

FAO-OIE Global Conference on PPR



ANIMAL HEALTH ADVISORY COMMITTEE
Working Group of the Advisory Group on the Food Chain,
Animal Health and Plant Health
FRIDAY 19 JUNE 2015, 10.00 H – 18.00 H
Conference Centre Albert Borschette – Rue Froissart 36 – Bruxelles, CCAB-4C

DRAFT AGENDA

Morning session 10:00-13:00
A-E. Fuessel, acting Head of Unit G2 Animal Health - DG

Introduction, opening-
SANTE

1. Information on the EU position and developments at 83rd OIE General Session,
SANTE G2

2. Updates from OIE
Global Conference on PPR,
6th Strategic plan

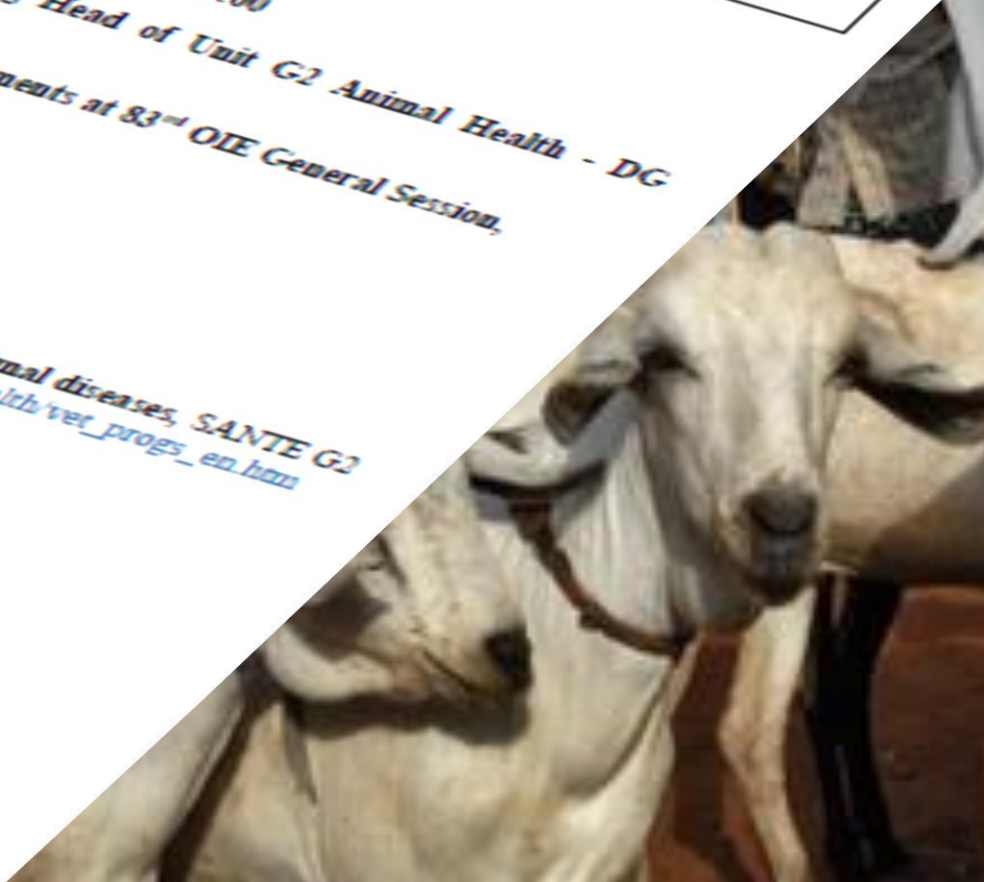
3. Update on Avian influenza
Statement on avian flu in the EU and worldwide, SANTE G2

Rabies subgroup of the Task Force on the eradication of animal diseases, SANTE G2
http://ec.europa.eu/dgs/health_food-safety/funding/cif/animal_health/vet_progs_en.htm
EFSA scientific opinion on canine leishmaniasis, EFSA
<http://www.efsa.europa.eu/en/efsajournal/pub/4075.htm>

Afternoon session 14:30-18:00
Martin Beer project coordinator

from the Latvian Presidency
P-AGRI Workshop "Biosecurity at farm level: challenges for
H5

<http://agriculture/content/interactive-workshop-biosecurity-eu>
conference
s/health_food-
ces/events/20150505_wildlife_conference_en.htm





Food and Agriculture
Organization of the
United Nations

Oie
WORLD ORGANISATION
FOR ANIMAL HEALTH



FAO AND OIE INTERNATIONAL
CONFERENCE FOR THE
**CONTROL AND ERADICATION OF
PESTE DES PETITS RUMINANTS (PPR)**

ABIDJAN, CÔTE D'IVOIRE
31 MARCH – 2 APRIL 2015

FAO-OIE Global Conference on PPR



Objective of the conference

The conference objectives are to present and adopt **the global control and eradication strategy** prepared by the GF-TADs Working Group on PPR.

Expected outcomes

Commitment of member countries, donors and other to support the FAO-OIE Global PPR Control and Eradication Strategy and its implementation at country, regional and global levels.

FAO-OIE Global Conference on PPR



PROVISION	
MONDAY, 30 MARCH 2015	
17:00 – 19:00	Registration of participants
DAY 1 TUESDAY, 31 MARCH 2015	
08:30 – 09:30	Registration of participants
09:30 – 10:00	Opening ceremony
	<ul style="list-style-type: none"> Mayor of the Municipality of Cocody Director General, OIE Assistant Director General for Africa Minister of Livestock and PPR Côte d'Ivoire
Part 1 Scientific and technical sessions	
Session I	Review of global PPR situation implementing a control programme
10:30 – 11:00	KEY NOTE: Setting the scene (ruminant production)
11:00 – 11:30	Discussion
11:30 – 12:30	Discussion
12:30 – 14:00	Discussion
14:00 – 16:00 (20 min each)	<ul style="list-style-type: none"> Surveillance tools and networks Diagnostic laboratories in international networks Veterinary services and service quality and diseases Vaccines, vaccination and vaccine quality certification Monitoring and assessment Post Vaccination Evaluation

Agenda – version 2 April 2015

Scientific and Technical sessions

FAO AND OIE INTERNATIONAL CONFERENCE FOR THE CONTROL AND ERADICATION OF PESTE DES PETITS RUMINANTS (PPR) ABIDJAN, CÔTE D'IVOIRE (1 MARCH – 1 APRIL 2015)	
16:00 – 16:30	Coffee Break
16:30 – 16:50	<ul style="list-style-type: none"> Research, including the Global Research Network (PPR-GREN)
16:50 – 18:00	<ul style="list-style-type: none"> Discussion
DAY 2 WEDNESDAY, 1 APRIL 2015	
Session III	Regional presentations
09:00 – 10:00 (12 min each)	Regional presentations: Tentative list <ul style="list-style-type: none"> African Union – Inter-African Bureau for Animal Resources (AU-IBAR) Inter-Governmental Authority on Development (IGAD) Economic and Monetary Community of Africa (CEBEVIRHA-CEMAC)
10:00 – 10:30	Coffee Break
	<ul style="list-style-type: none"> Economic Community Of West Africa (ECOWAS) Northern Africa Middle East Central Asia (Economic Cooperation Organisation) (ECO)
12:10 – 14:10	Lunch
14:10 – 15:40 (12 min each + discussion)	Regional presentations (cont.) <ul style="list-style-type: none"> South Asian Association for Regional Cooperation (SAARC) European Union (EU)
15:40 – 16:00	Coffee Break

Agenda – version 2 April 2015

High level meeting on commitment and support

FAO AND OIE INTERNATIONAL CONFERENCE FOR THE CONTROL AND ERADICATION OF PESTE DES PETITS RUMINANTS (PPR) ABIDJAN, CÔTE D'IVOIRE (1 MARCH – 1 APRIL 2015)		
Session IV	The Global Control and Eradication Strategy, socio-economic rationale and implementation costs	Chair: FAO/OIE
16:00- 16:45	<ul style="list-style-type: none"> Socio-economic aspects of PPR (and other major diseases of small ruminants) The FAO/OIE Global PPR Control and Eradication Strategy Costing of the Global Strategy 	T. Kimani, J. Rushton J. Domenech – E. Raizman on behalf of GF TADs WG J. Rushton
Session V	Countries: panel discussion	Chair: FAO/OIE
16:45 – 18:00	<ul style="list-style-type: none"> Countries: panel discussion (experts panellists from China (People's Rep. of), Burkina Faso, Cote d'Ivoire, Ethiopia, India, Morocco, Turkey) 	Facilitator J. Domenech
DAY 3 THURSDAY, 2 APRIL 2015		
Part 2 High-level meeting on commitment and support		
Session VI	Statements from host country authorities, Directors General of International Organisations, donors and key partners	Chair: MIRAH
09:00 – 10:00	Introductory remarks <ul style="list-style-type: none"> Mayor of the Municipality of Cocody Minister of Livestock and PPR Côte d'Ivoire Minister of Agriculture, Côte d'Ivoire African Union Commission (AUC) Director General, OIE Director General, FAO Minister of Health, Côte d'Ivoire 	
10:00 – 10:30	Press conference and Coffee break	

Agenda – version 2 April 2015

FAO-OIE Global Conference on PPR





300 participants
(70 countries
along with
representatives
from donor
agencies, the
scientific
community, the
private sector and
civil society)




FAO-OIE Global Conference on PPR



 Food and Agriculture Organization of the United Nations



 WORLD ORGANISATION FOR ANIMAL HEALTH

FAO AND OIE INTERNATIONAL CONFERENCE FOR THE CONTROL AND ERADICATION OF PESTE DES PETITS RUMINANTS (PPR)
ABIDJAN, CÔTE D'IVOIRE 31 MARCH - 2 APRIL 2015

FAO and OIE International Conference for the Control and Eradication of Peste des Petits Ruminants (PPR)
Abidjan 31 March - 2 April 2015

Recommendations

Considering that

- Livestock is an important component in nutrition and food security, income generation, agriculture production and soil fertilization, livelihoods of pastoralists and small holders and in the alleviation of hunger and poverty. In subsistence livestock production systems and their associated value chains, millions of people, especially women and their families, depend on small ruminants to generate nutrition for their families and revenue for their daily life;
- Impact of infectious diseases of small ruminants can severely affect and disrupt community livelihoods and regional and international trade in live animals and their products causing significant financial damage. In developing countries these diseases undermine access to quality nutritional products, food security and economic development, at the level of village smallholders and the entire production chain;
- Since PPR was first identified in Côte d'Ivoire in 1942, it has spread to around 70 countries in Africa, the Near and Middle East and Asia that are home to over 80 percent of the world's sheep and goat and to more than 330 million of the world's poorest people who depend on them for their livelihoods. Economic losses caused by PPR and its ever increasing threat of spreading to non-infected areas, further cripple already vulnerable livelihoods as well as national and regional livestock production opportunities;
- Globalization of trade with rapid and long distance movements of animals and animal products increases the risk of major pathogens spreading from one country or region to another;
- Controlling transboundary animal diseases (TADs), such as PPR, at their source is a shared interest between infected and uninfected countries and should be considered as Global Public Good;
- In response to a resolution voted by the World Assembly of Delegates of the OIE and recommendations of FAO's Committee on Agriculture (COAG) and the Council of FAO, the GF-TADs Working Group on PPR has developed a PPR Global Control and Eradication Strategy, that has been presented at the FAO and OIE International Conference for the Control and Eradication of Peste des Petits Ruminants held in Abidjan (Côte d'Ivoire), from 31 March to 2 April 2015;

1

• Part I →
'Declaration'

• Part II →
Recommendations
to countries

• Part III →
Recommendations
to OIE and FAO

FAO-OIE Global Conference on PPR



- **Part I → 'Declaration'**

The Conference and in particular the Honourable Ministers, donors and national and international high level participants

