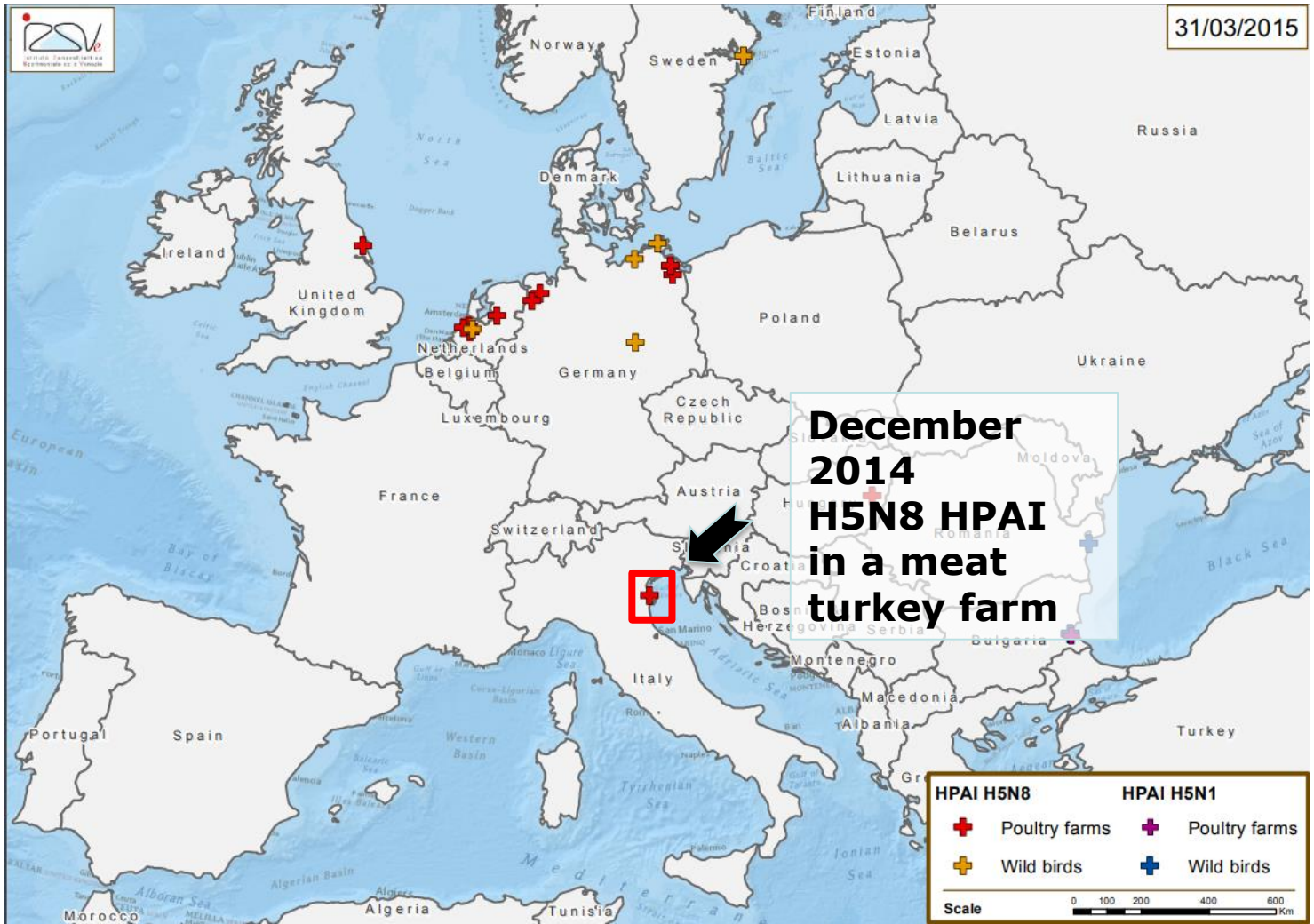
2016-2018 Italian H5N8 HPAI epidemic

2014–2015 - Spread of H5N8 HPAI by long-distance migratory wild water birds



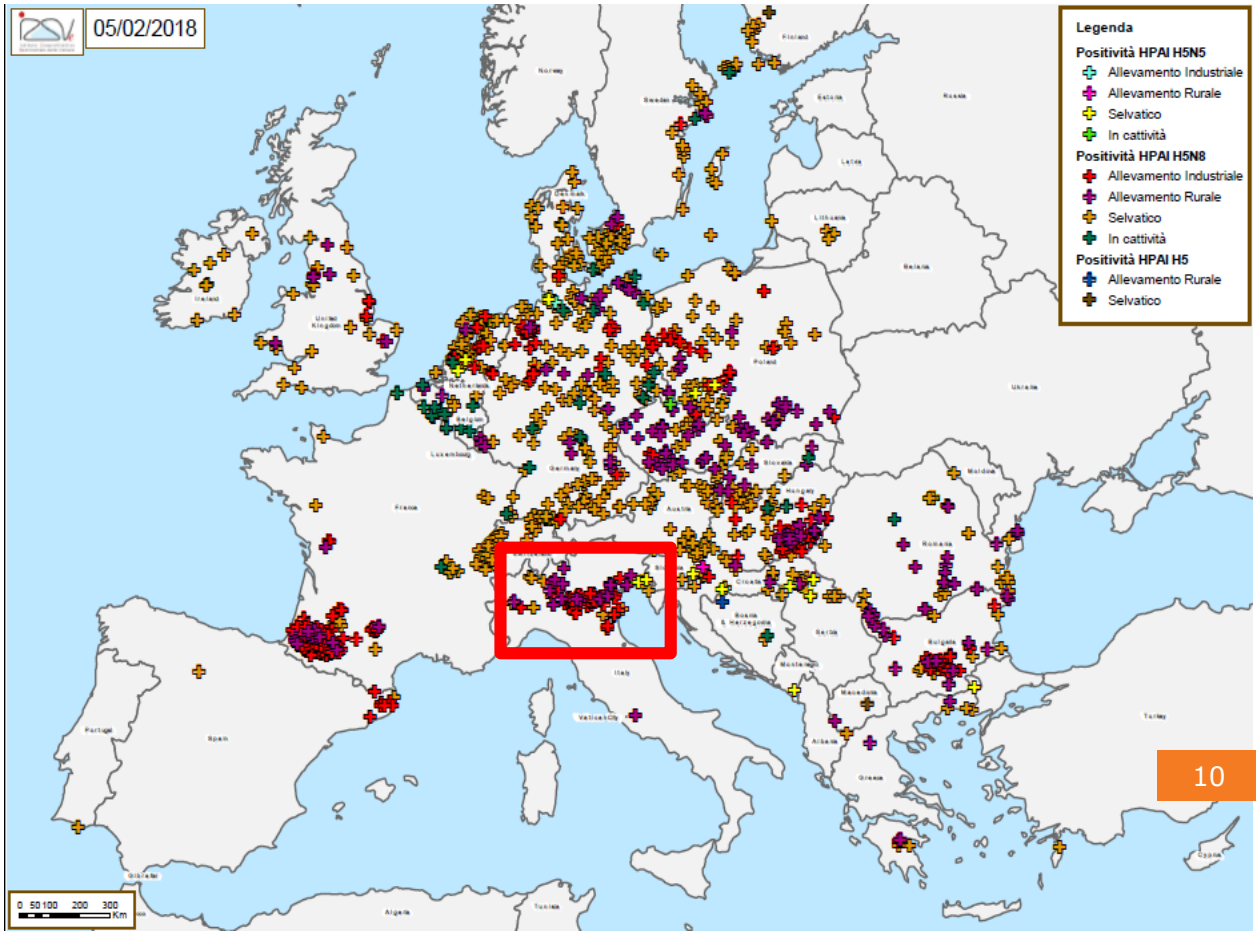
Lee *et al.*, 2015

H5N8 HPAI in EU 2014 - 2015



H5N8 HPAI (Europe)(first case 26.10.2016)

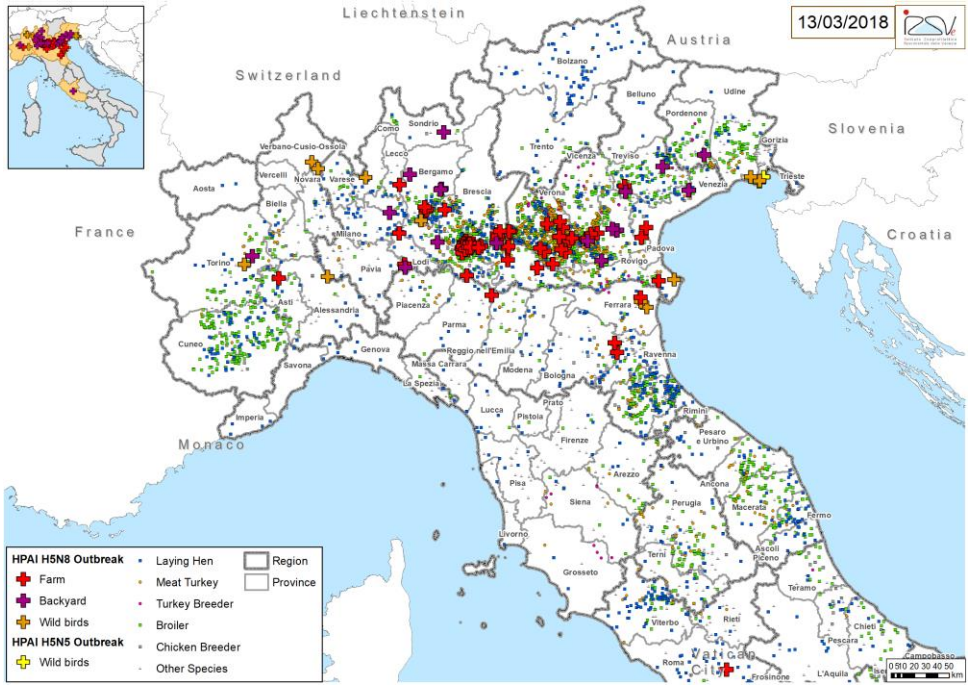
- **29** Countries
- **≈1,200** outbreaks
- million birds dead or stamped out
- **>3,000** affected wild birds