Declare that the **control and eradication of PPR worldwide is officially and solemnly launched during the 'Abidjan Conference' with the vision of a world free of PPR by 2030**. PPR is expected to be the second animal disease eradicated from the globe after the success of rinderpest eradication in 2011

Declare that, as a consequence, they officially **endorse the FAO-OIE Global Control and Eradication Strategy (GCES)** with its three components and encourage all national competent authorities, the international community, the veterinary profession and all stakeholders as a whole to commit to its implementation and thereby take the necessary political, technical and financial means to ensure that this Vision is accomplished in a timely manner

FAO-OIE Global Conference on PPR



- **Part III → Recommendations to OIE and FAO (9)**

14. The OIE and FAO develop a full-fledged GCEP aligned with the GCES, learning from the Global Rinderpest Eradication Programme (GREP), Pan African Rinderpest Campaign (PARC) and Pan African Control of Epizootics (PACE) programme experience, these last under AU-IBAR leadership and using north-south and south-south cooperation and OIE and FAO multi-lateral trust funds to implement the Global Strategy

13. The FAO and OIE put in place the proper GF-TADs governance for the implementation of the GCES and the subsequent Global Control and Eradication Programme (GCEP), including a global joint FAO-OIE PPR Global Secretariat and joint fund raising agreements as well as strong collaborations with regional and sub-regional organizations

FAO-OIE Global Conference on PPR



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GLOBAL STRATEGY FOR THE CONTROL AND ERADICATION OF PPR



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Global control and eradication of *peste des petits ruminants*

Investing in veterinary systems,
food security and poverty alleviation

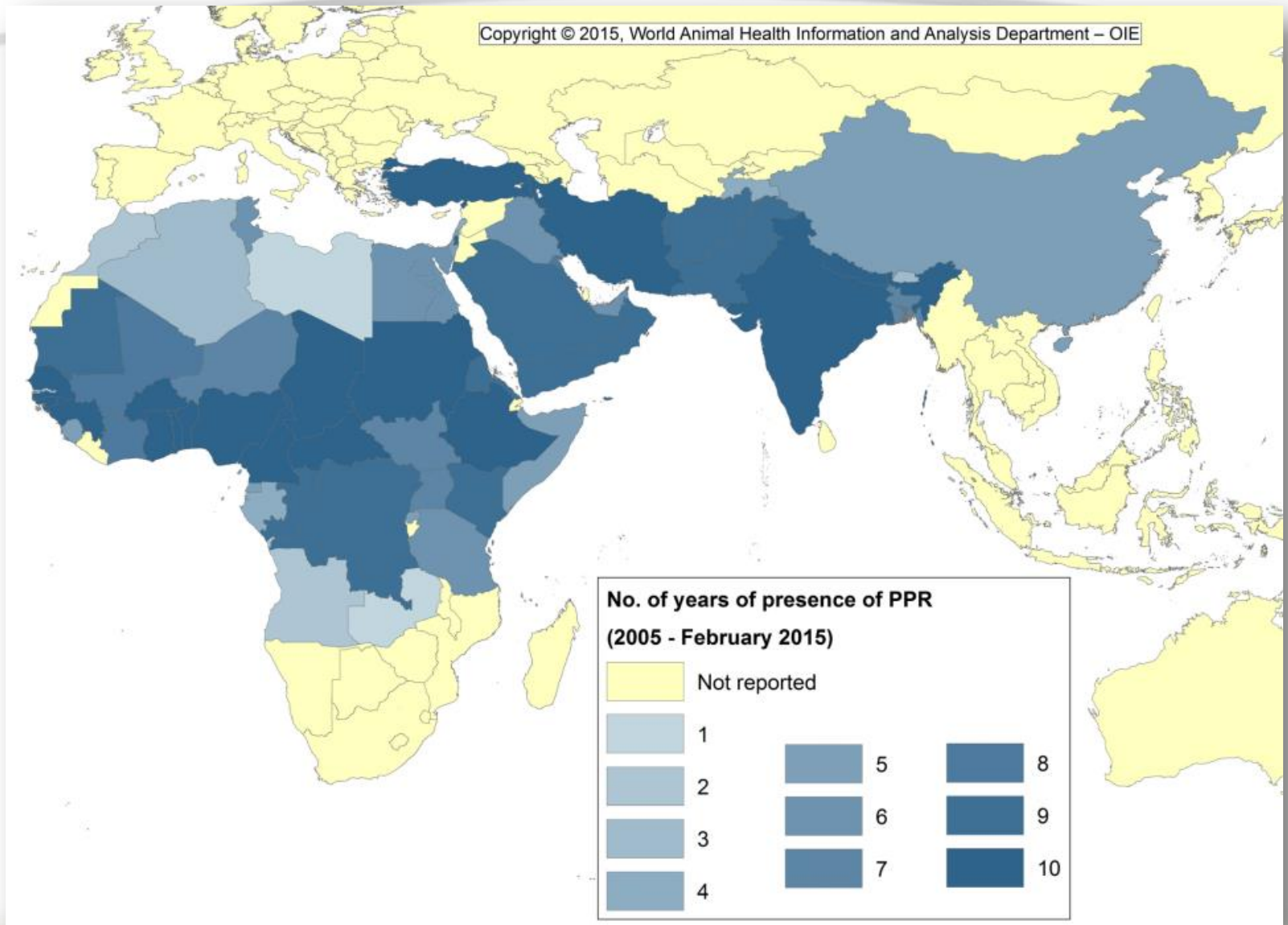
Rationale



Why invest in the control and eradication of *peste des petits ruminants*?

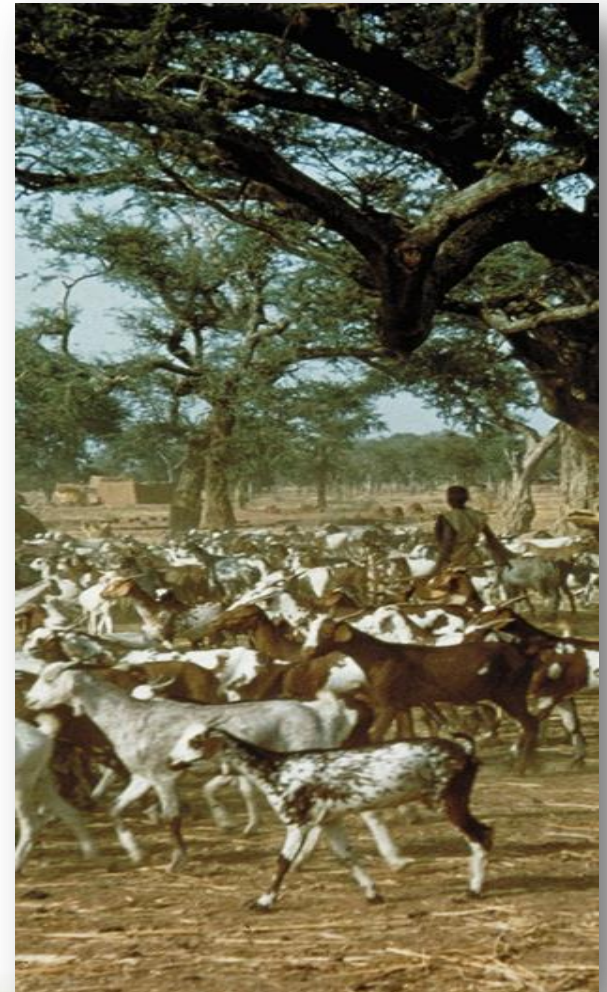
- More than 1.7 billion sheep and goats – over 80% of the global small ruminants population – are in Africa and Asia
- PPR is a highly contagious viral animal disease affecting small ruminants. Once introduced, the virus can infect up to 90% of a flock and the disease can kill anywhere from 30 to 70% of infected animals.
- PPR causes an estimated USD 1.45 billion to USD 2.1 billion in economic losses each year
- PPR has dramatically expanded in the last 15 years reaching previously non-infected regions
- From 2000 to 2030 demand for meat and milk from small ruminants in Africa and Asia will rise between 137% and 177%

Rationale



PPR is a good candidate disease for eradication

- One serotype
- No carrier state after infection
- No reservoir outside domestic small ruminants
- Vaccine with long live immunity after a single dose, cheap to produce
- thermo-stable vaccine to come
- Diagnostic tests available
- Many of the tools required for progressive control and monitoring already available



Overall and specific objectives



- The overall objective is a small ruminant sector contributing to global **food security and nutrition, human health and economic growth**, particularly in developing countries, thereby **alleviating poverty**, increasing **income generation** and improving the livelihoods of smallholder farmers and general human wellbeing.
- The purpose is to establish the **capacity of stakeholders and VS** to control and eradicate PPR and control other small ruminant diseases.

Overall and specific objectives



The specific objectives of the Global Strategy are:

- **The eradication of PPR by 2030**, which requires:
 - In infected countries, achieving a progressive reduction of the incidence and spread, leading to final eradication of PPR
 - In non-infected countries, maintaining the officially recognised PPR free status

While at the same time:

- **Reinforcing Veterinary Services**
- Improving animal health globally by **reducing the impact of other major infectious diseases**



Main principles

- **National, regional and global** levels
- Combination of vertical (disease specific) and transversal / horizontal (VS strengthening) approaches
 - Component 1 – **PPR**
 - Component 2 – **Veterinary Services**
 - Component 3 – **Combined disease control** (mainly small ruminant diseases)

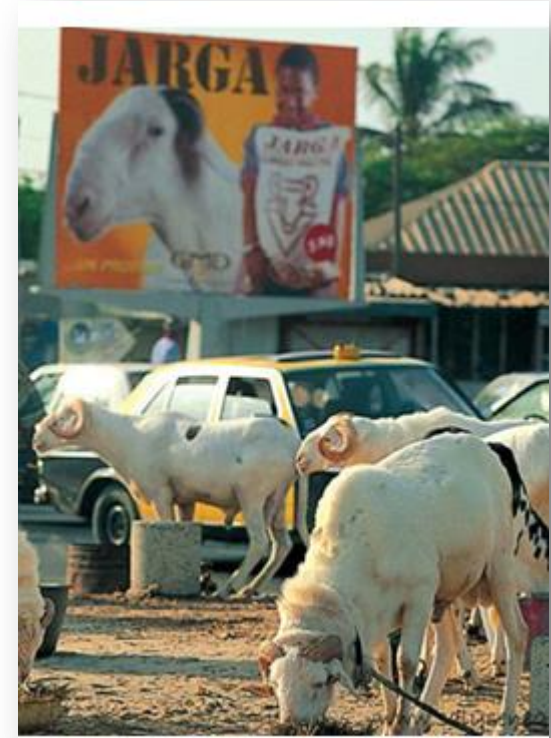
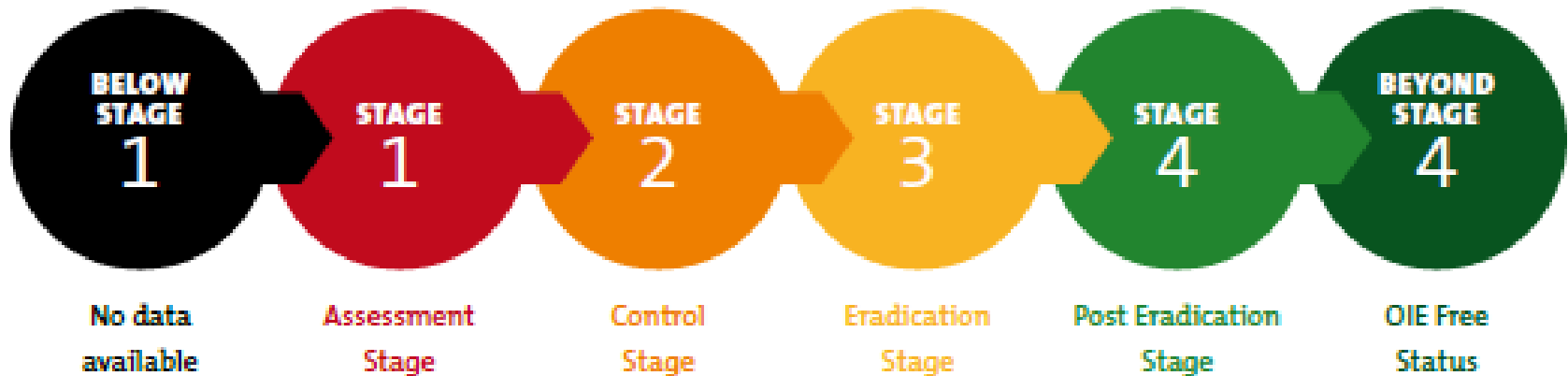