2016-2018 H5N8 HPAI in Italy

December 2016 – March 2018

- **86** outbreaks in poultry
- **3.057.000** birds stamped out in affected premises
- **2.089.000** birds pre-emptively culled on at-risk premises in DPPAs
- **14** cases in wild birds



AI outbreak management

(Council Directive 2005/94/EC)

- Restrictions on suspect/affected holding
- **Stamping out** of all poultry in affected premises
- Disposal of carcasses and contaminated materials (e.g. eggs, litter)
- Cleansing and **disinfection**
- ……
- Epidemiological investigation (standard form) and contact tracking activities in each affected premises

Risk analysis to identify:

- Premises at high risk of AI (preventive killing -> criteria)
- Premises with at-risk contacts (restrictions and enhanced surveillance)
- **Geographical areas at risk (where restriction measures shall be rapidly enforced)**

Establishment of restriction zones (Regionalization)

Criteria

- Outcome of epidemiological enquiry
- Geographical situation
- Natural and administrative boundaries
- Location, proximity of other holdings, number and distribution of holdings and birds (poultry density)
- Movements and trade patterns
- Role of wildlife
- Veterinary infrastructure to control movements, …….

Establishment of restriction zones (in line with OIE standards)

Aims

- Disease prevention and control
- International trade

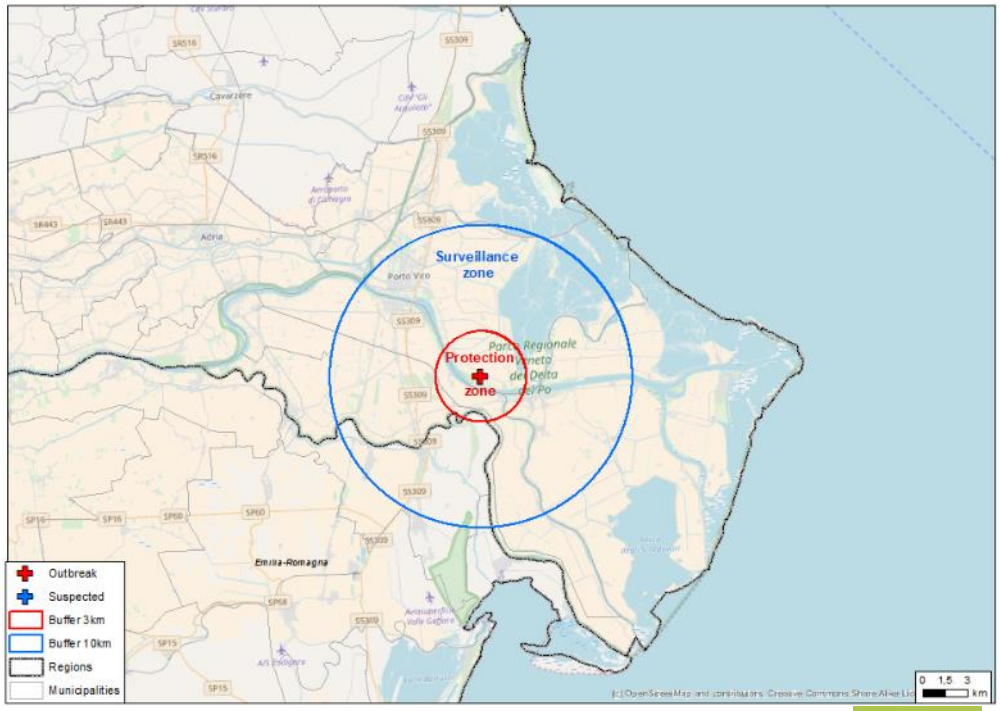
Procedure

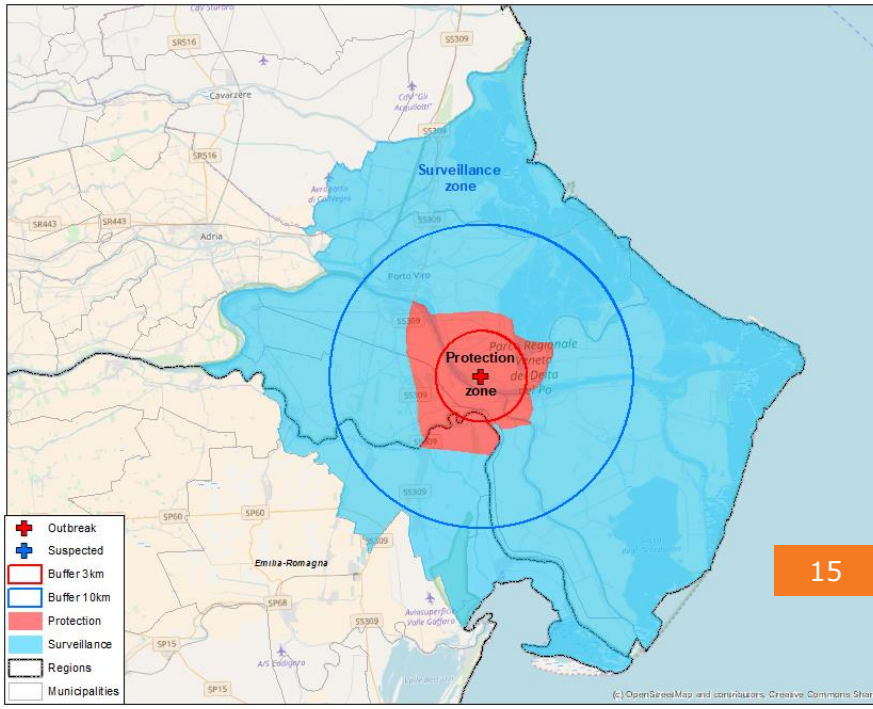
- To identify a sub-population within a clearly delineated geographical area

Method

- Definition of geographic areas (**GIS**)
- Biosecurity plans


Outbreak
Suspected
Regions
Municipalities
0 0,05 0,1 km


Surveillance zone
Protection zone
Outbreak
Suspected
Buffer 3km
Buffer 10km
Regions
Municipalities
0 1,5 3 km


Surveillance zone
Protection zone
Outbreak
Suspected
Buffer 3km
Buffer 10km
Protection
Surveillance
Regions
Municipalities

Protection zone - minimum 3 km radius

- Census of holdings
- All poultry indoors
- Records of all visiting persons
- All commercial poultry holdings **visited by official veterinarian**
- Additional clinical surveillance to identify further spread (sampling if necessary)
- Any increased **morbidity / mortality to be notified** immediately and investigated by the competent authority

Protection zone - minimum 3 km radius

Restrictions on movements of live poultry, poultry products, meat, eggs and manure

- Certain movements may be authorised under strict conditions - testing according to AI diagnostic manual

Biosecurity measures

- For persons entering/leaving a poultry holding
- Cleansing and disinfection of vehicles and equipment
- Prohibition of fairs, markets and shows for poultry
- No release of game birds

Surveillance zone – minimum 10 km radius

- Census of holdings
- Any increased **morbidity/mortality to be notified** immediately and investigated by the competent authority

Restrictions on movements of live poultry, poultry products, meat, eggs and manure.

- Certain movements may be authorised under strict conditions

Biosecurity measures

- For persons entering/leaving a poultry holding
- Cleansing and disinfection of vehicles and equipment
- Prohibition of fairs, markets and shows for poultry
- No release of game birds

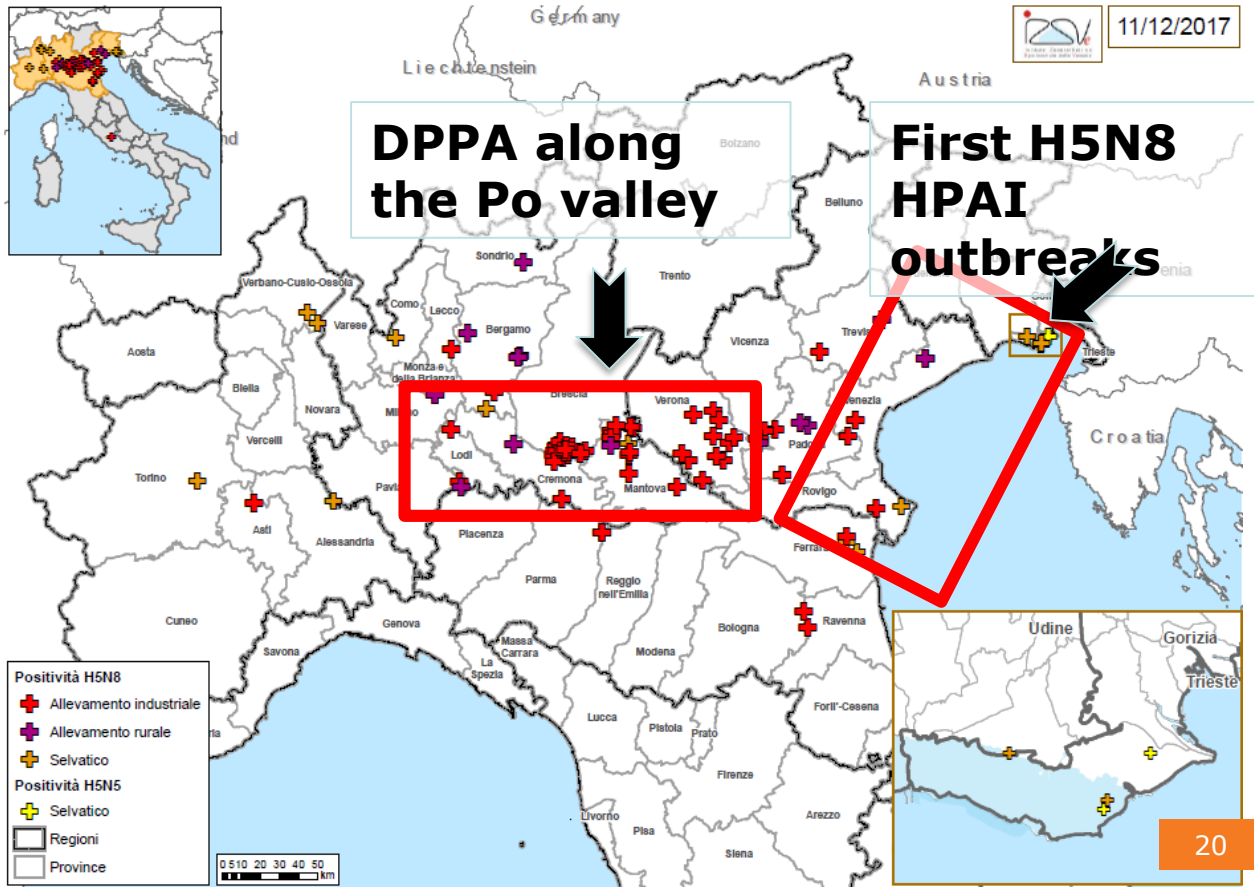
Duration of restriction measures
(Council Directive 2005/94/EC)

- Measures in **protection zone** remain at least 21 days after stamping out, cleansing and disinfection and until holdings in zone have been inspected and tested in accordance with the Diagnostic manual

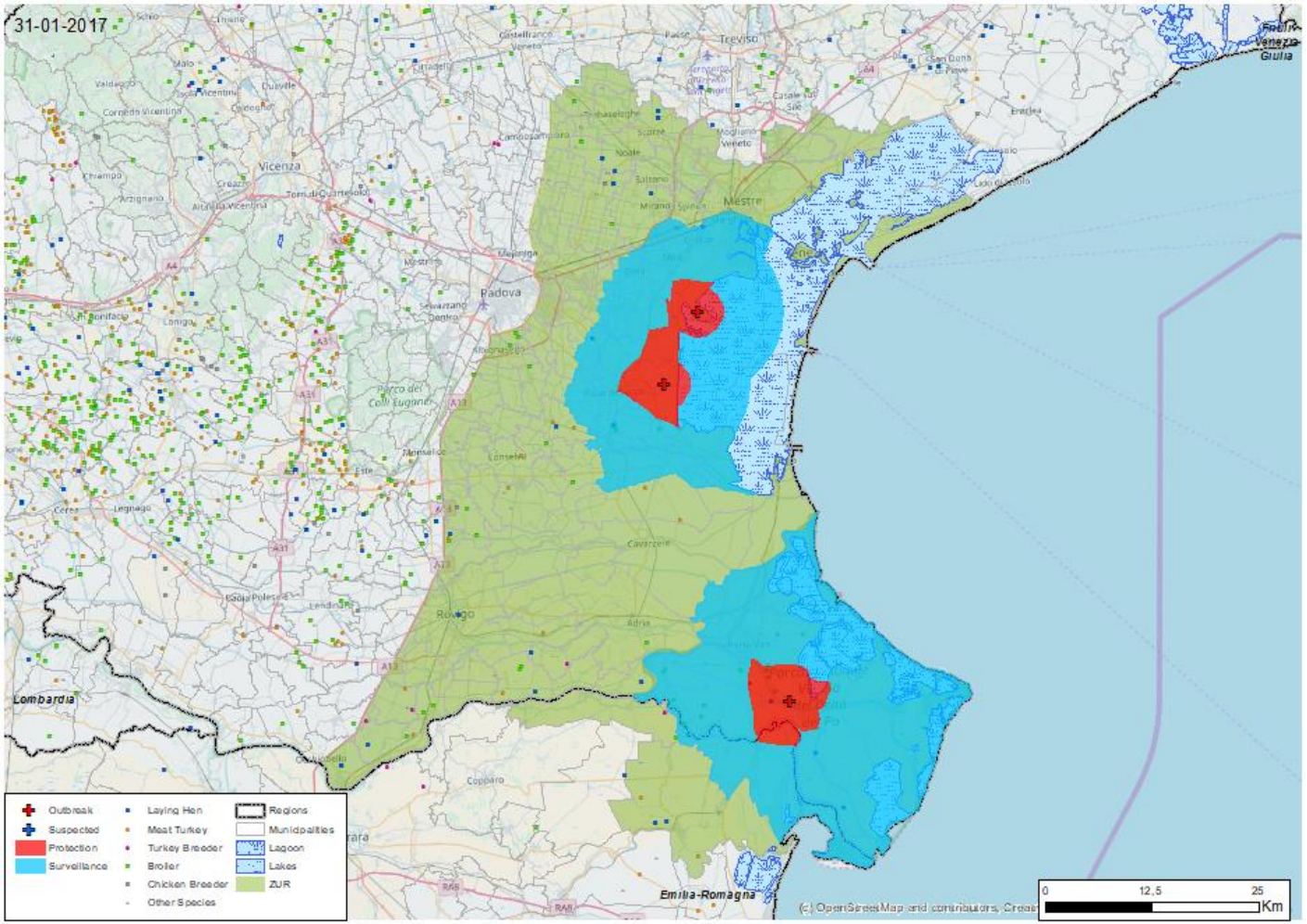
- Measures in **surveillance zone** remain in place at least 30 days

2016-2018 H5N8 HPAI in Italy

- First outbreaks detected along the migratory flyways (Venetian lagoon and Po river Delta)
- Afterwards H5N8 HPAIV introduced in DPPAs mainly along the Po valley -> high risk of farm-to-farm spread