Photo credit: CIRAD

The Progressive Step-wise Approach for the prevention and control of PPR

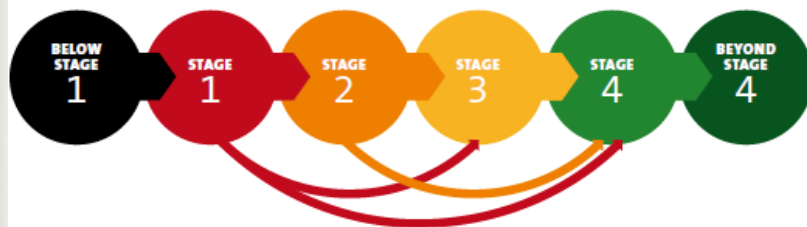


From

Stage 1 – where the epidemiological situation is being assessed

To

Stage 4 – where there is no virus circulation either at zonal or national level (country ready to apply for the OIE official status of PPR freedom)



(National level)

Focuses according to the stage



	STAGE 1	STAGE 2	STAGE 3	STAGE 4
	Assessment Stage	Control Stage	Eradication Stage	Post-eradication Stage
FOCUS	To gain a better understanding on the presence of PPR	To control both PPR clinical disease and infection in a specific zone or production system	To achieve PPR eradication throughout the national territory	To build evidence that there is no clinical disease nor virus circulation

(1 - 3 years)

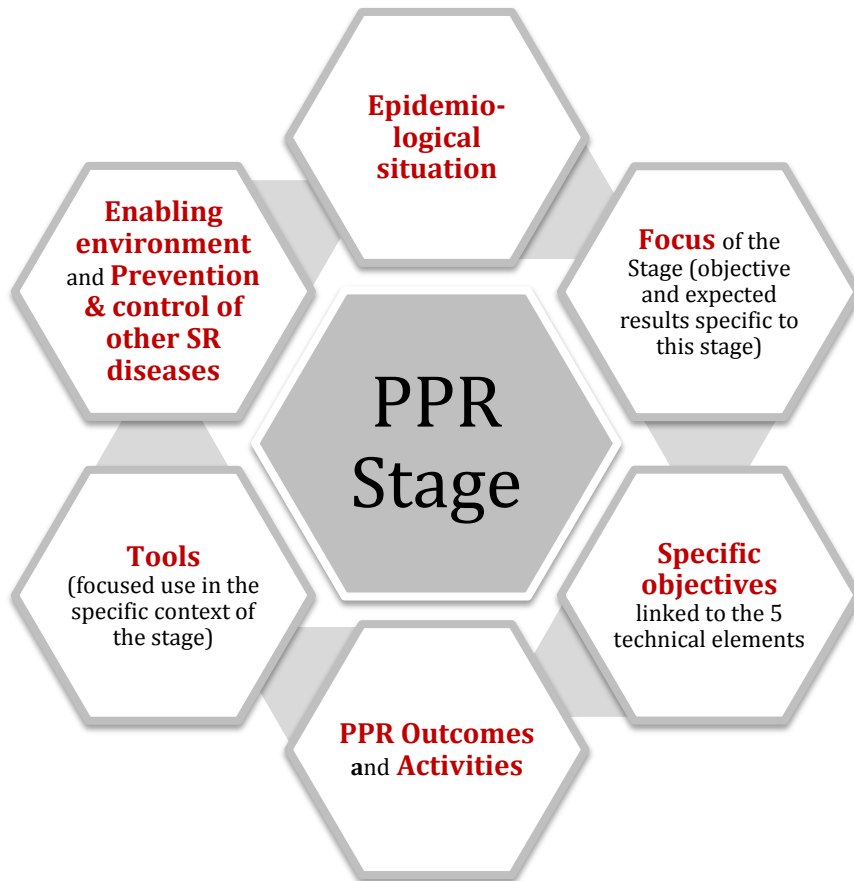
(2 - 3 years)

(2 to 5 years)

(2 to 3 years)

Characterisation of the stages

- Aspects addressed for each PPR stage



- Five technical elements characterise each stage



Legal framework



Surveillance



Diagnostic



Prevention and Control

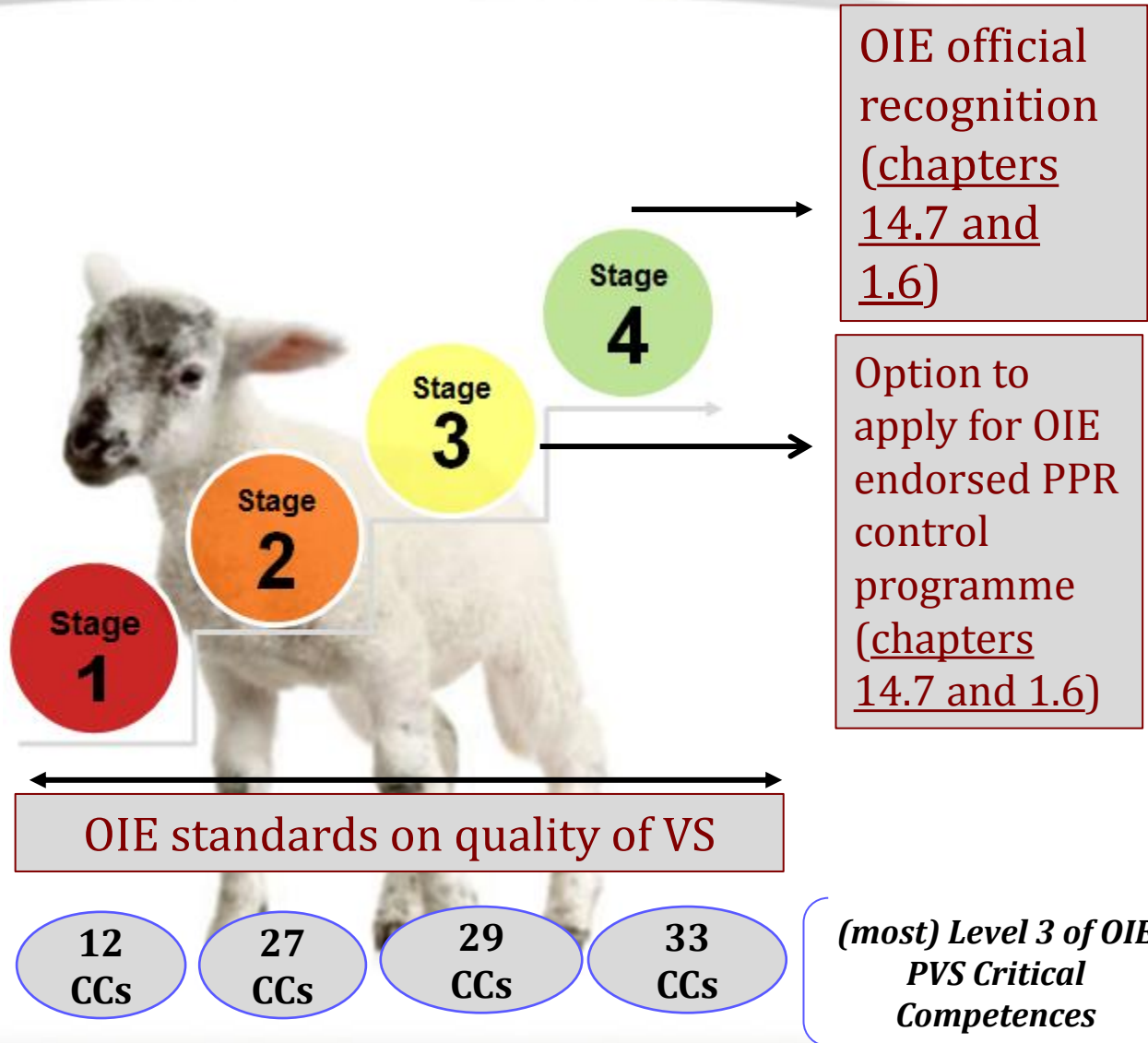


Stakeholder involvement

Linking the PPR step-wise approach to the quality of VS



Capacity of VS considered as the 'Enabling Environment' (compliance with OIE Standards as well)



Expected results



	2015	2020	2025	2030
'Stage 0'	25 %	0%	0%	0%
Stage 1	30 %	0%	0%	0%
Stage 2	30 %	50%	20%	0%
Stage 3	10 %	25 %	30%	0%
Stage 4	5 %	25 %	50 %	100%

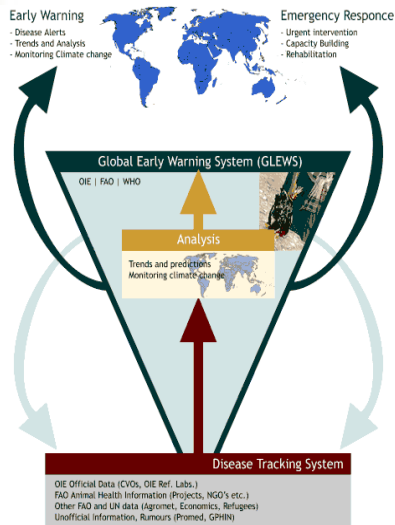
**Expected progression of PPR
infected countries in % overtime**

Tools to be used

- **Generic tools:**

OIE PVS Pathway, OIE standards, Diagnostics laboratories, Epidemiology Centers/teams, WAHIS, GLEWS, and their Regional and International Networks...