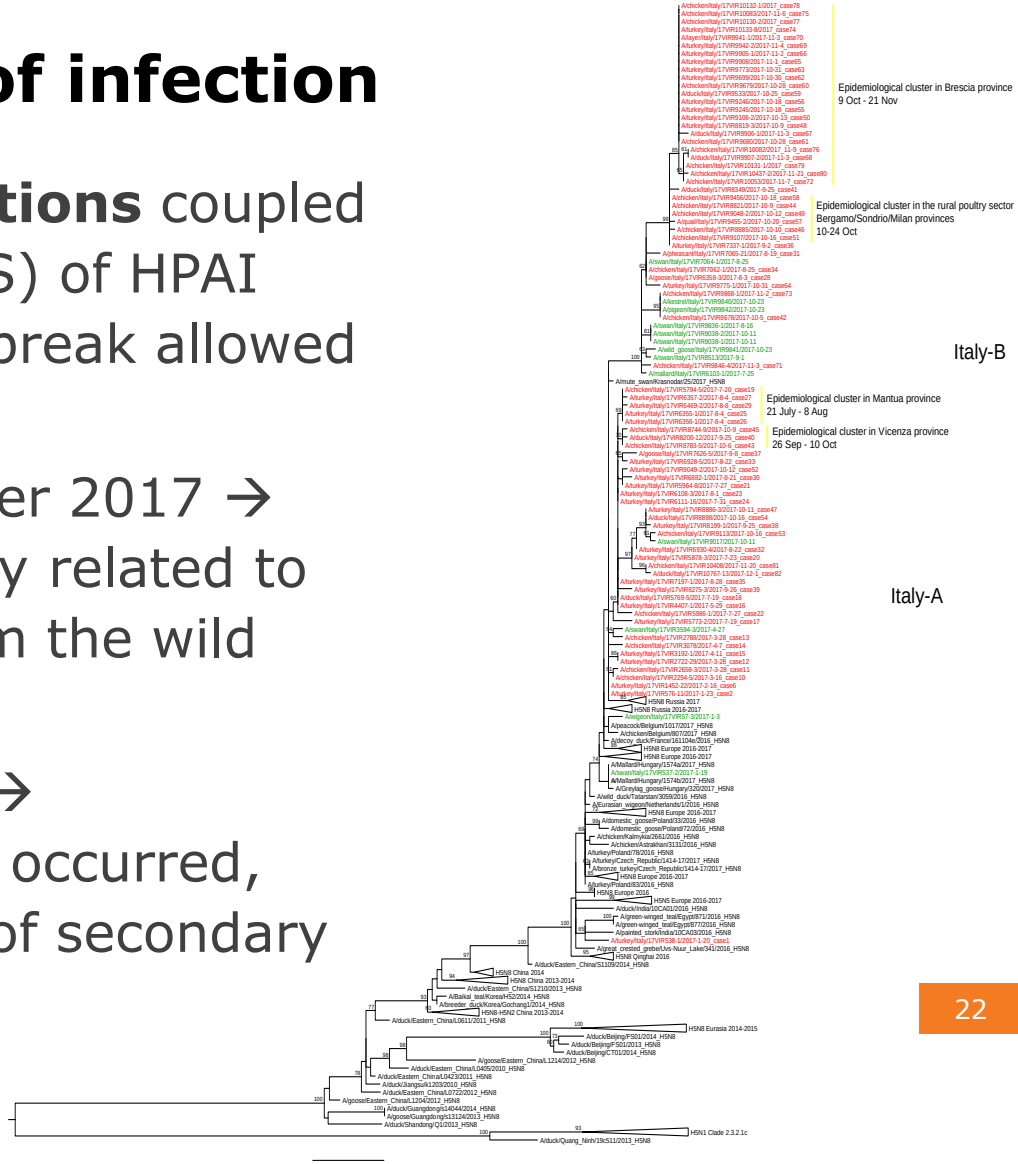
Further restricted zones



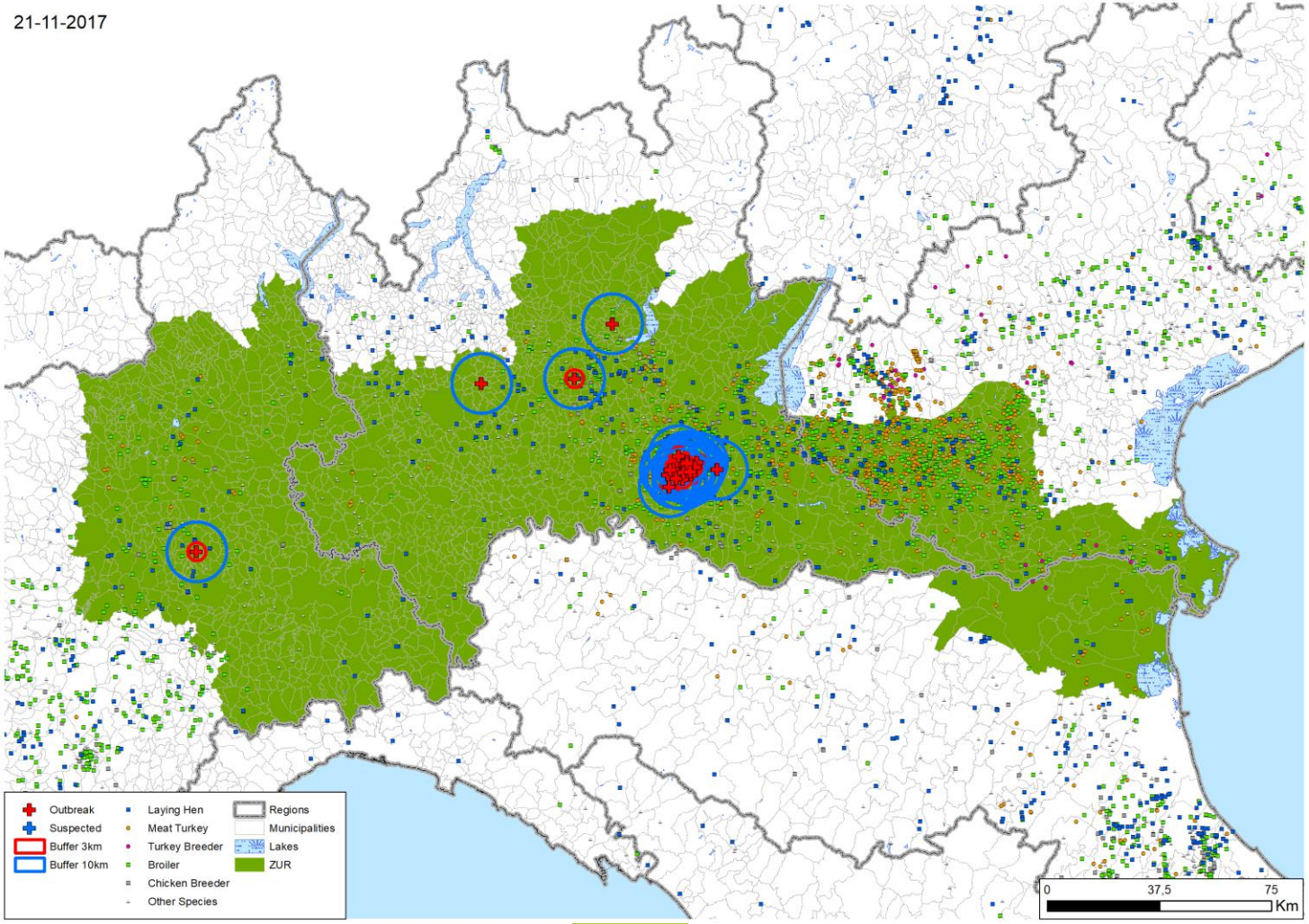
Origin of infection

Epidemiological investigations coupled with **genetic analysis** (WGS) of HPAI viruses detected in each outbreak allowed to established that:

- Up to the end of September 2017 → Majority of outbreaks likely related to multiple introductions from the wild reservoir
- October-November 2017 → Lateral spread of AIV also occurred, leading to a large cluster of secondary cases in two provinces



Further restricted zones



Further Restricted Zone
Additional restriction and control measures

- Census of industrial poultry holdings
- All poultry indoors
- Official inspection and virological (PCR) testing e.g. before loading for slaughter (**pre-movement controls**)
- Enforcement of **strict biosecurity** measures regarding vehicles/personnel entering and exiting farms
- Poultry companies must ensure a functional separation of activities, personnel and facilities with areas outside the FRZ

Re-stocking of turkey farms **prohibited**

- Possible derogation only in presence of strict biosecurity standards and after a geographical risk assessment
- .....

Restricted Zones

Commission Implementing Decision (EU) 2017/247 on "Protective measures in relation to outbreaks of the highly pathogenic avian influenza in certain Member States", as amended:

- Established at Union level the **protection and surveillance zones** instituted by Member States, following an outbreak of HPAI in poultry or captive birds
- **Prohibited the dispatch of consignments** of live poultry, day-old chicks and hatching eggs from the areas listed as **Further Restricted Zone**

Derogations applied in case specific risk mitigating measures were in place

Restricted Zones

Commission Implementing Decision (EU) 2017/247 establishing areas under restrictions at EU level:

- aims at **preventing unnecessary disturbance to trade**, and
- it ensures **transparency** and safe trade between disease free areas of Member States and to third countries

Conclusions

- 2016-2018 H5N8 HPAI epidemic in EU was unprecedented for its amplitude and geographical range of wild bird involvement
- The spread of AI viruses among EU Member States and to other Countries did not occur due to the prompt enforcement of strict eradication, restriction and biosecurity measures in affected and at risk areas

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Better Training for Safer Food
BTSF

European Commission
Consumers, Health, Agriculture and Food Executive Agency
DRB A3/042
L-2920 Luxembourg

European Commission

Regional Workshop on Animal Disease Preparedness

Better Training For Safer Food

Tsviatko Alexandrov

Notifications and exchange of information at EU and international level

Tokyo, Japan
12-15 June 2018

Food Safety

Content

- General objectives in Animal Health
- Notification systems
- Country disease(s) notification
- EC and EU Member states meetings and Committees

General objectives in Animal Health

Transparency:

- Ensure transparency in the global animal disease situation
- Dissemination of disease information

Adequate measures:

- Outbreaks control
- Vaccination

Sanitary safety:

- Safeguard world trade by health standards for international trade in animals and animal products

Notification systems

- **A**nimal **D**isease **N**otification **S**ystem (EU)
- **W**orld **A**nimal **H**ealth **I**nformation **S**ystem (OIE)
- **TRA**de **C**ontrol and **E**xpert **S**ystem (EU)
- **R**apid **A**lert **S**ystem for **F**ood and **F**eed (EU)

Country disease notification

- Suspicion?
- Primary outbreak: within 24 hours via ADNS, WAHIS, Reports, other tools….
- Secondary outbreak: Follow up reports in WAHIS, weekly notifications in ADNS, Reports, other tools….