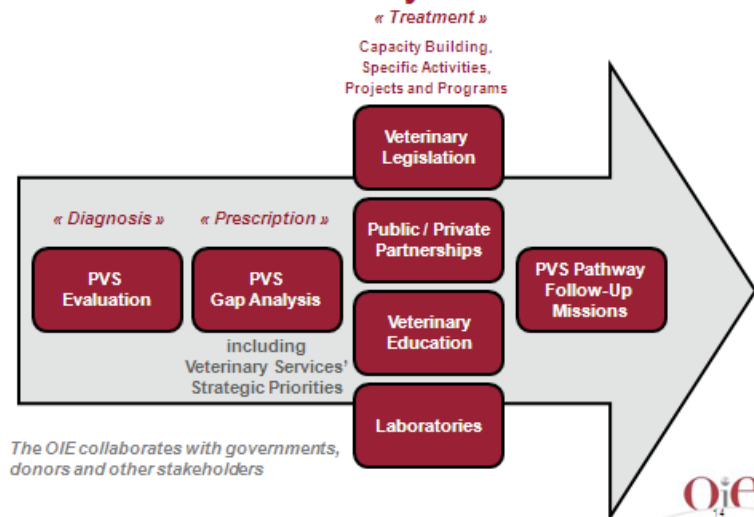
- **Specific PPR tools:** **PMAT**, **PVE**, Vaccines, regional vaccine banks, OIE PPR standards, diagnostics assays, **PPR-GREN**



Global Early Warning System (GLEWS)



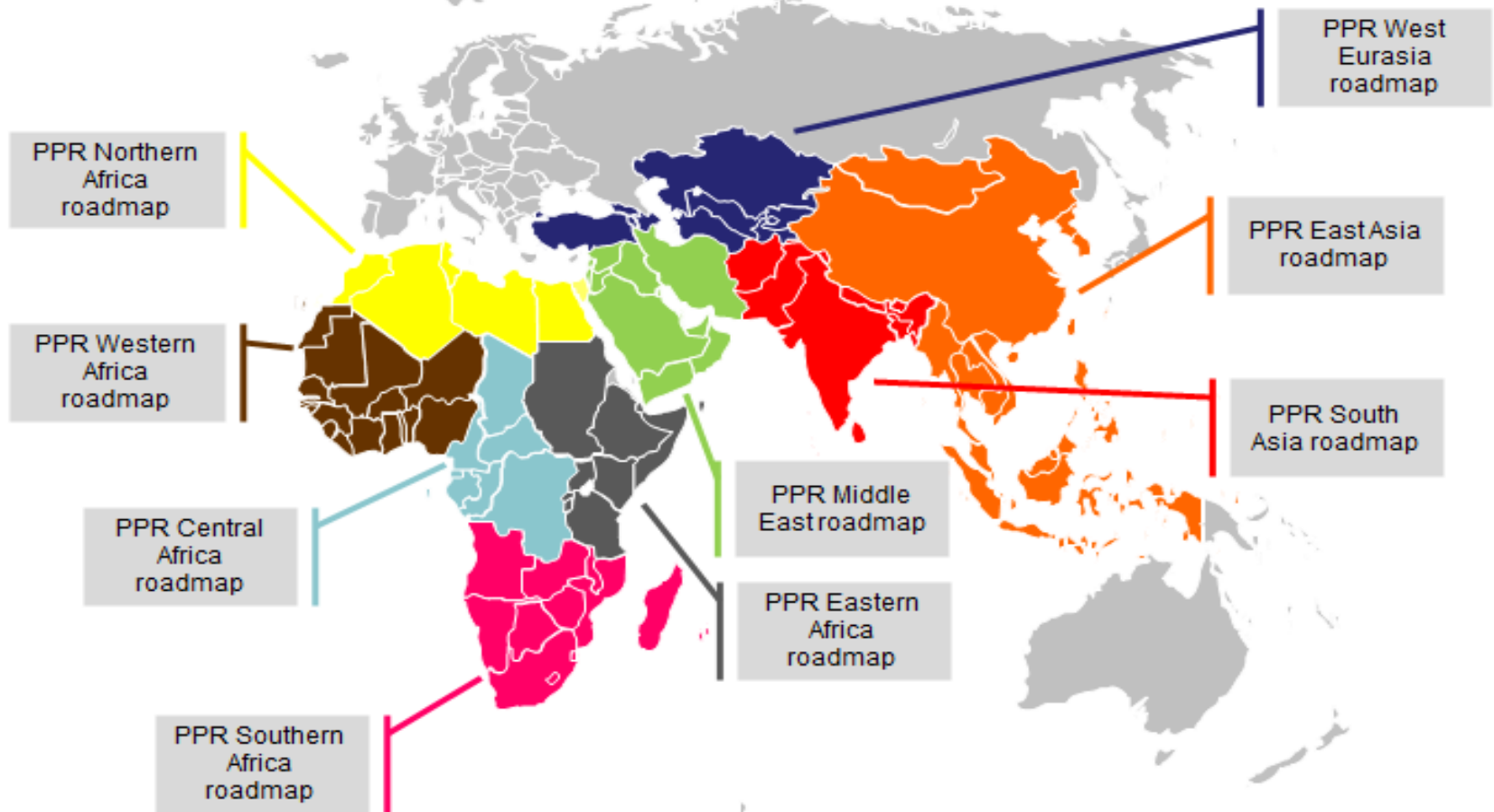
The OIE PVS Pathway



Evaluation and country PPR stage ranking



Regional PPR roadmaps – PMAT – regional Advisory Groups



Estimated **maximum** cost for the 15-year global PPR eradication period (Comp 1) = **USD 7.6 and 9.1 billion**, with the first five years costing between **USD 2.5 and USD 3.1 billion**.

An investment of USD 7.6 billion over 15 years will eliminate the negative socio-economic impact of PPR permanently, and will result in financial savings of USD 1.8 billion per year

The investment will be recovered within the first five years after eradicating the disease

More...



FAO AND OIE INTERNATIONAL CONFERENCE FOR THE **CONTROL AND ERADICATION OF PESTE DES PETITS RUMINANTS (PPR)**
ABIDJAN, CÔTE D'IVOIRE 31 MARCH – 2 APRIL 2015

[Français]

- > BACKGROUND
- > OBJECTIVE
- > PROGRAMME
- > DOCUMENTS
- > MEDIA
- > RECOMMENDATIONS
- > PRESENTATIONS



Documents of the conference

Advocacy document

Global strategy for the control and eradication of PPR (document without annexes)

Global strategy for the control and eradication of PPR (document with annexes)

Book of abstracts



“We have a plan, the tools, the science, and the partners. Eradication of PPR is not only within reach, but also in our hands. With OIE, we have agreed to establish a joint secretariat for the implementation to be hosted by FAO”.

FAO Director-General José Graziano da Silva

OIE Sixth Strategic Plan



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- Martin Beer project coordinator
- from the Latvian Presidency
- AGRI Workshop "Biosecurity at farm level: challenges for H5N1"
- <http://agriculture/content/interactive-workshop-biosecurity-eu>
- conference
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MAIN CHALLENGES FACED BY THE OIE

Global and External Challenges



- Recurring sanitary concerns (PPR, CBPP, Rabies, FMD...)
- Emergent of re-emergent diseases: AI, MERs, Ebola
 - Impact on the productivity
- Environmental risks
 - Impact on Animal/Public Health, biodiversity ..., climate changes,
- Societal challenges
 - Food security / population growth
 - Changes in consumption patterns / animal proteins
 - Changes in production systems / AW, vegetarianism
 - New technologies

Structural and Internal Challenges



- Scientific excellence : experts, ref Lab network, OIE staff
 - quality – relevance – accuracy
- Information
 - transparency, timeliness, quality, adaptation to users expectations
- Governance and organisational needs
 - efficiency – performance – policies and procedures

Finally, the objectives are to preserve:

- **the effectiveness**
- **the legitimacy**
- **the credibility**

of the Organisation for the benefit of its Member Countries



RESPONSES PROPOSED BY THE OIE

Responses



- to contribute to the good global sanitary governance
- to promote the Veterinary Services as key players
- to support the OIE MC in their efforts to strengthen the national VS
- to permanently improve the OIE procedures and policies

Responses



- By setting up **relevant standards** on Animal Health and Animal Welfare, Guidelines and Recommendations
- By designing and implementing **Global Control strategies** against major diseases / partnerships
- By implementing the **OIE PVS Pathway** / thanks to donors
- By organising **training seminars** / national focal points
- By encouraging the networking among the OIE **Reference Centres** + twinnings



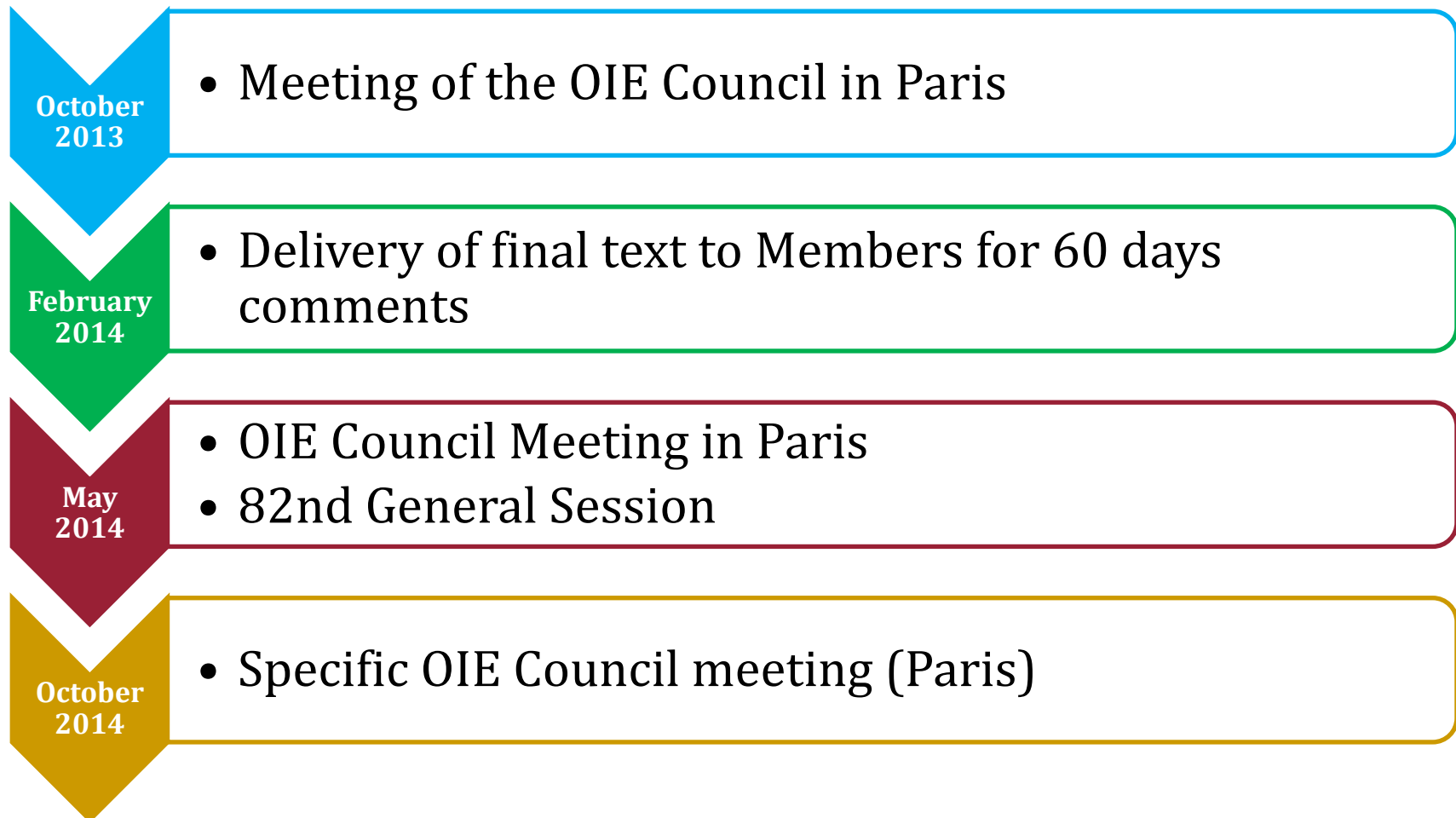
THE 6TH STRATEGIC PLAN

2016 - 2020

Chronology for inputs in 2015 an 18 months process



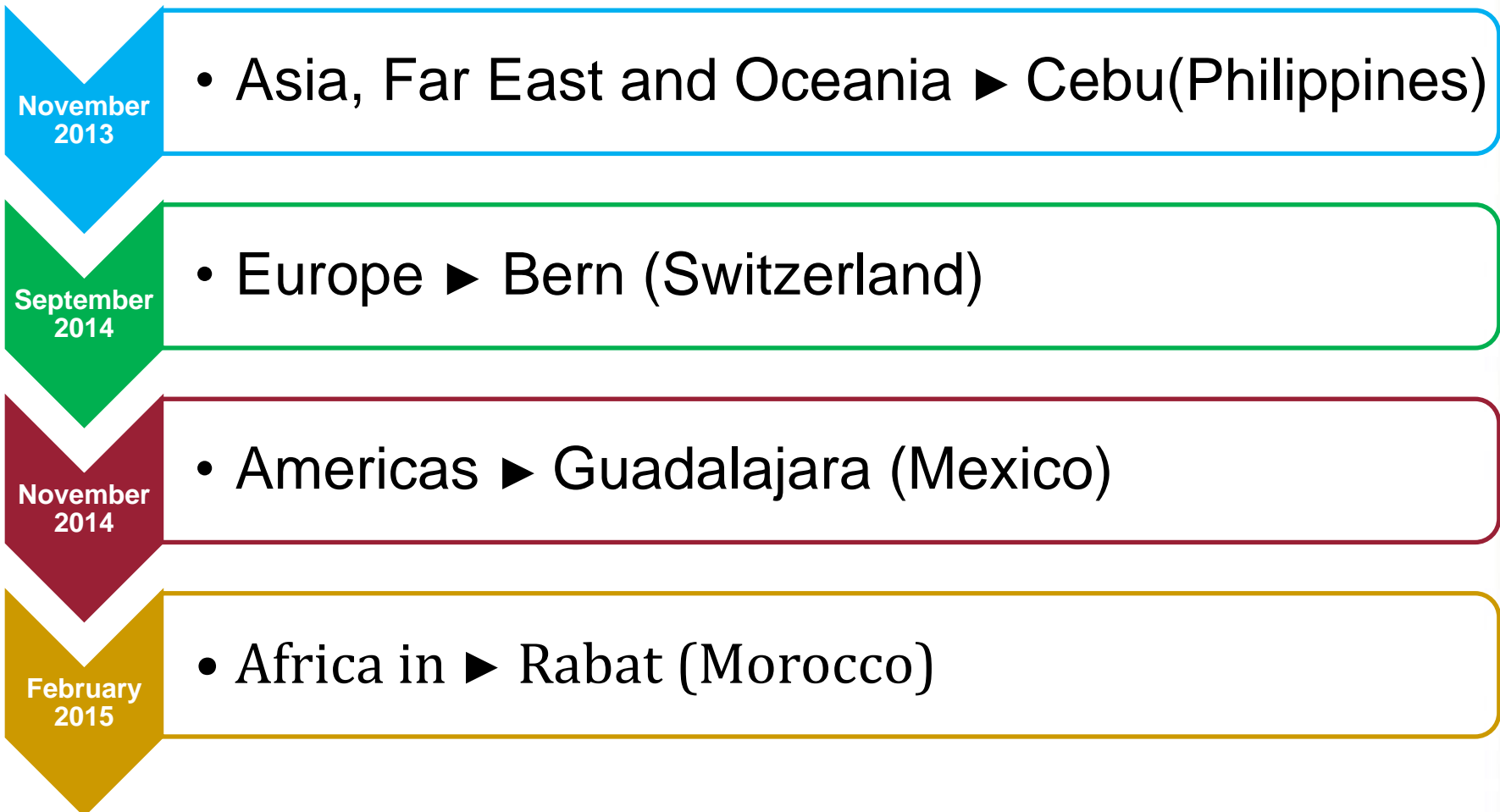
OIE Council meetings



Chronology for inputs in 2015



Conferences of Regional Commissions



Chronology for inputs in 2015



February
2015

- Meeting of the OIE Council in Paris

March
2015

- Delivery of final text to Members for 60 days comments

May
2015

- Adoption of the Sixth Strategic Plan during Administrative Session of the 83rd General Session

OIE'S GLOBAL VISION

OIE's global vision is expressed as “**Protecting animals; preserving our future**”, leading to economic prosperity and social and environmental well-being.

OIE Strategic objectives

- Strategic objective 1: securing animal health and welfare by Appropriate risk management
- Strategic objective 2: establishing trust through transparency and communication
- Strategic objective 3: ensuring the capacity and sustainability of Veterinary Services

The cross-cutting areas 2016 – 2020



A: science

B: diversity
transparency

C: governance

PARTNERSHIPS

The Organisation will continue to develop synergies and strong engagement with international institutional partners including the World Health Organization, the Codex Alimentarius Commission, the Food and Agriculture Organization of the United Nations (FAO), the World Bank, the World Trade Organization, etc., in areas of common interest and continue to explore additional partnerships with other organisations as warranted. It will continue to work with FAO and WHO, in the framework of the tripartite partnership, in programmes such as the Global Framework for the progressive control of Transboundary Animal Diseases (GF-TADS), eradication of PPR and canine Rabies, global control of FMD, the alignment of the PVS with the International Health Regulations (IHR), and the continuing programme for Rinderpest material sequestration (with FAO).

The Organisation will strengthen its relations with the international security community such as Interpol in areas of common interest related to the prevention, preparedness, response and recovery from the deliberate use of animal pathogens to cause harm and natural disasters, measures to enhance the control of counterfeit drugs and the detection of fraud, and to contribute to international programs designed to promote integrated approaches to the management of health risks at the human-animal interface such as the Global Health Security Agenda (GHSA).

The OIE has entered into more than 60 Cooperation Agreements with external partners representing professional, academic, private and civil organizations. It will establish a process of monitoring these agreements to ensure that they remain strategically valid and that they further the aims of the Organisation.

OIE Statement on Avian Influenza



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OIE Statement on Avian Influenza



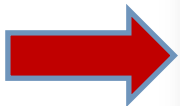
The OIE recommends stronger farm biosecurity measures to curb the spread of avian influenza worldwide

Since early 2014, outbreaks of avian influenza (“bird flu”) involving different strains of the virus have been reported in more than 35 countries around the globe. Tens of millions of poultry have died as a result of these outbreaks, either naturally or due to the application of stamping out measures. While it is not unusual for the avian influenza virus to circulate, particularly among wild birds, the recent upsurge in outbreaks worldwide reaffirms the need for better implementation of the intergovernmental standards adopted by the OIE’s 180 member countries on avian influenza surveillance, early detection, rapid response to outbreaks and prevention and control, especially farm biosecurity and, where appropriate, poultry vaccination.



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Made in response to the international poultry sector concerns



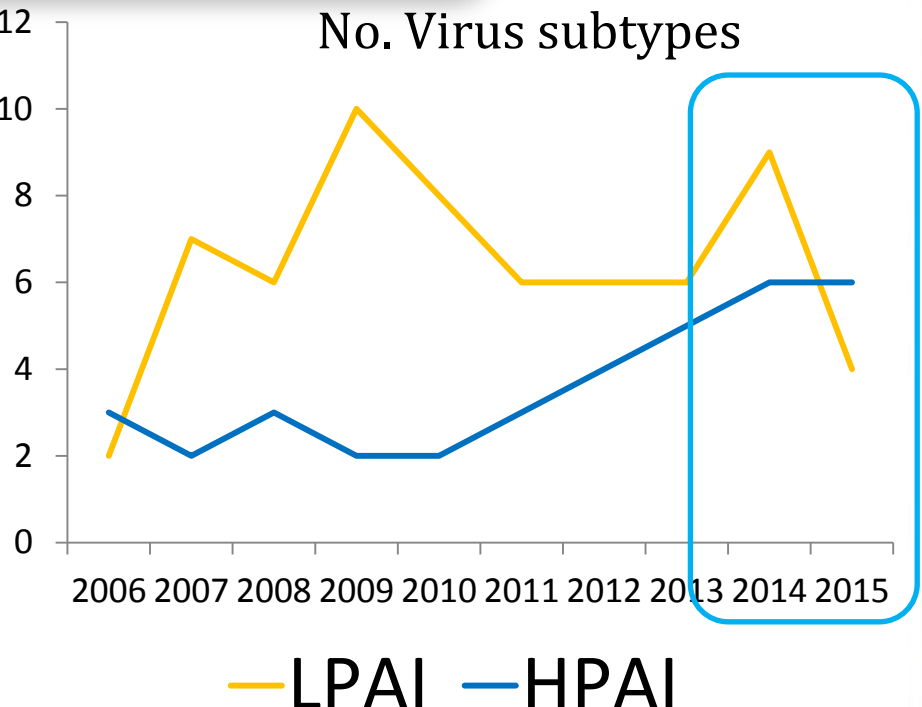
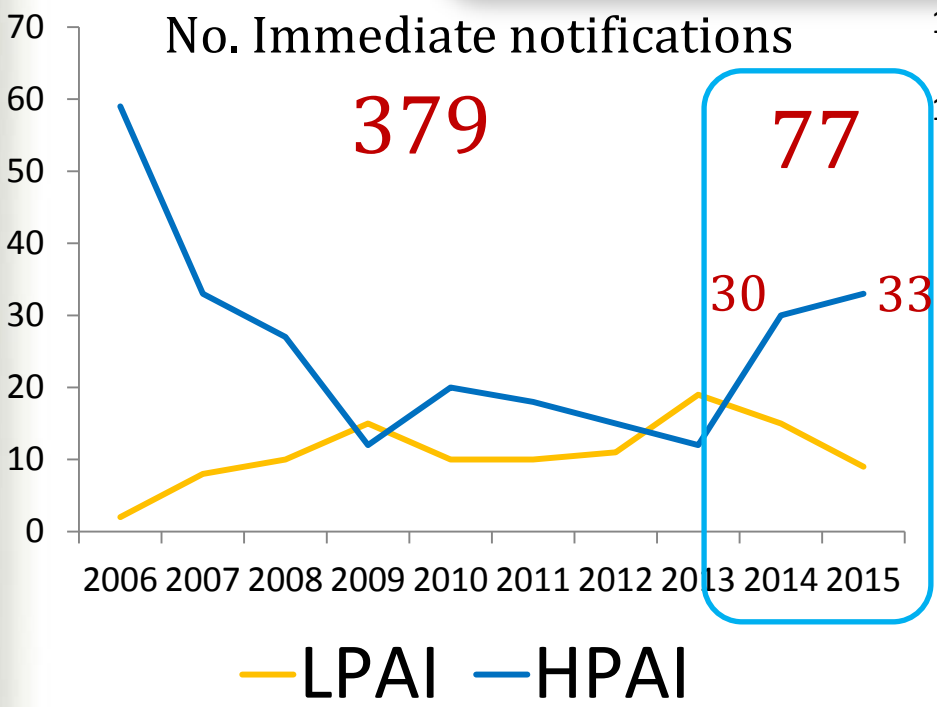
Paris, 19 May 2015 – The global epizootic (epidemic outbreak in animals) of avian influenza subtype H5N1 that emerged in early 2004 resulted in the death of tens of millions of poultry. Several hundred human cases* were also detected, more than half of which proved fatal. Back then, this essentially animal epidemic was widely publicised for fear of the strain mutating into a form easily transmissible from person to person, which might have led to a global spread of the disease in humans.