Legal obligation for disease notification in animals

European Commission

for all OIE Member Countries trough WAHIS → Mission - to ensure transparency of worldwide animal disease situation including zoonosis

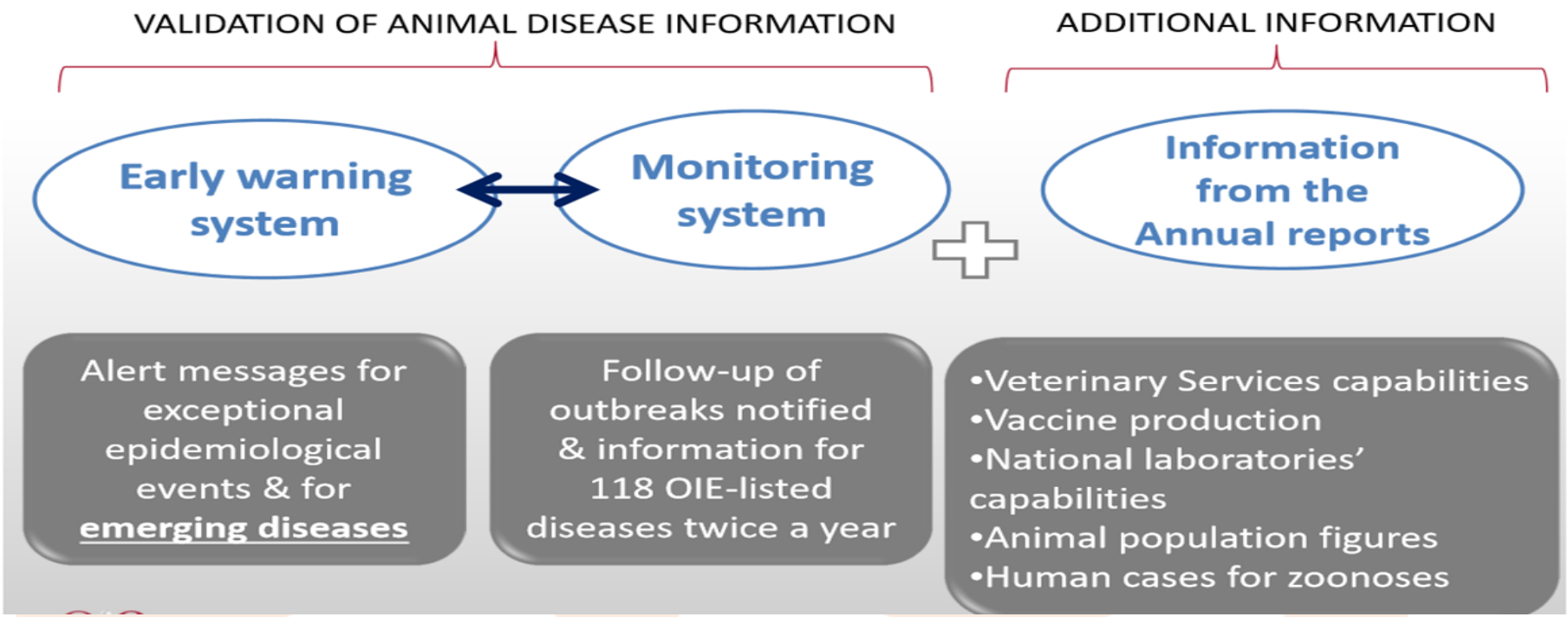
URL address: www.oie.int/wahis

OIE List of notifiable diseases for terrestrial and aquatic animals, as per :

-Terrestrial Animal Health Code

-Aquatic Animal Health Code

In 2016 : 90 disease in terrestrial animals and 28 diseases in aquatic


VALIDATION OF ANIMAL DISEASE INFORMATION
ADDITIONAL INFORMATION
Early warning system
Monitoring system
Information from the Annual reports
Alert messages for exceptional epidemiological events & for emerging diseases
Follow-up of outbreaks notified & information for 118 OIE-listed diseases twice a year
•Veterinary Services capabilities
•Vaccine production
•National laboratories' capabilities
•Animal population figures
•Human cases for zoonoses

European

http://www.oie.int/wahis_2/public/wahid.php/Disease

OIE World Animal Health In...

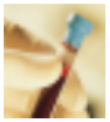
Google Search Share More

Suggested Sites Web Slice Gallery

reports containing information not normally contained within the other types of reports.

+ Immediate notifications and Follow-ups

This report provides a list of all reported disease events, and allows you to progressively find more detail about a particular event - lists of all outbreaks associated with the event, and detailed information about a particular outbreak. It also provides a link to the full immediate notification or follow-up reports for that event.



+ Detailed country (ies) disease incidence

This page displays the detailed data on disease outbreaks (by month and first administrative division, when this information is provided by the country). It provides a detailed insight into the disease situation within the country. For countries that have not reported the presence of disease during the six-month period (s) or for which the disease has never been reported NIL incidence will be displayed.

+ Weekly Disease Information

The weekly reports provide a summary of all immediate notifications and follow-up reports for any unusual disease events submitted by reporting Member Countries, by week. This is a good place to check what has been happening around the world.

+ List of countries by sanitary situation

This page lists all countries, having notified to the OIE, according to the animal health situation for a specified disease. This information is based on their most recent six-monthly report. This is where to find, for instance, a quick list of countries that are free from a specified disease (according to their most recent disease situation report).

+ Report archive

OIE keeps an archive of all immediate notifications and weekly reports in PDF format available for download. This section gives you access to: immediate notifications; weekly reports; and OIE special reports containing information not normally contained within the other types of reports.

+ Disease timelines

The disease situation is constantly changing. This graphical report shows, for a specified disease, how the status of each OIE reporting country has changed. Colour coded blocks indicate disease status in six-month intervals over multiple years.

+ Disease outbreak maps

These maps indicate the location of disease outbreaks reported in immediate notifications or follow-up reports. As with the previous maps, you can zoom in to examine an area of outbreaks in more detail. You can also all the available details about a given outbreak by clicking on the map.

+ General Disease Information

This page provides access to a range of background information about OIE-listed diseases, including access to information not based on country reports. This includes the OIE disease cards, as well as links to the various disease-specific chapters of the Codes and Manuals.

+ Disease distribution maps

Dynamic maps showing the presence or absence of disease at the national and sub-national level. Information is based on six-monthly reports. These maps are interactive so you can see the global situation, then zoom in on a specific region, country or locality

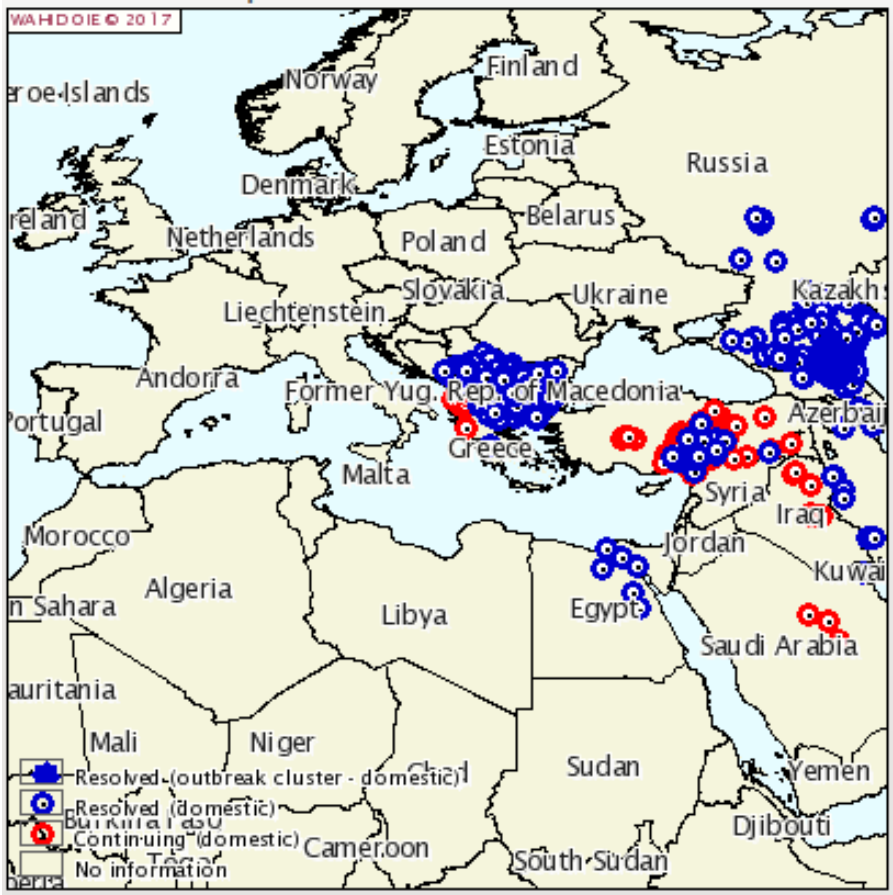
European Commission

WAHIS Interface

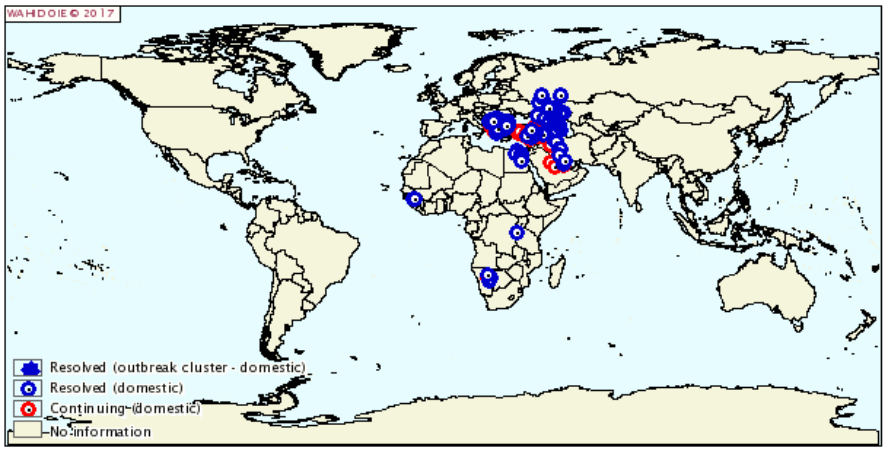
Animal Health Information
Information zoosanitaire
Información Zoosanitaria