No. immediate notifications and virus subtypes for AI



Significant increase in 2014 and 2015



[China: 6; Germany: 5]

No. immediate notifications and virus subtypes for AI



H5N1: recent outbreaks in Africa, Israel and Palestine; endemic in Egypt

H7N9: emerged in 2013 in China; first time that a LPAI in poultry can affect humans

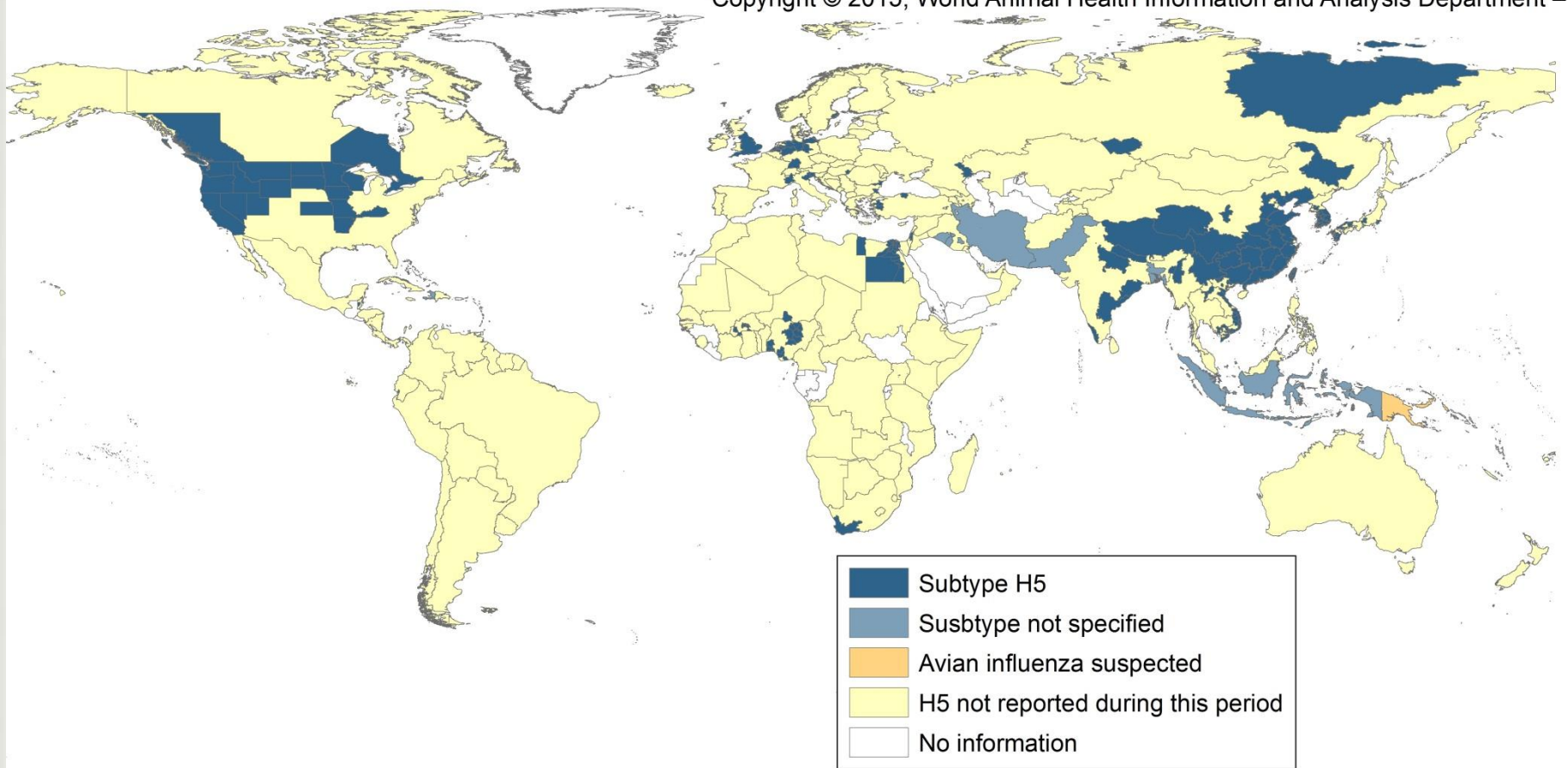
H5N8: emerged in 2014 in China, Korea and Japan; then India, Europe and Northern America (Canada and USA) → role of migratory birds

H5N2: recently in USA (suggested recombination between H5N8 and local strains)

Distribution of infection with avian influenza viruses in 2014 and early 2015 – Subtype H5

Poultry and wild bird

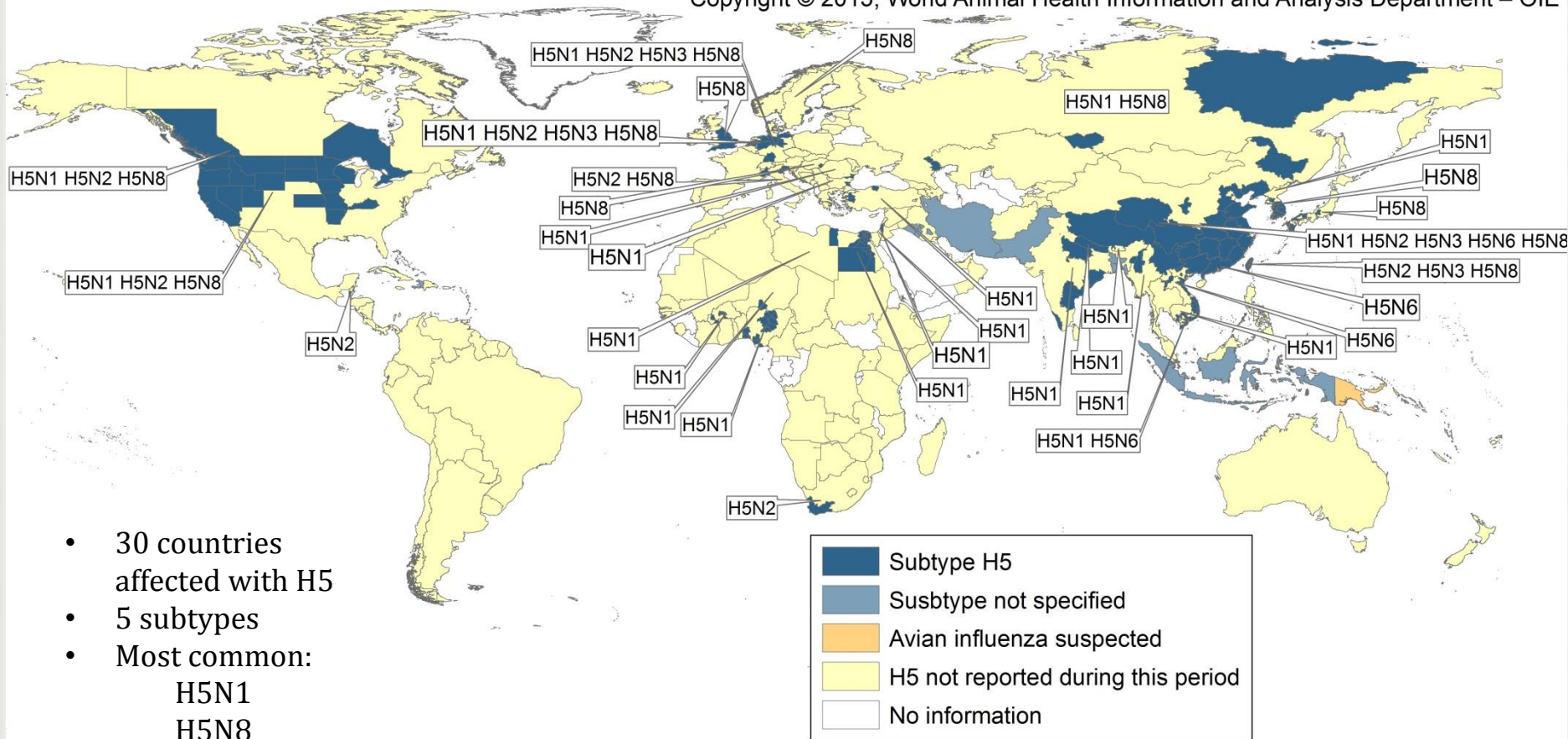
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Distribution of infection with avian influenza viruses in 2014 and early 2015 – Subtype H5

Poultry and wild bird

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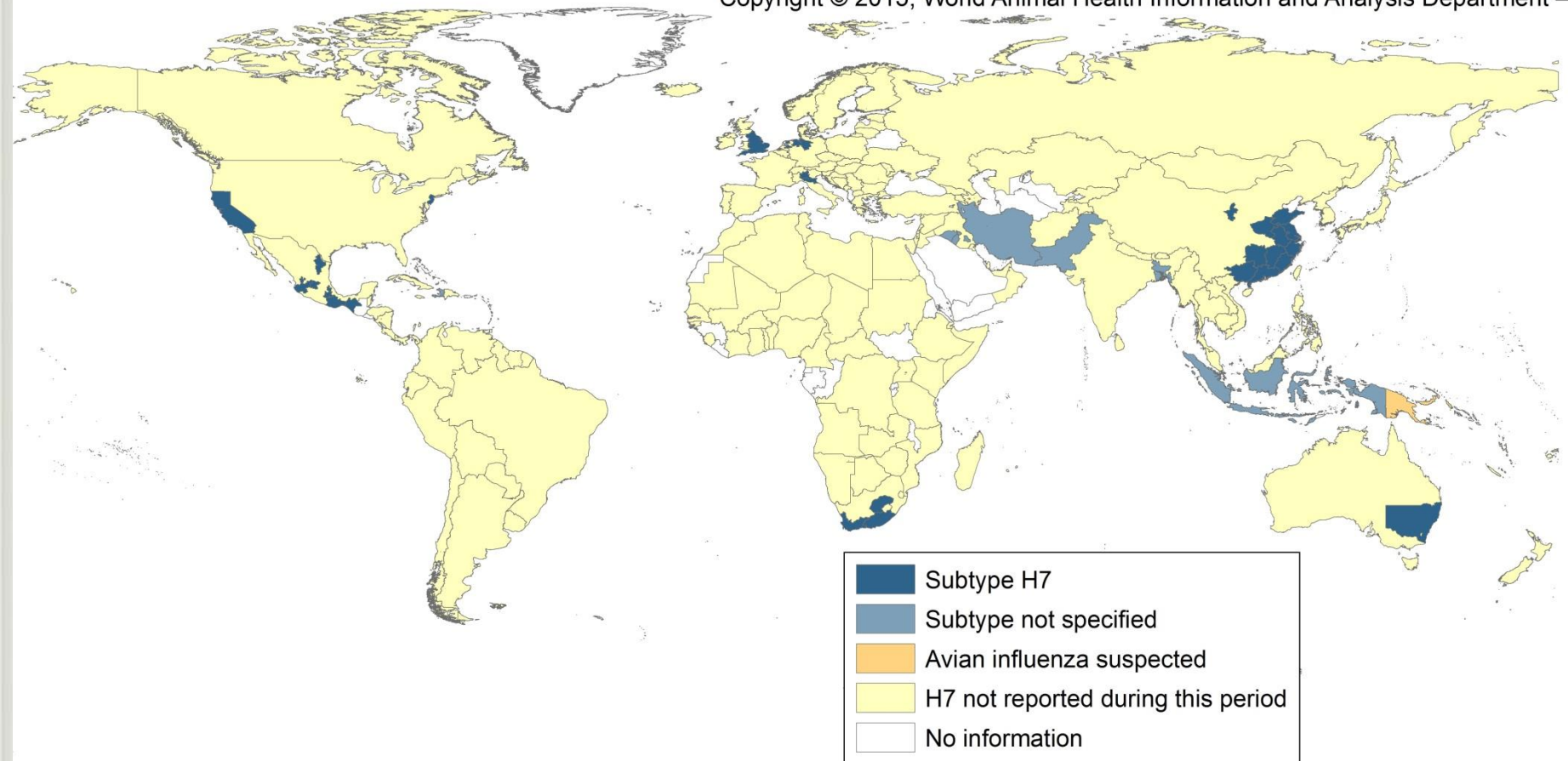


- 30 countries affected with H5
- 5 subtypes
- Most common:
 - H5N1
 - H5N8
 - H5N2

Distribution of infection with avian influenza viruses in 2014 and early 2015 – Subtype H7

Poultry and wild bird

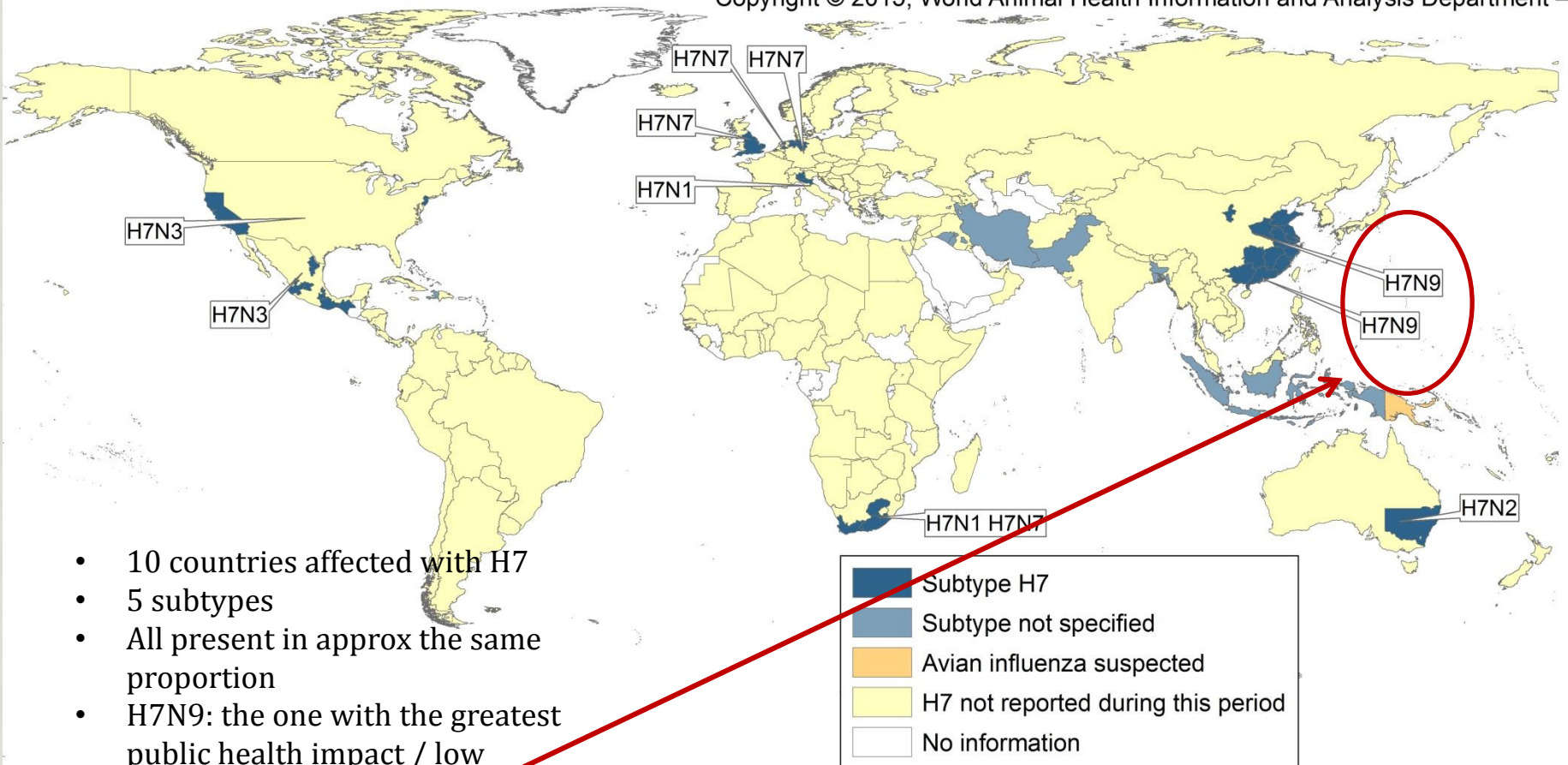
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Distribution of infection with avian influenza viruses in 2014 and early 2015 – Subtype H7

Poultry and wild bird

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- 10 countries affected with H7
- 5 subtypes
- All present in approx the same proportion
- H7N9: the one with the greatest public health impact / low pathogenicity in poultry

HPAI in Europe (2015)



1er janvier – 15 juin 2015 (HPAI)

1. Bulgaria (22/01/2015; H5N1)
2. Germany (04/11/2015; H5N8)
3. Hungary (23/02/2015; H5N8)
4. Israel (14/01/2015; H5N1)
5. Italy (15/12/2014; H5N8)
6. Kazakhstan (12/05/2015; H5)
7. The Netherlands (14/11/2014; H5N8)
8. Romania (25/03/2015; H5N1)
9. Russia (17/04/2015; H5N1)
10. Sweden (18/02/2015; H5N8)
11. Turkey (23/04/2015; H5N1)

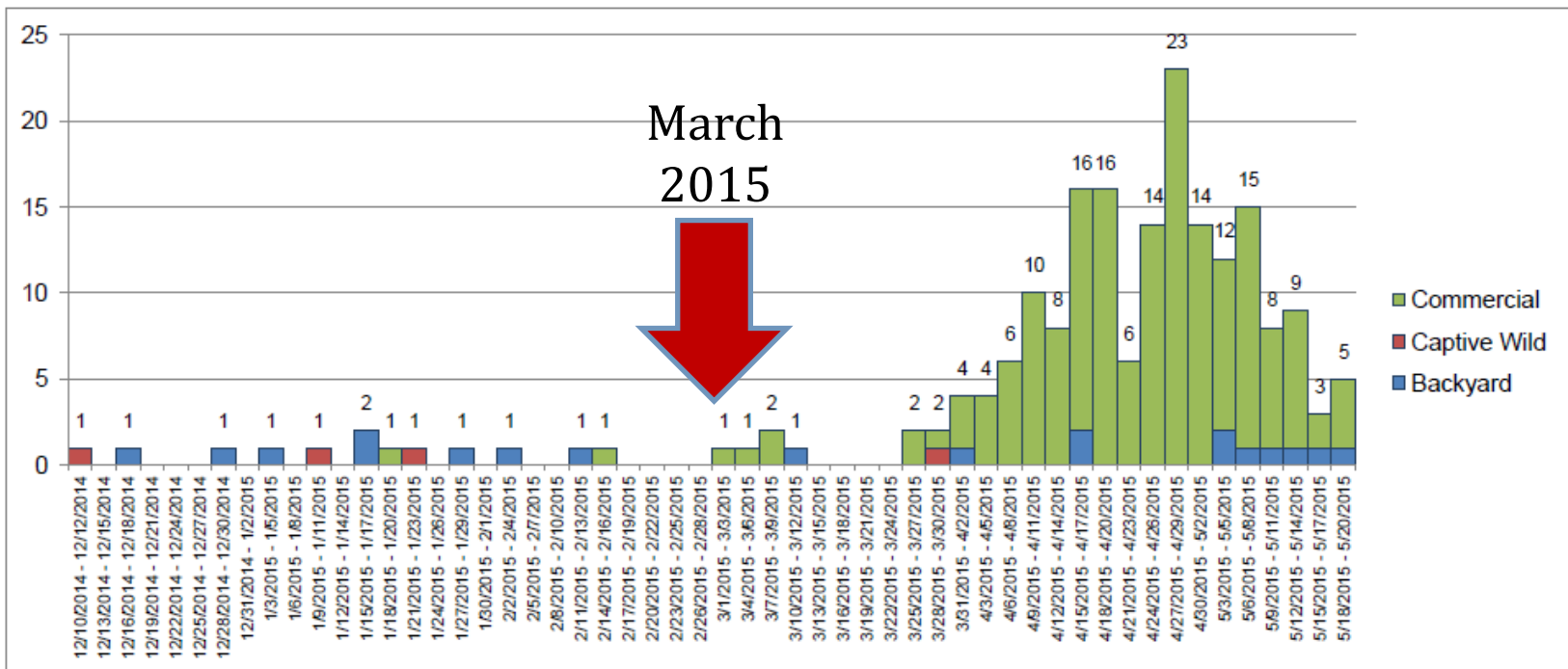


HPAI in the United States



H5N8
H5N2

Figure 2. Premises Detected for ALL STATES 12/10/14 to 5/21/15
Captive Wild, Backyard, Commercial
By 3-DAY INTERVAL



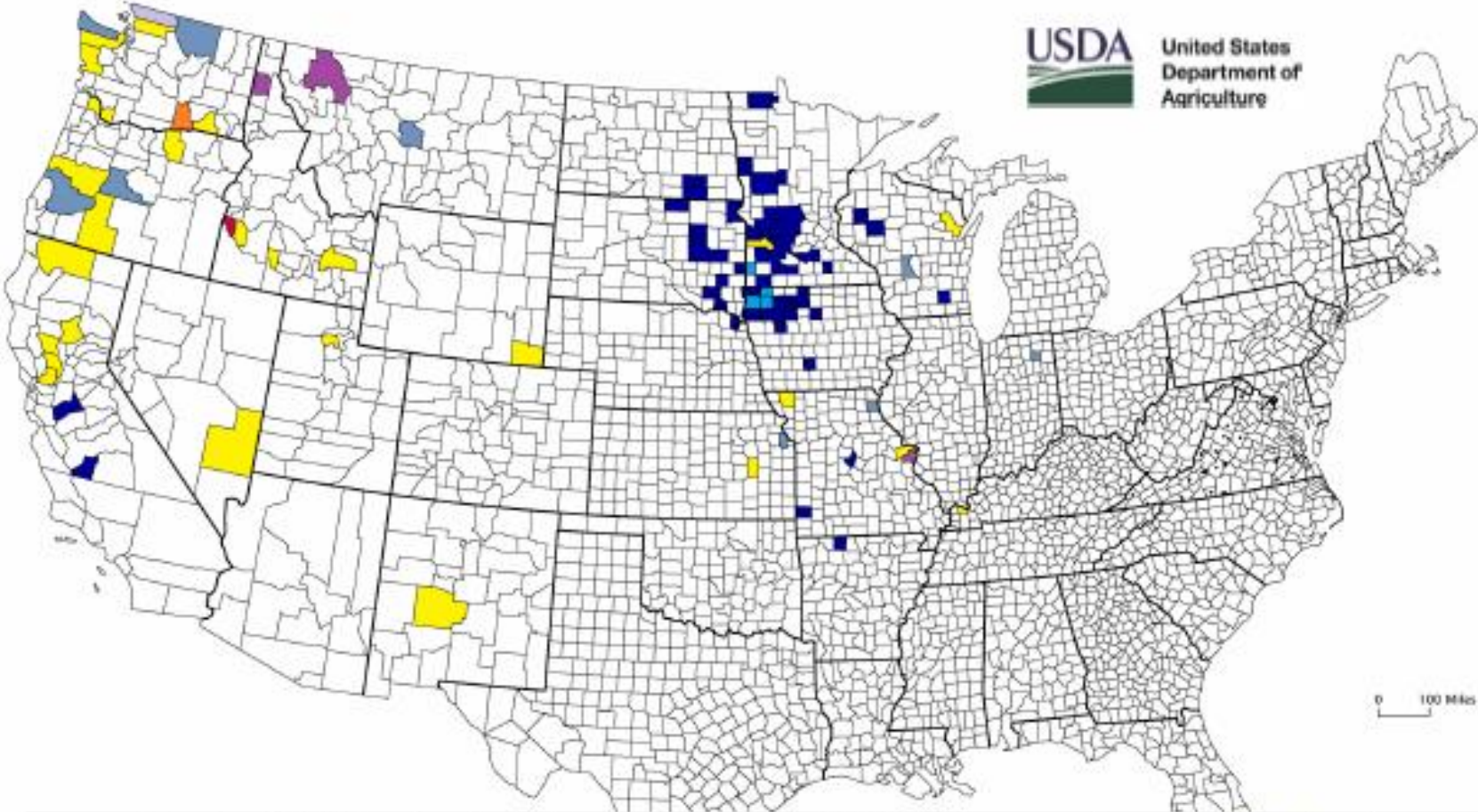


Figure 4. All HPAI Detections in All Birds, by Type, As Of May 22, 2015 PM (as reported on www.aphis.usda.gov)

*one or more detections may have occurred in county

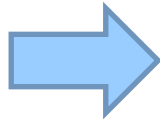
- Backyard
 Commercial
 Backyard & Commercial
 Captive Wild Birds
 Wild Birds
- Backyard, Captive Wild Birds & Wild Birds
 Captive Wild Birds & Wild Birds
 Backyard & Wild Birds

Analysis of WAHIS data

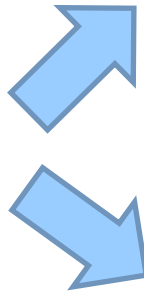
Which is the spatial dynamic of avian influenza? Is it related to virus subtype?