Disease outbreak maps: Lumpy skin disease

Click on the map to recentre it

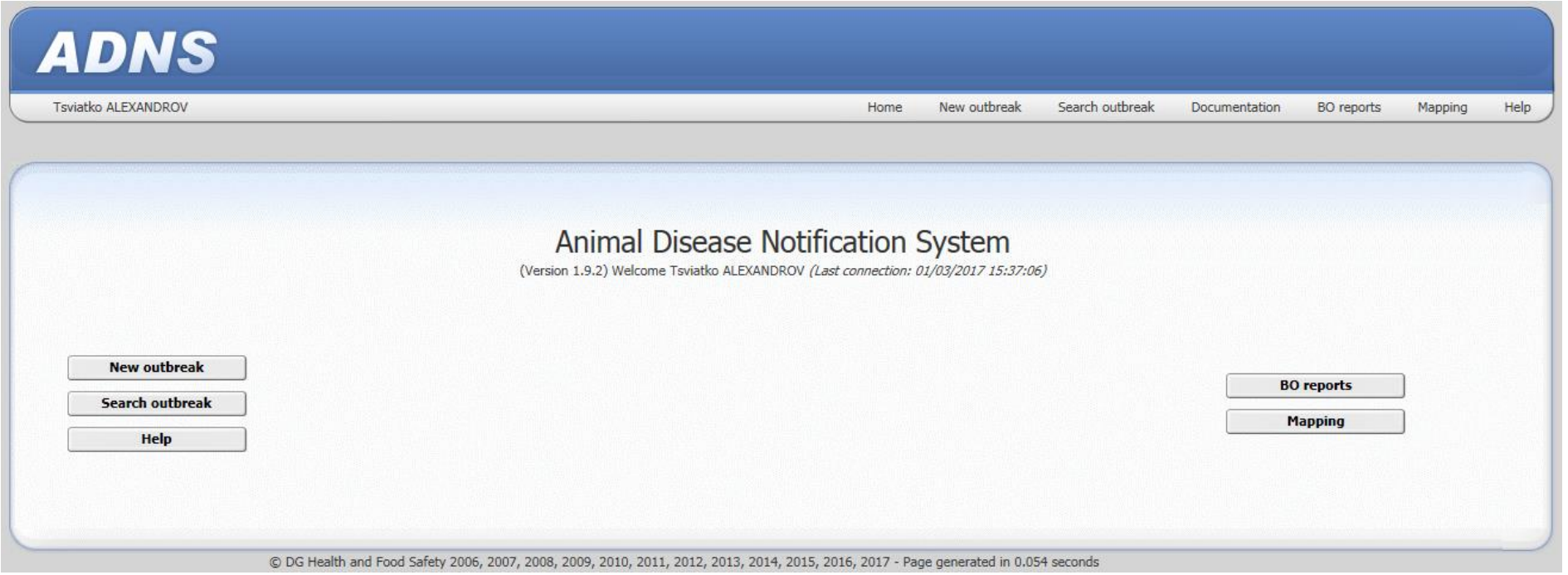


LSD outbreaks 2014 – Feb 2017



European Commission

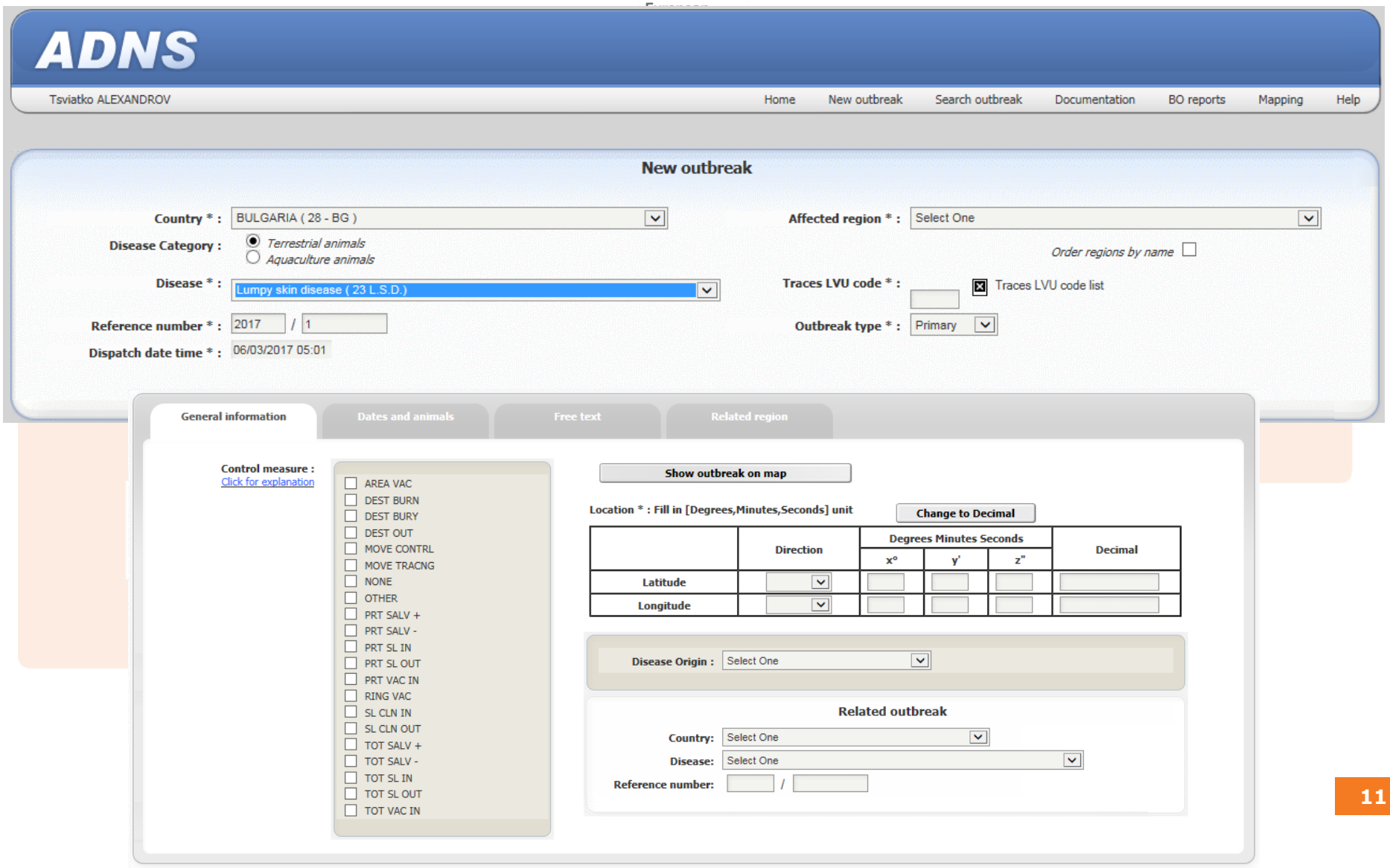
Animal Disease Notification System



Users: EU Member States, Serbia, Macedonia, Kosovo, Turkey, Ukraine…….