Methodology

Localization of the starting points and related outbreaks



Distance between the points (Haversine formula)



Spread
Progressive distance from the starting point(km)

Speed
Ratio between 'distance from starting point' and 'days after the start of the event' (km/day).



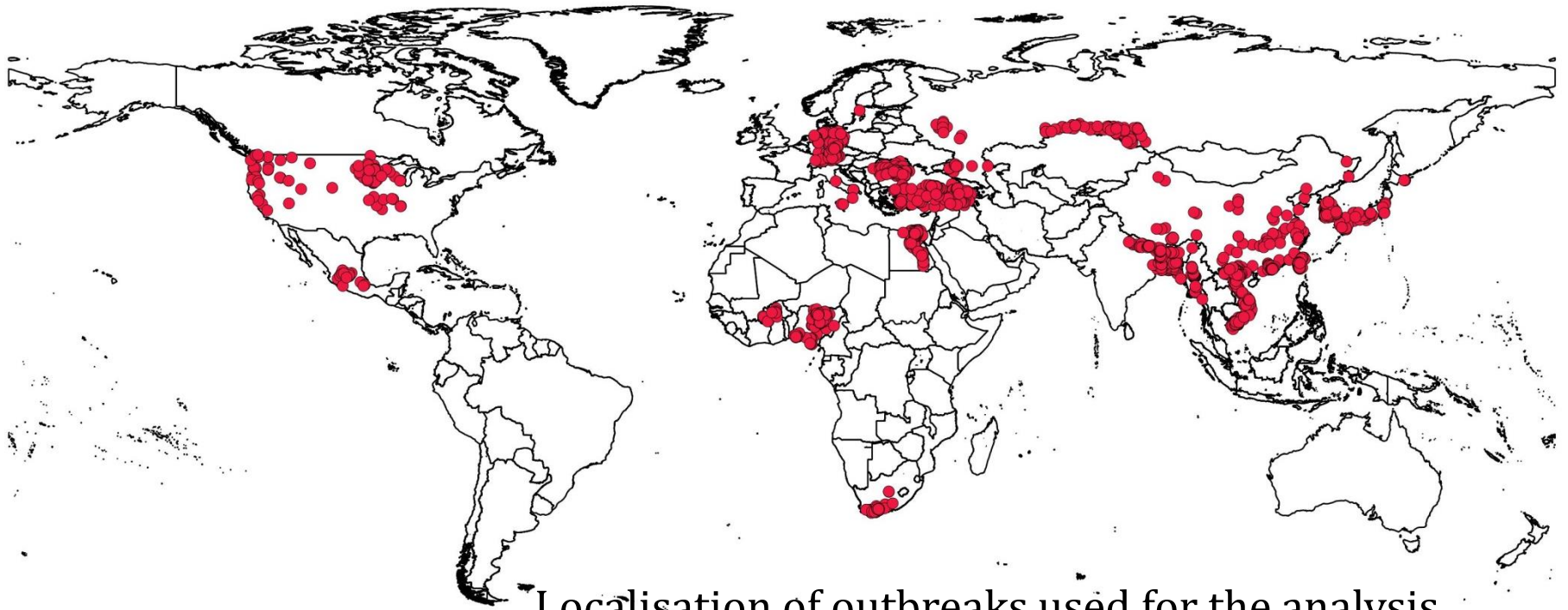
Analysis of WAHIS data

Methodology

Only events with **more than 10 outbreaks**

Data between **1 January 2005** and **19 May 2015**

(In total: 5910 outbreaks / 21 countries / 10 subtypes / LPAI + HPAI)



Localisation of outbreaks used for the analysis

Results at local level (within the same country / all subtypes)

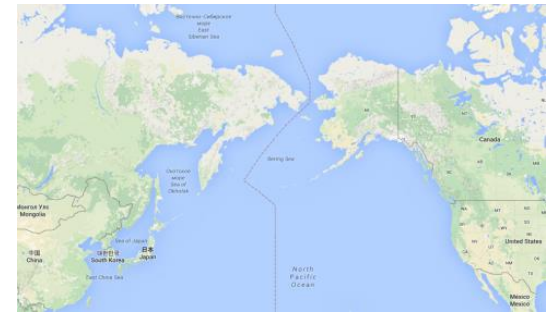
Maximum spread after the start of the event reached after **five** months:

- mean **985** km
- minimum **54** km
- maximum **1 745** km

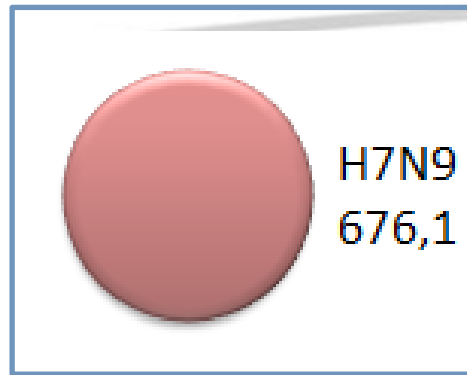
Local dynamics

Maximum speed registered in the first week post event:

- mean **18** km/day
- minimum **5** km/day
- maximum **58** km/day

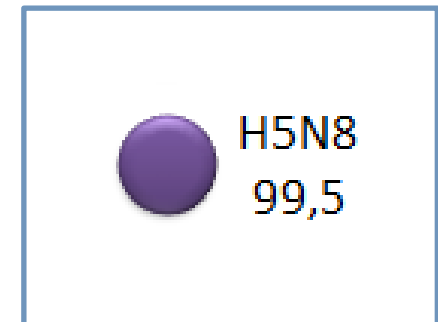
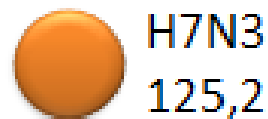
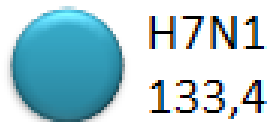
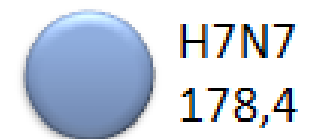
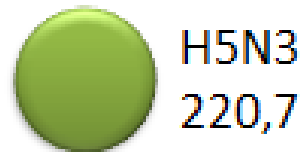
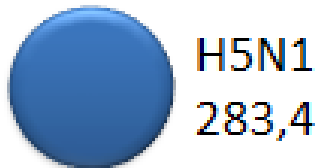


Spread at local level



High ability to spread

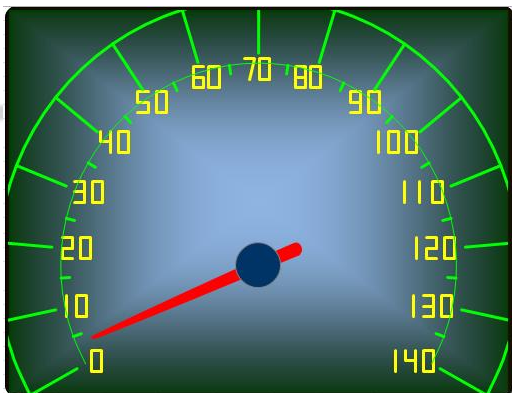
High variability
among the
different
subtypes



Low ability to spread

Speed at local level (speed 10x)

H7N1
(0,4 KM / Day)



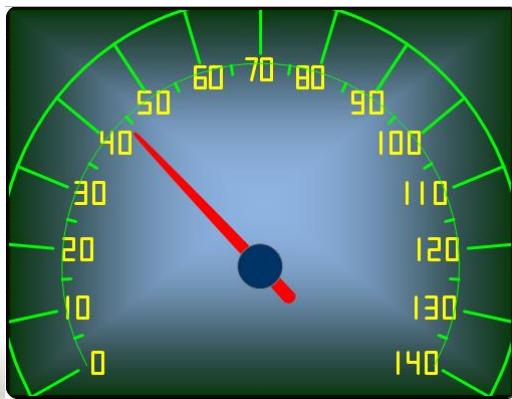
H7N3



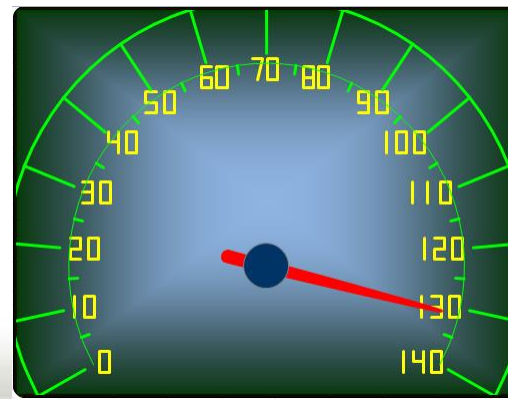
H5N1
H5N3



H5N2
H5N8
H7N7



H7N9
(13,2 KM / Day)



Spread and speed at international level (based only on H5N8 and H7N9)

H5N8

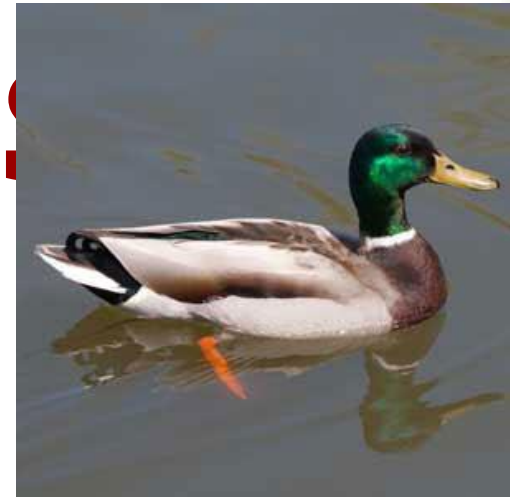


H5N8 → capacity to jump to other countries (migratory birds)

International dynamics



H7N9



Importance of AI (HPAI + LPAI)



Economic impact

HPAI events

(January 2014 to 19 May 2015)

35 countries

57 724 590 susceptible

H5N8: most severe impact (15,4 Million birds destroyed) / no human transmission reported to date

Public health consequences

- **H5N1** (as of May 2015)
16 countries
840 cases in humans
447 deaths
- **H7N9** (as of February 2015)
2 countries
602 cases in humans
227 deaths



World Health Organization

Conclusions AI



- Existing measures laid down in the OIE Terrestrial Animal Health Code are sufficiently robust to manage outbreaks and to facilitate safe trade
- Importance of biosecurity measures at farm level, in live bird markets and in commerce
- Importance for countries to monitor the situation in domestic and wild animals, considering the high recombination and mutation of AI virus (and the high variability of subtypes in some countries) → priority to strengthen monitoring systems
- Importance for countries to comply with reporting obligations – reminder:
 - HPAI : mandatory reporting in poultry and wild birds
 - LPAI: mandatory reporting in poultry
 - LPAI: voluntary reporting in wild birds (*WAHIS-wild; since 2013*)*
- On-going analysis of data (spread; speed capacity) which are useful to understand the virus dynamics (very different according to the subtypes) and follow the spatiotemporal evolution of the disease
- In turn, this will allow member countries to increase their capacity to manage the disease and limit devastating effects