https://webgate.ec.europa.eu/ADNS/sec/?event=sec.login

New outbreak



General information | Dates and animals | Free text | Related region

Disease's Evolution

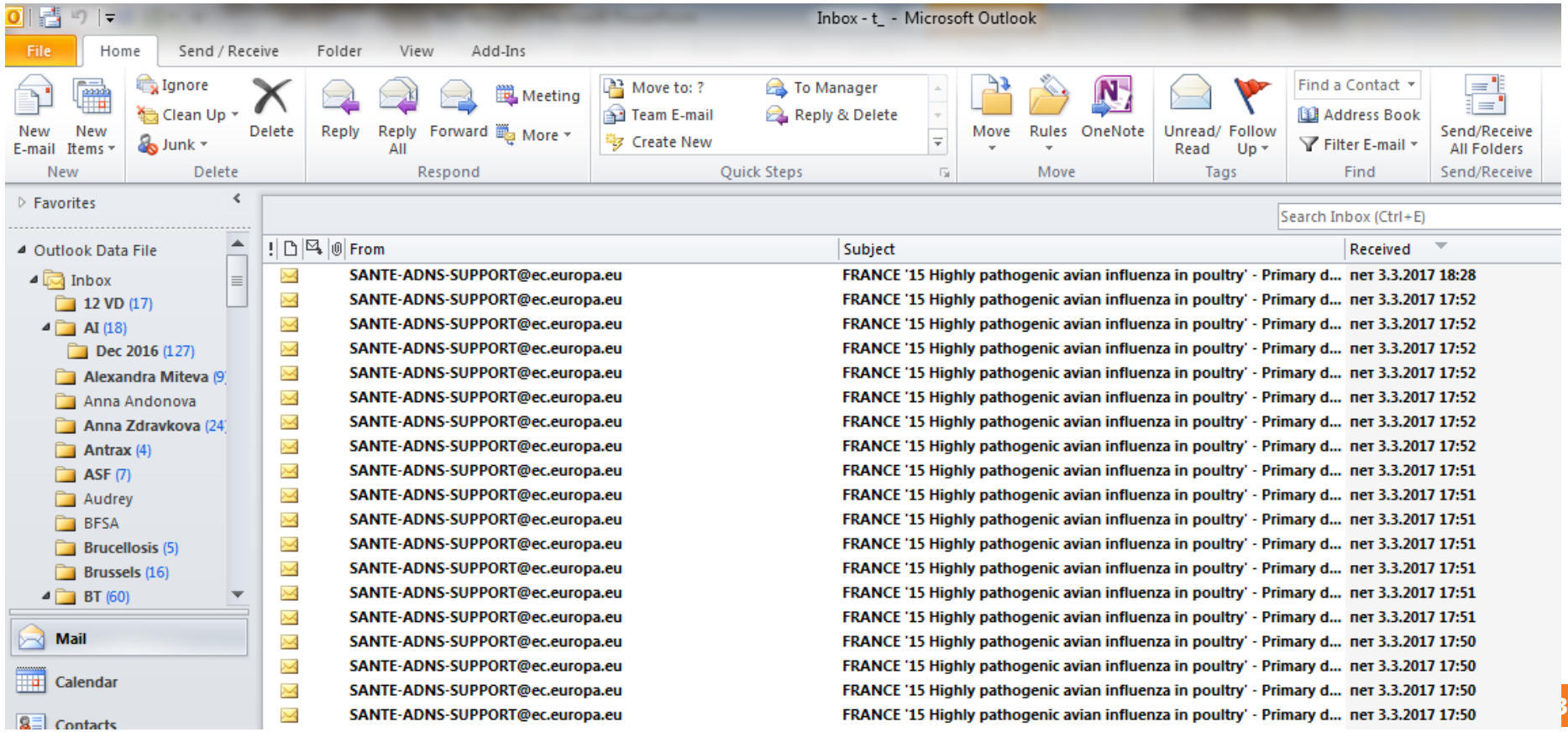
Evolution type	Code	
Suspicion	130	- + (dd/mm/yyyy)
Confirmation *	140	- + (dd/mm/yyyy)
First Infection	150	- + (dd/mm/yyyy)
Killed	160	- + (dd/mm/yyyy)
Destruction	170	- + (dd/mm/yyyy)

Number of animals

Status	Code	Cattle	Wild Species	Total
Susceptible	13 (X)			0
Affected	14 (X)			0
Dead	15 (X)			0
Killed	16 (X)			0
Destroyed	17 (X)			0

European Commission

Outbreak notification directly by e-mail



From: SANTE-ADNS-SUPPORT@ec.europa.eu [mailto:SANTE-ADNS-SUPPORT@ec.europa.eu]
Sent: Friday, March 3, 2017 1:58 PM
To: Georgi Chobanov <G_Chobanov@bfsa.bg>
Subject: GREECE '23 Lumpy skin disease' - Primary disease notification

Country of origin	GREECE
Disease	Lumpy skin disease
Serial number of outbreak (year/number)	2017/1
Type of outbreak (primary '1' or secondary '2')	1
Region affected	00022 KERKIRA
Traces LVU code	02400 - Kerkyra
Latitude	39.58
Longitude	19.88

Origin of disease : Unknown - investigation continuing

Control measures :
- 30 DEST BURY
- 50 MOVE CONTRL
- 51 MOVE TRACNG
- 10 TOT SL IN

Date
Date of suspicion of disease on holding (day/month/year) : 27/02/2017
Date of confirmation of disease on holding (day/month/year) : 02/03/2017

Number of animals
Number of susceptible animals on holding
- cattle : 28

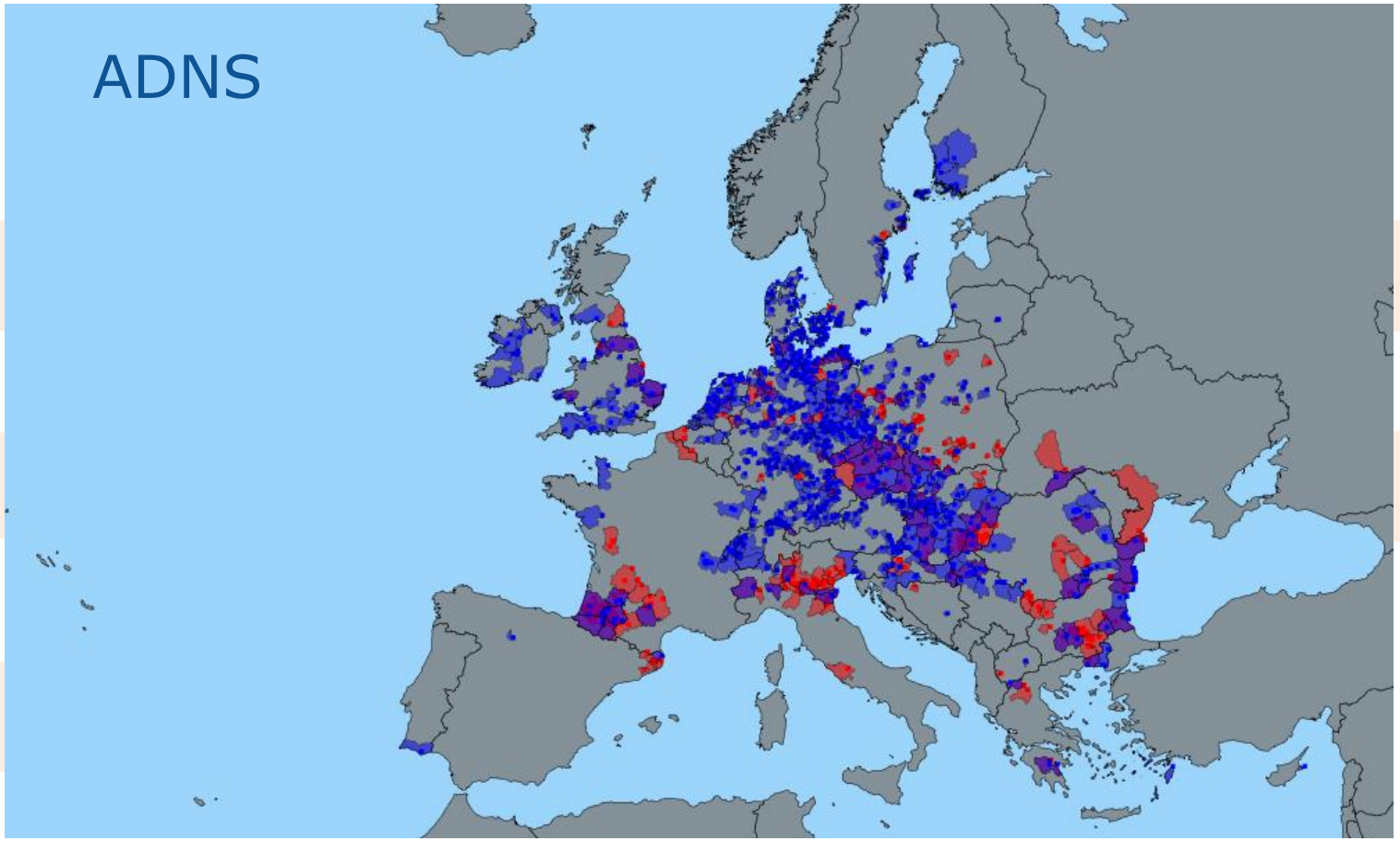
Number of animals affected on holding
- cattle : 12

Number of animals that have died of the disease on holding
- cattle : 3

Number of animals killed on holding
- cattle : 25

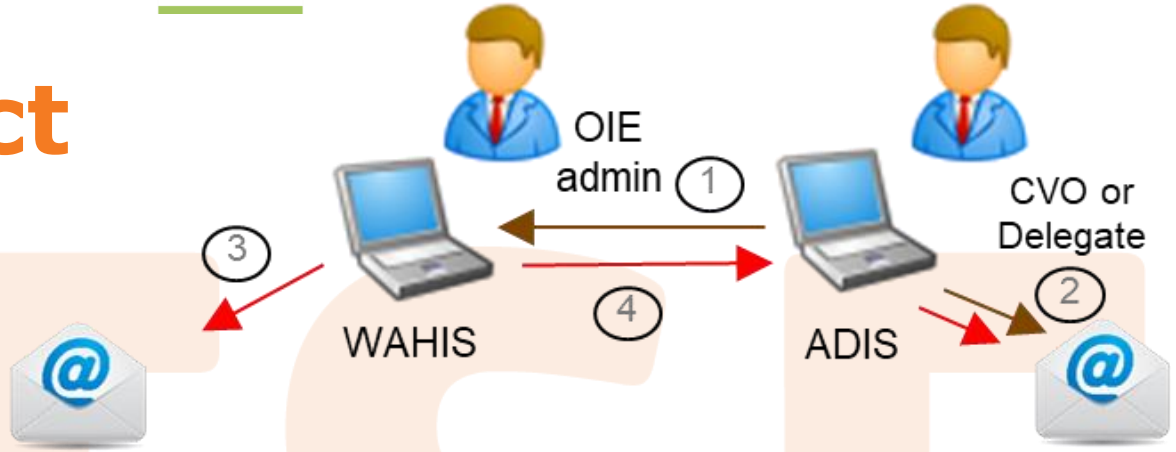
Number of carcasses destroyed or rendered
- cattle : 28

Date of dispatch (day/month/year) : 03/03/2017
Time of dispatch (24-hour clock) : 12:55



Outbreaks and affected regions of HPAI in domestic and wild birds, 2016 – 03 May 2018

ADIS project



Objectives :

- Provide a single entry point to the OIE WAHIS system and to the EU ADNS system (i.e eliminate the need for double entry to EU and OIE systems)
- Develop an Animal Disease Information System (ADIS), compatible with the OIE system and EU system; is the specific action by the EC in response to one of the desired outcomes of the Animal Health Strategy for the European Union.

Annual reporting on the outcomes of the surveillance and control programmes

Programmes for:

- AI
- ASF
- BT
- CSF
- FMD/SGP/PPR
- LSD
- Rabies

- Bovine TB
- Brucellosis
- Other

- Chief Veterinary Officers Meetings
- Standing Committee on Plant Animals Food and Feed
- Working groups

The contents of this presentation are the views of the author and do not necessarily represent an official position of the European Commission.

Thank you!

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European Commission
Consumers, Health, Agriculture and Food Executive Agency
DRB A3/042
L-2920 Luxembourg

Food Safety

Regional Workshop on Animal Disease Preparedness

Better Training For Safer Food

Marius Masiulis

Public health, animal health and „one health" concept

Food safety

Tokyo, Japan
12-15 June 2018

Some facts and figures

60% of existing human infectious diseases are zoonotic

At least 75% of emerging infectious diseases of humans (including Ebola, HIV, and influenza) have an animal origin

5 new human diseases appear every year. Three are of animal origin

80% of agents with potential bioterrorist use are zoonotic pathogens

"One World, One Health" Concept

General Principles:

- 60% of pathogens that causes diseases in humans are from animal origin… : zoonosis
- Animal in good health produce more animal-derived protein and play an important role in the World Food Program
- Animal in good health produce safe food

One Health Concept

- The One Health concept recognizes that the health of humans and animals are linked because we share the same environment.

- One Health is the collaborative effort of multiple disciplines working locally, nationally, and globally, to address critical challenges and attain optimal health for people, domestic animals, wildlife, and our environment.

What is „one health“ ?

"One health" concept was introduced in the beginning of 2000`s.

Human health and animal health are interdependent and bound to the health of ecosystems in which they exist.

Concept envisaged and implemented by OIE as a collaborative global approach to understanding risks for human and animal health and ecosystem health as a whole.

OIE builds intergovernmental standards, unites a network of international experts and programmes for strengthening Veterinary Services.

"One World, One Health" Concept

The "ONE HEALTH" concept ensure

political support in coordinated prevention

of high public health and animal impact diseases

at the

human-animal interface

Why „ one health“ ?

Diseases of animal origin transmittable to humans, zoonotic diseases (rabies, HPAI, Brucellosis) pose worldwide risks to public health.

Rabies in humans cannot be prevented without targeting the animal source of infection.

There are diseases transmitted mainly from person to person but also circulate in animals or have an animal reservoir, such as recent epidemic of Ebola virus.

These risks increase with globalization, climate change and changes in human behavior – pathogens colonize new territories and evolve into new forms.

One World – One Health Strategy

- food safety and public health;
- combating emerging or re-emerging diseases, especially zoonoses with the necessary disease surveillance and management of risks;
- food security and animal production to address the ever increasing states of human malnutrition and poverty;
- safeguarding biodiversity and addressing environmental management and sustainability; and
- bio-security and meeting threats of bio-terrorism.

Why „one health“

Drug-resistant microbes can be transmitted between animals and humans through direct contact or contaminated food.

Common approach is essential for prudent use of antimicrobials.

These challenges can not be met by single institutions and OIE is working in close collaboration with WHO and FAO.

Collaboration

World Organisation for animal Health

World Health organisation

Food and Agriculture organisation of the United Nations

International

Collaboration

In April 2010 OIE, WHO and FAO undersigned a concept note confirming that new synergies between 3 world organizations will include normative work, public communication, pathogen detection, risk assessment and management, technical capacity building and research development.

Addressing health risks at the human-animal-ecosystems interfaces requires strong partnerships between International organizations, governments, civil society and donors.

Animal and human health institutions have to be strengthened.

Collaboration

WHO and FAO participate in OIE ad hoc working group meetings (eg WG on Animal Production Food Safety).

OIE contributes to FAO work on reducing biological safety risks and to Codex Alimentarius Commission (Food Standards Programme)

FAO-OIE-WHO Global Early Warning and Response System (GLEWS) combines alert and response mechanisms to avoid duplication.

To support the notification of main animal diseases OIE has developed World Animal Health Information System and Database (WAHIS and WAHID) contributing to GLEWS.

Collaboration

WHO and FAO produce INFOSAN alerting national focal points on regional or global concerns for a food safety event.

FAO and OIE have developed a joint Network of Expertise on Avian Influenza (OFFLU) having strong links with WHO Global Influenza Programme.

OIE and FAO launched Global Framework for the Control of Transboundary Animal Diseases (GF-TADs) interlinked with GLEWS in case of zoonooses.

The way forward

Joint efforts at regional and national levels to obtain deeper political support for integrated prevention of diseases both of medical and veterinary importance.

Models for forecasting animal disease outbreaks to be developed.

Animal disease outbreaks preceding human outbreaks can provide early warning, ensure preparedness and targeted response.

Advocate for increased funding and explore research partnerships with the private sector.

The way forward

OIE, FAO and WHO should align data collection, risk assessment, risk reduction measures and focus on the development of outbreak investigation and response strategies.

Joint risk assessment plans should be incorporated into regional action plans.

There is a global need to improve diagnostics, data analysis and risk assessment, epidemiology, social science and communication.

Whats needed?

International standards (to harmonise protocols and methodologies);

Coordinated research on effectiveness of policies to achieve AMR risk reduction;

Legislation on access to quality drugs and restricted use;

Good governance of all sectors related to authorisation and use of VMPs (lab expertise, international standards and legislation development and implementation, surveillance and control).

Animal Health Strategy of EU

New challenges (emerging diseases, outbreaks of eradicated diseases, climate change).

Increased volume of trade in live animals and animal products.

Enlargement of the EU.

Science, technology and our institutional framework have evolved substantially.

Better use of the available resources, including financial tools.

Animal Health Strategy of EU

Animal health rules for:

Disease prevention:

Disease awareness, biosecurity, surveillance, traceability, etc…

Disease control and eradication;

Intra-EU movements and entry into the EU of animals and animal products;

Emergency measures.

Animal Health Strategy of EU

More prevention:

Biosecurity at farms, in transport, assembly, at borders;

Enhanced surveillance, disease notification and reporting;

Clearer policy for the use of vaccines and in relation to disease control & diagnosis also some other veterinary medicines;

AMR pathogens considered as "diseases":

- Different disease preventive and control measures may be applied

- **More tools to control emerging diseases.**

Easier and safer trade:

Enhanced convergence with international standards on animal health (OIE);

Compartmentalisation;

Requirements for export.

Animal Health Strategy of EU

- "One Health" approach;
- Horizontal principles and rules contributing to better overall husbandry;
- Better response to new threats;
- Flexibility for disease prevention and control measures proportionate to the risks.

"Animal Health Law"

- ✓ The huge number of legal acts are streamlined into a single law;
- ✓ Simpler and clearer rules enable authorities and those having to follow the rules to focus on key priorities: preventing and eradicating disease;
- ✓ Responsibilities are clarified for farmers, vets and others dealing with animals;
- ✓ The new rules allow greater use of new technologies for animal health activities - surveillance of pathogens, electronic identification and registration of animals;

"Animal Health Law"

- ✓ Better early detection & control of animal diseases, including emerging diseases linked to climate change, will help to reduce the occurrence and effects of animal epidemics;
- ✓ There will be more flexibility to adjust rules to local circumstances, and to emerging issues such as climate and social change;
- ✓ It sets out a better legal basis for monitoring animal pathogens resistant to antimicrobial agents supplementing existing rules and two other proposals currently being negotiated in the European Parliament and Council, on veterinary medicines and on medicated feed.

European Commission

Thank you!!!

The contents of this presentation are the views of the author and do not necessarily represent an official position of the European Commission.

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